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S1  Otorhinolaryngology
    August 13, 2015, 8am to 12:15pm
    Room: Havana and Anfiteatro da Oftalmologia - ICHC

S7  Speech, Language and Hearing Sciences
    August 13, 2015, 1:45pm to 6:00pm
    August 14, 2015, 8:00am to 3:00pm
    Room: Havana

E-Posters

S20  Otorhinolaryngology

S58  Speech, Language and Hearing Sciences
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Oral Presentations

Otorhinolaryngology

A39. Analysis From The Middle Ear Aspirated Of Patients Undergoing Tympanostomy
Eduardo de Barros Sarolli, José Fernando Polanski, Marcos Mocellin
Hospital de Clínicas da Ufpr

Introduction: The serous otitis or otitis media with effusion (OME) is a very common disease and a major cause of hearing loss in children. Although some studies show fragments or bacterial growth in the middle ear, it is believed that this liquid is sterile. The most effective treatment is the placement of ventilation tube through tympanostomy.

Methods: There were selected patients from ENT HC-UFRP with Serous Otitis Media with clinical indication for surgical treatment. Intraoperatively, the tympanostomy was performed for placement of the ventilation tube, and aspirate the content from the middle ear when it was present. This content was sent to microbiological analysis and antibiogram.

Results: Until now, 10 middle ear aspirates were analyzed, and the result was negative in all tests for bacteria growth.

Conclusion: The sample showed no bacterial growth, justifying the assumption that the serous otitis media is not an infectious disease, but probably only inflammatory, reactive and obstructive. In the literature there is a large discrepancy in the aspirate culture positivity, but the PCR was able to detect fragments of bacteria the culture tests were unable to demonstrate.

Keywords: Serous otitis, middle ear ventilation, tympanostomy tube

A393. Are The Vocal Alterations Caused By Chronic Smoking In The Reinke’s Edema Completely Reversible After Microsurgery?
Regina Helena Garcia Martins, Elaine Lara Mendes Tavares, Adriana Bueno Benito Pessin, Thais Gomes Abrahão Elias, Caroline Fernandes Rimoli
Faculdade de Medicina de Botucatu (Unesp)

Introduction: Reinke’s edema is frequent in female smoking. Their voices present pitch lowered similar to male voices. The treatment is the microsurgery, however some patients complain that their voices are not completely normal even after the surgery and smoking cessation.

Methods: Twenty female smoking with Reinke’s edema were submitted to acoustic vocal analysis in two moments, pre and post-surgery (six months after surgery). The values of the post-surgery moment were compared to the normal voices values. Parameters studied: f0, jitter (%), PPQ, shimmer (%), APQ, NHR, SPI and Maximum time phonation (MTP). All

patients underwent the same conventional microsurgery to the Reinke’s edema. Only patients who stopped smoking after surgery were included in the study.

Results: We identified significant improvement in all vocal acoustic measures of patients six month after the surgery. When we compared the acoustic measurements of post-surgery moment (six months after surgery) to the normal voices we observed that some parameters keeps changed, especially f0 which still has lower values.

Conclusion: We identified significant improvement in vocal acoustic measures of patients after six month of surgery. However these measures still differ from normal voices, justifying the symptoms of many patients. So, we believe that the tobacco causes irreversible voice disorders who do not recover completely even after six months of surgery and smoking cessation.

Keywords: Reinke’s edema, voice, dysphonia

A525. Assessment of the Balance in Children with Hearing Loss through the Berg’s Scale in before and after Practice of Capoeira
Rafaela de Paula Peres, Vinicius Riba Fonseca, Fernando Rogerio de Carvalho
Instituição Universidade Tuiuti do Paraná - Programa de Mestrado e Doutorado em Distúrbios da Comunicação

Introduction: The hearing disability is a obstacle that interferes in daily life, because the infant is organized to perform a continuous feedback through the sense of hearing. Therefore, hearing loss change the body functionality and structure, disabling the infant and restricting their daily living activities. The Capoeira, improves the development of motor coordination, laterality, body scheme and kinesthetic of infant with hearing disability who practice this sport.

Objective: To evaluate the balance, through the Berg’s scale, before and after the practice of capoeira in children with hearing disability.

Methods: Quantitative, clinic and observational studies. Twenty five children between 10 and 16 years old, of both gender. with severe and profound hearing loss, were evaluated with Berg’s balance scale in 2 times: before the practice of capoeira and after a 6 month period. The research was performed in a School for Children with hearing impairment.

Results: The test compared results was performed by Wilcoxon, significance level 0.05, which result p = 0.0039, there is a significant difference in the results between total scores, before and after training, that shows the capoeira increases significantly the total score.

Conclusion: Through the analysis noticed an improve- ment in the balance and locomotor development of capoeira practitioners children.

Keywords: Balance, Hearing Disability, Berg’s scale, Capoeira

A385. Comparative Study Between The Friedman Index And The Pharyngeal Obstruction Sites In the DISE (Drug-Induced Sleep Endoscopy)
Alônco da Cunha Viana Junior, Ana Carolina Daflon Scoralick, Nathalia Senra Santos, Daniel Braz Nunes Azevedo, Daniella Leitao Mendes, Maria Helena de Araujo Melo
Hospital Naval Marcialio Dias

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A385. Comparative Study Between The Friedman Index And The Pharyngeal Obstruction Sites In the DISE (Drug-Induced Sleep Endoscopy)
Alônco da Cunha Viana Junior, Ana Carolina Daflon Scoralick, Nathalia Senra Santos, Daniel Braz Nunes Azevedo, Daniella Leitao Mendes, Maria Helena de Araujo Melo
Hospital Naval Marcialio Dias
**Introduction:** The location of the upper airway obstruction site in patients with obstructive sleep apnea (OSA) has been evaluated according to different methods, among which DISE (Drug-Induced Sleep Endoscopy), a test that allows to observe the anatomic area responsible for producing the noise and the(s) site(s) of pharyngeal narrowing and obstruction in conditions that mimic the physiological sleep.

**Objective:** Through DISE and using the NOHL (Nose Oropharynx Hypopharynx Larynx) classification, compare the severity of obstruction sites of the oropharynx and of the hypopharynx with the results obtained through the Friedman index.

**Method:** Retrospective study of 50 patients with moderate and severe OSA, between 18-65 years of age, of both sexes, with a body mass index less than 35, submitted to DISE, using NOHL and Friedman classifications. All patients were from the Sleep Clinic of the Otorhinolaryngology Department of the Naval Hospital Marcílio Dias.

**Results:** It was observed that most patients showed oropharyngeal and/or hypopharynx obstruction greater than 75%, regardless of content Friedman. It was not possible to establish a statistical relationship between the severity of obstruction at the level of the oropharynx, through DISE, and the Friedman index.

**Conclusion:** The Friedman index has been insufficient in the correlation with the sites of pharynx obstruction, thus stressing the relevance of DISE in the assessment of OSA patients.

**Keywords:** Obstructive sleep apnea syndrome, Endoscopy, Pharynx, Propofol, Sleep, BIS

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**A550. Ergonomic Evaluation Of Clinical And Surgical Practice Applied To Otorhinolaryngology**

Bruno Amaral Hay, Michel Balvedi Nomura, Vinicius Ribas Fonseca

Hospital Cruz Vermelha-Pr / Universidade Positivo

**Introduction:** Occupational diseases represent a major concern of professionals in health, specialty in ENT area. A study in UK found that 72% of ORL have back pain and/or neck.

**Objective:** The aim of this study was to examine the ergonomic issues in daily activities of an otorhinolaryngologist.

**Methods:** Through ergonomic assessment tools (Strain Index, RULA and OWAS) was stratified the risk of poor posture, applying forces and other risk factors found in ENT physical examination and in the surgical area.

**Results:** The ergonomic analysis of ENT physical examination revealed a low risk by the Strain Index; the OWAS method found that the acquired posture deserves attention to possible risks and according to the RULA method is required investigation and immediate changes. Surgical ergonomic study evaluated the septoplasty and tonsillectomy. The first surgical procedure was evaluated by Strain Index as low risk; by OWAS a normal posture was found, but should be verified in further studies, and the RULA method showed results that is similar to the physical examination. The second surgery was questionable via Strain Index index; OWAS shows the same result found in septoplasty and the RULA method warns about futures research and changes.

**Conclusion:** We can highlight that much of postures and repetitive power applications performed by an ENT in your work environment can be detrimental to your health. Besides that more studies must be stimulated in this area to improve the knowledge of occupational health.

**Keywords:** ENT, ergonomic, otorhinolaryngologist

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**A711. Evaluation Of Screening Questionnaires For Obstructive Sleep Apnea In Adults With Repaired Cleft Lip And Palate**

Leticia Dominguez Campos, Alicia G. Noronha Silva Salgueiro, Rafael Higa Scarmagnani, Eliza Janaina Bueno Bighetti, Ivy Kiemle Trindade Suedam, Inge Elly Kiemle Trindade

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**Introduction:** Obstructive sleep apnea (OSA) is highly prevalent in the general population. Easy-to-use questionnaires, such as the Berlin, Pittsburgh and Epworth Sleepiness Scale (ESS), have been developed for OSA screening. However, their performance may differ among specific populations depending on the presenting symptoms. In patients with cleft lip and palate, in particular, the risk factors for OSA may differ from those of the general population, such as pharyngeal flap, nasal deformities, and maxillomandibular discrepancies, which are not taken into account in those questionnaires.

**Objective:** to evaluate the performance of OSA screening questionnaires in adults with cleft lip and palate.

**Methods:** Forty-two subjects with repaired cleft palate ± lip underwent nocturnal polysomnography (PSG €”EMBLA-N7000 system). Subjects were divided into two groups, according to PSG findings: OSA group (n = 29, AHI greater than 5 events/hour of sleep), and Non-OSA group (n = 13, AHI lower than 5/h). All patients were evaluated with the validated Berlin, Pittsburgh and ESS questionnaires.

**Results:** Groups matched for BMI, abdominal and cervical circumferences. Results from the three questionnaires did not differ between the groups. Sensitivity, specificity, positive and negative predictive values of the Berlin questionnaire to predict OSA were 48%, 85%, 88% and 42%, respectively. For the Pittsburgh questionnaire were 90%, 23%, 72% and 50%, and for the ESS, 38%, 62%, 69% and 31%, respectively.

**Conclusion:** Accuracy of the Berlin, Pittsburgh and ESS questionnaires to predict OSA in patients with cleft lip and palate was shown to be low. Specific screening questionnaires for the cleft population should be developed.

**Keywords:** Sleep Apnea, Questionnaires, Cleft Palate

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**A271. Gastro-Esophageal Reflux And Laryngeal Pachydermia In Obstructive Sleep Apnea**

Alonco da Cunha Viana Junior, Ana Carolina Daflon Scoralick, Nathália Senra Santos, Nilce Sandy Costa da Silva Behrens, Daniella Leitao Mendes, Maria Helena de Araujo Melo

Hospital Naval Marcílio Dias

**Introduction:** Obstructive sleep apnea (OSA) is characterized by recurrent episodes of collapse of the pharynx that result in snoring, apnea or hypopnea, a decrease in oxygen saturation and frequent awakenings during the night. The symptomatic gastro-esophageal reflux is more prevalent in these patients, but its occurrence is not significantly influenced by the OSA severity.

**Objective:** To assess the prevalence of gastro-esophageal reflux and laryngeal pachydermia, and their relationship with the severity of OSA during the DISE (Drug-Induced Sleep Endoscopy).

**Methods:** Cross-sectional study with 45 patients with OSA, all of them from the Sleep Clinic of the Otorhinolaryngology Department of the Naval Hospital Marcílio Dias, between 18-65 years of age, of both sexes, with a body mass index less than 35, submitted to DISE, and evaluated according to pachydermia laryngeal rating.

**Results:** In this study the prevalence of gastro-esophageal reflux was 35.5%. But when analyzing the findings by nasofibrolaryngoscopy during the DISE, about 97.7% of...
subjects had laryngeal pachydermia, 22.2% (10) grade I, 64.4% (29) grade II, 11.2% (5) grade III, and it was absent from only 2.2% (1) of the patients. The study has observed a greater prevalence of laryngeal pachydermia grade II in all levels of OSA severity.

Conclusion: The study showed an association between laryngeal pachydermia and OSA, but it was not possible to establish a relationship between the severity of OSA and laryngeal pachydermia.

Keywords: Obstructive sleep apnea syndrome, Endoscopy, Pharynx, Propofol, Sleep

A681. Genetic Etiology In Cochlear Implant Patients From Hospital das Clínicas-FMUSP
Juliana Sampaio Silva, Karina Lezirovitz Mandelbaum, Cláudia Regina de Marchi Lopes Henaza, Robinson Koji Tsuji, Ricardo Ferreira Bento, Jeanne Oiticica
Otolaringology Lab/LIM32 School Of Medicine Clinics Hospital, University Of São Paulo; Cochlear Implant Group, School Of Medicine Clinics Hospital, Universidade de São Paulo - Usp, São Paulo, Sp, Brazil

Introduction: Genetic Etiology contributes to 60% of nonsyndromic deafness.

Objective: Investigate genetic etiology in deaf patients who received cochlear implants in Hospital das Clinicas-FMUSP.

Methods: Search for mutations in the coding region of GJB2 gene (connexin 26), screen for deletions of GJB6 gene (connexin 30) and the mitochondrial mutation A1555G (MT-RNR1 gene) in all implanted patients evaluated at the Genetic Counseling Unit of the Otolaryngology Lab (LIM32 HCFCMUSP).

Results: Up to date, 56 implanted patients with sensorineural deafness were evaluated, 64% with prelingual onset and 36% postlingual. In 29/56 (52%), the most probable etiology was genetic. Pathogenic mutations were found in nine (31%) validating the genetic etiology (seven prelingual cases and two postlingual). Four of these seven prelingual cases were found to be homozygous for the c.35delG mutation (GJB2 gene) and three compound heterozygous for mutations in GJB2 gene (c.35delG/p.W24X, c.35delG/p.Val27fs, c.35delG/p.Lys112fs). The p.W24X and P.Lys112fs mutations have already been associated with deafness. However, the p.Val27fs mutation (c.75_81delGTCinsAGA) has not been previously described. It is a frameshift that leads to a premature stop codon, thus pathogenic. Among the postlingual cases with mutations, one presented the A1555G mutation, usually associated with aminoglycoside induced/worsened deafness. Indeed this patient exhibited progressive hearing loss after aminoglycoside exposure. The other case presented the heterozygous p.R75Q mutation (GJB2 gene). The patient presents also palmoplantar keratoderma, phenotype that already been attributed to the mutation.

Conclusion: GJB2 mutations represents an important cause of deafness in cochlear implant patients explaining 14% of our cases, while m.A1555G explained 2%.

A682. Genetic Etiology Of Deafness And Cochlear Implant Results In A Patient From Hospital das Clínicas-FMUSP
Juliana Sampaio Silva, Karina Lezirovitz Mandelbaum, Ana Cristina Hiromi Hoshino, Robinson Koji Tsuji, Ricardo Ferreira Bento, Jeanne Oiticica
Otolaringology Lab/LIM32 Otorhinolaryngology And Head And Neck Surgery, Faculty Of Medicine Of Ribeirão Preto, University Of São Paulo

Introduction: GJB2 gene mutations is a frequent cause of nonsyndromic deafness and may exhibit autosomal recessive and autosomal dominant inheritance.

Objectives: Investigate the genetic etiology and correlate with cochlear implant results in an implanted patient.

Methods: Search for mutations in the coding region of GJB2 gene (connexin 26), screen for deletions of GJB6 gene (connexin 30) and the mitochondrial mutation A1555G (MT-RNR1 gene).

Results: The patient exhibited bilateral sensorineural progressive hearing loss starting at seven years old. She also complained about a skin disease affecting hands and feet. Sequencing of GJB2 gene revealed the heterozygous c.G224A (p.R75Q) mutation. Indeed this mutation has already been associated deafness and Palmoplantar Keratoderma. We also studied three affected members of her family, two daughters with both conditions and the p.R75Q mutation and one nice with deafness and the p.R75Q mutation but no diagnosis of Palmoplantar Keratoderma so far. The patient received left-ear cochlear implant with 35 years of age. Before the Implant, she showed severe to profound deafness with no benefit with hearing aids; speech perception scores were closed-set 30% and open-set 0%. One year after implant, pure tone average (PTA) was 25dB and speech perception scores 80%.

Conclusion: We identified the cause of deafness and Palmoplantar Keratoderma in an implanted patient and performed genetic counselling to other affected members of the family. In addition, she showed a good Speech Perception performance, which is in line with many other implanted patients described in the literature with causative GJB2 mutations.

A1. Gentamicin Conditioning Confers Auditory Protection Against Noise Trauma
Alex Strose, Miguel Angelo Hyppolito
Department Of Ophthalmology, Otorhinolaryngology And Head And Neck Surgery, Faculty Of Medicine Of Ribeirão Preto, University Of São Paulo

Auditory conditioning consists of the pre-exposure to low levels of a potential harmful agent to protect against a subsequent harmful presentation. It was first tested with noise. More recently, it was successfully tested with other agents. Nonetheless, the vast majority of the studies utilize the same agent to both condition and cause the damage. The aim of this study was to verify whether conditioning with an agent different from the agent used to cause the trauma can also be effective. Thus, the following groups were organized: group A1, which is the noise trauma control group, was exposed to 110-dB broadband noise centered at 4 kHz for 72 hours; group A2, which is the gentamicin conditioning control group, was administered 30 mg/kg of gentamicin daily for 30 consecutive days; and group A3 was conditioned with gentamicin similarly to group A2 and then subjected to a noise trauma similarly to group A1. The animals were functionally and morphologically evaluated through the measurement of the Auditory Brainstem Response (ABR) and scanning electron microscopy (SEM), respectively. The following variables were investigated: outer hair cell injury and auditory threshold shift. The group that was conditioned with the drug exhibited significantly less outer hair cell damage, 10.8% and 22.9%, respectively (p = 0.0146), although did not maintain the proper functioning of the auditory system. We therefore conclude that conditioning with a different agent from that used to cause the trauma is effective, which suggests that both agents that were used promote similar mechanisms of self-protection.

A679. Hes1 Expression Knocking-Down Gives Rise To New Hair Cells In Organ Of Corti Cultures
Ana Carla Batissoco, Karina Lezirovitz Mandelbaum, Daniella Bertolini Zanatta, Milene Massucci Bisoli, Luciana dos Reis Vasques, Jeanne Aparecida Oiticica
Department Of Genetics And Evolutionary Biology, Institute Biosciences - Usp. Department Of Otolaryngology, Medical School - Usp. Viral Vector Laboratory, Translational Research Center For Oncology, Cancer Institute Of São Paulo State.

Introduction: Hair cells and supporting cells in the auditory sensory epithelium of the inner ear arise from a common progenitor. Recent evidence suggests that NOTCH pathway proteins, including HES1 (hairless and enhancer of split 1), play a role in keeping supporting cells phenotype and preventing them from becoming hair cells. This is the major limitation for hair cells regeneration and hearing loss recovery in the elderly.

Objective: The aim of this study was to compare the expression of hair supporting cells markers after knockdown of Hes1 transcripts in organ of Corti organotypic cultures from postnatal day 3 mice.

Methods: About 48h after lentiviral transduction, RNA from organ of Corti cultures was extracted and cDNA synthesized from each of the three experiments: negative control and two shRNA with different targets for silencing of Hes1. OC HC and SC marker proteins expression was investigated by quantitative RT-PCR (qRT-PCR) and two shRNA with different targets for silencing of Hes1.

Results and Conclusion: A 30% reduction in Hes1 expression disclosed a significant increase in the mRNA level of Myo7a, which was a consequence of the augmented number of cells expressing the protein Myo7a in vitro in the organ of Corti. These findings suggest that even a modest reduction in the Hes1 expression leads to gene expression alteration specifically related to the organ of Corti hair cell differentiation phenotype.

A561. How Effective Are Unattended Sleep Studies In Children
Silke Anna Theresa Weber, Iury Lima Veloso, José Vicente Tagliarini, Sergio Henrique Kiemle Trindade
Faculdade de Medicina de Botucatu,Unesp

Introduction: Lower costs and the facilities of a less complex exam of unattended sleep studies may increase the screening of severe OSA.

Aim: to analyze the quality of unattended sleep studies in children on a waiting list for adenotonsillectomy (AT) in a University Hospital, the frequency of failure, which age group was more exposed to failure and which sensor was more easily lost.

Methods: During the last three years, 135 children, aged 3 to 12 years old, with hypertrophy of the tonsils, realized unattended polysomnography for severe OSA screening. We analyzed the frequency of failure of first night exam in different age groups, and the sensor more easily lost.

Results: Out of 135 children (57.8% boys), 69 were aged 3 to 6 years old. 38.6% of the children confirmed severe OSA. 28.1% PSGs failed at first night, more frequently (47.2%) in age group 3 to 4 years old. Airflow sensor showed the highest error index. Failure was higher at first year of our experience (52%) with improvement and a lower rate in the third year (15%).

Conclusions: Unattended sleep studies are helpful for severe OSA screening. However, children aged 3-4 years showed highest failure rate, probably due to more restless sleep and are more difficulties for cooperation when putting on the equipment. Airflow sensor was lost more easily during the night, mostly due to difficulty in fixing it in the face. Good training of the team is fundamental, as an optimal fixation of the sensors is crucial for an acceptable result.

A44. Olfactory Epithelium Involvement In Alzheimer’s Disease: A Clinical-pathological Study
Maria Dantas Costa Lima Godoy, Luciana Fernandes Costa, Marco Aurélio Fornazieri, Fábio de Rezende Pinna, Richard Louis Voegels
Faculdade de Medicina - Universidade de São Paulo

Introduction: Alzheimer’s disease (AD) is considered the most prevalent type of dementia. AD diagnosis is performed exclusively through clinical criteria. However, clinical symptoms are preceded by a long asymptomatic period, with silent deposit of tau and ß-amyloid proteins in brain tissue. Recent studies demonstrate the same findings in the olfactory epithelium, which could contribute to the early diagnosis of AD.

Objectives: Correlate the prevalence of tau and amyloid proteins in the olfactory epithelium with clinical and neuropathological criteria used for diagnosis of AD and to determine the sensitivity and specificity of the olfactory epithelium involvement for the diagnosis of AD.

Methods: Ninety-two individuals, included in the Brain Bank of the Aging Brain Study Project form University of Sao Paulo, had collected blocks of olfactory mucosa during autopsy. Cognitive evaluation was gathered through an interview with a knowledgeable informant using the CDR (Clinical Dementia Rating) and IQCODE (Informant Questionnaire on Cognitive Decline in the Elderly) scales. Neuropathological examination was carried out based on accepted criteria, using immunohistochemistry, and classified in CERAD criteria and Braak & Braak staging. The presence of tau and ß-amyloid protein deposits in the olfactory epithelium was compared with clinical and neuropathological parameters.

Results: The superior turbinate olfactory epithelium analysis allowed us to identify the tau and ß-amyloid proteins with high sensitivity when compared with neuropathological scales (> 80%) and assessed by clinical analysis of CDR (> 90%) and IQCODE (> 78%).

Conclusion: Analysis of the olfactory epithelium may represent a potential biomarker for early diagnosis of AD.

A1731. Perturbation Measures on the Degree of Naturalness of Synthesized Vowels
Rosiane Yamasaki, Arlindo Neto Montagnoli, Adriana Hachiya, Eloisa Maria Santiago Gebrim, Jorge Vicente Lopes da Silva, Emi Zuiki Murano, Mara Behlau, Domingos Hiroshi Tsuji
Faculdade de Medicina da Universidade de São Paulo

Introduction: The effect of jitter and shimmer on synthesized voice is not completely known. To verify the influence of these perturbation measures on the degree of naturalness, a mathematical model generated glottal pulses and then an magnetic resonance images based solid model of vocal tract generated a synthesized vowel.

Objective: To evaluate perceptually the degree of naturalness of synthesized vowels with and without short-time perturbations.

Methods: Eighty synthesized glottal pulses were generated with four perturbation conditions (jitter, shimmer, jitter + shimmer and no-perturbation) from 20 original voice samples. These pulses were amplified, sent to a driver, and
transferred to a solid model of the vocal tract that generated 80 synthesized vowels â€œâ€œ. Experiment 1: Three judges rated 120 vowels, 20 humans + 80 synthesized + 20% repetition, as â€œhumanâ€œ or â€œsynthesizedâ€œ. Experiment 2: Three judges rated 20 sequences of synthesized vowels, plus 20% repetition, with four perturbation conditions each. They ranked each four-vowel/sequence as most natural (1) to most artificial (4).

Results: Experiment 1: 100% human vowels were classified as human, and 27/80 synthesized as human (15/20 jitter + shimmer, 10/20 jitter, 2/20 no-perturbation and 0/20 shimmer). Experiment 2: Two judges considered the vowels with jitter + shimmer as the most natural samples, followed by those with jitter. The other judge considered the vowels with jitter as the most natural, followed by jitter + shimmer. All rated the vowels without perturbation as the most artificial.

Conclusions: Jitter and shimmer increased the degree of naturalness of synthesized vowels, and jitter alone seems to provide more naturalness than shimmer alone.

A713. Polysomnographic Findings in Subjects With Obstructive Sleep Apnea Syndrome Who Underwent Nasal Septoplasty
Sergio Henrique Kiemle Trindade, José Vicente Tagliarini, Inge Elly Kiemle Trindade, Silke Anna Theresa Weber

Disciplina de Otorrinolaringologia e Cirurgia de Cabeça e Pescoço, Faculdade de Medicina de Botucatu, Unesp; Laboratório de Diagnóstico e Terapêutica dos Distúrbios Respiratórios do Sono, Faculdade de Medicina de Botucatu, Unesp

Introduction: The impact of septal deviation in the pathogenesis of obstructive sleep apnea syndrome (OSAS) remains unclear. Nasal septoplasty improves airflow through nasal cavities, by reducing airway resistance, and, because of that may reduce OSAS severity.

Objective: To compare polysomnographic findings in subjects with OSAS before and after nasal septoplasty.

Methods: Pre - and postoperative polysomnographic (PSG) findings from 23 adults (aged 20 to 60y, both genders) with OSAS in different degrees of severity were retrospective-ly analyzed. The following PSG variables were investigated: Apnea and Hypopnea Index (AHI), Apnea Index (AI), Hypopnea Index (HI), Sleep Efficiency (SE), Pulse Oximetry (PO).

Results: Mean AHI decreased from 14.6 ± 11.5 to 9.9 ± 7.3 after surgery; however, the difference was not statistically significant (p = 0.07). On the other hand, a significant decrease (p < 0.005) in AI mean values (from 6.6 ± 5.3 to 3.4 ± 3.6) and a significant improvement in SE (from 81.5 ± 12.8% to 85.9 ± 12.5%) were observed when comparing pre - and postoperative data (p < 0.05). No significant changes were observed between for HI and PO mean values.

Conclusion: Nasal septoplasty had a significant impact over some polysomnographic parameters, reducing an index used to indicate the severity of sleep apnea and improving sleep efficiency.

Keywords: Polysomnography, nasal surgical procedures, obstructive sleep apnea

A586. The Bispectral Index In Obstructive Sleep Apnea During Drug-Induced Sleep Endoscopy
Aloâ€™na da Cunha Viana Junior, Ana Carolina Dafon Scoraliak, Daniel Braz Nunes Azevedo, Luiz Felipe Lira de Moraes, Daniella Leitao Mendes, Maria Helena de Araujo Melo
Hospital Naval Marcilio Dias

Introduction: The Bispectral Index (BIS) is a neuro-physiological monitoring device which continually analyzes the EEG tracing. During DISE, BIS helps to measure the depth of sedation and allowing set sedation levels as close to natural sleep.

Objective: To relate average BIS and the severity of obstructive sleep apnea (OSA) in episodes of apnea during the DISE.

Methodology: A prospective study in 45 patients with moderate and severe OSA, between 18-65 years of age, of both sexes, with body mass index less than 35, submitted to DISE in target-controlled infusion of propofol and monitoring with BIS, from the sleep clinic of Otorhinolaryngology Service of Naval Hospital Marcilio Dias.

Results: The BIS found ranged between 70 and 53 with a median of 63. Among patients with moderate OSA, the BIS ranging from 70 to 53, while those with severe OSA, 68 to 62. We observed a greater homogeneity between the patients with severe OSA.

Conclusion: Patients with moderate OSA had greater variability of BIS, which may suggest that this group is more vulnerable to change the real sites of obstruction during the realization of the DISE

Keywords: Obstructive sleep apnea syndrome, Endoscopy, Pharynx, Propofol, Sleep, BIS
A680. The Expression Of The Gap Junction Connexins 26, 30 And 43 From Inner Ear Support Cells Is Maintained In Vitro In Otospheres
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Introduction: Most forms of congenital and acquired deafness result from damage to cochlear hair cells or their associated neurons. Although regeneration in the auditory organ of Corti is limited, isolation of stem cells has been reported from mouse inner ear sensory epithelium. In non-adherent culture conditions, these cells can self-renew and form otospheres, floating cell colonies expressing inner ear progenitor cell markers. Supporting cells are primary targets for inducing hair cells regeneration and are the primary expression site of Connexin26 and Connexin30 gap junction proteins. Mutations or deletions in the genes that encoded the Connexin26 and Connexin30 are the most common causes of nonsyndromic inherited deafness in humans. Different investigators reported that various connexin isoforms are expressed in stem cells of from different sources and there is evidence that suggest a role of connexins in the maintenance of pluripotency these cells. It has been observed that Connexin43 represent a pluripotency marker of iPS and may play an important role in the reprogramming process.

Objective: Investigate the expression of Connexins 26, 30 and 43 in otospheres.

Methods: The proteins expression was investigated by flow cytometry and immunofluorescence analysis.

Results and Conclusion: Here we demonstrate, by flow cytometry and immunofluorescence analysis, that otospheres within three days in vitro express Cx26, Cx30 and Cx43. Otospheres have never been investigated regarding expression of connexins. Although further phenotype characterization is necessary, this is the first time that the expression of Cx26, Cx30 and Cx43 could be demonstrated in suspension cultures from mouse cochlear sensory epithelium.

A705. The External Ear Molding: Technique Description And Achievement Of Auriculocephalic And Conchoscaphal Angles
Daniela Dranka Cristoff, Caio Marcio Correia Soares, Marcos Mocellin
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Introduction: The proeminent ears, the most common auricular anatomic defect, reach about 5% of world population. The excess of concha and malformation of antihelix are the main alterations and can be corrected with otoplasty surgery. The auriculocephalic and conchoscaphal angles are increased in patients with proeminent ears and the values of this angles are useful parameters to compare different surgical techniques and pre and pos operatory results.

Objective: Describe with details the technique of auricular molding with alginate, the pros and cons of the material, and how to get the main angles of the ears.

Methods: Molding with alginate and mensuration of auricular angles of right ear of 15 volunteers, with rich description and photos of the all process.

Results: We found a simple execution technique, with good reproducibility and low cost.

Conclusion: The production of an ear alginate molde to mensure the ears angles is a simple process and can be very useful as an objective parameter to compare surgical results.
A200. A Comparison of Water (44°C/30°C) and Air (50°C/24°C) Caloric Responses
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Irmandade Santa Casa de Misericórdia de São Paulo

Introduction: With the advent of caloric test using air and its systematic use, much controversy has been raised, especially concerning the reference values of this test in comparison to the stimulation by water.

Objective: To verify the equivalence of the nystagmus responses between water and air stimulation in the caloric test.

Methods: We analyzed 280 medical records, between January 2011 and November 2014, of adult patients above 18 years old with symmetric responses to the caloric test of up to 20%. The patients were divided into two groups: int the first 84 patients underwent air stimulation at 50°C and 24°C (GAR) and in the second 196 patients underwent water stimulation at 44°C and 30°C (GAG). The equipment used was the Contronic otocalorimeter EI07AR and E96AG.

Results: The mean values found were:
In the GAR group, hot stimulation RE: 20.73; hot stimulation LE: 20.78; cold stimulation RE: 16.5 and cold stimulation LE: 16.89.
In the GAG group the mean values of the angular velocity of the slow component were: hot stimulation RE: 18.75; hot stimulation LE: 19.19; cold stimulation RE: 19.72 and cold stimulation LE: 20.32.
There was no significant statistical difference between the caloric tests using water and air in both hot and cold stimulation ($p = 1.781842$).

Conclusion: In the caloric stimulus using air at 50°C and 24°C is equivalent to using water at 44°C and 30°C.

Keywords: caloric tests, electroneystagmography, physiologic nystagmus

A454. Analysis Of Ocular Vestibular Evoked Myogenic Potentials In Normal Listeners Without Vestibular Complaints
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Universidade Federal do Rio Grande do Sul

Introduction: Ocular Vestibular Evoked Myogenic Potentials are composed by myogenic responses activated by sound stimulation registered by surface electromyography positioned in the periocular musculature. Recent evidence shows that this test has the utricular and the vestibular superior nerve as its main source. Because it is a complement in the otoneurological assessment, it is necessary to know this exam’s patterns of normality.

Objectives: To compare the latencies and amplitudes of Ocular Vestibular Evoked Myogenic Potential between ears and genders.

Methods: Were assessed 20 normal listener adults with no vestibular complaints, 10 men and 10 women. The equipment used was the Eclipse-Otoaccess, from Interacoustic. Were performed 500 toneburst incentives, with 500Hz frequency and an intensity of 100dBHL, band-pass filter from 20Hz to 2000Hz. The obtained tracings were analyzed over the first biphasic potential.

Results: There was no statistically significant difference between the amplitudes and latencies between the stimulated ears ($p = 0.131$), as well as gender ($p = 0.148$).

The median latency of the positive peak was 15.11ms in the right ear, and 15.33ms in the left ear, and the median of the negative peak was 10ms in the right ear, and 10.33 in the left ear.

Conclusion: It was found that there was no statistical difference in the analysis of latencies and amplitudes of waves between genders and ears. It is thought that the Ocular Vestibular Evoked Myogenic Potential is a promising test and it is believed that the normal standards for the values of latency and amplitude must be stipulated according to each equipment.

Keywords: Vestibular Evoked Myogenic Potentials; Evoked Potentials; Vestibular Function Tests

A304. Assessment Of The Immediate Effect Of The Semi-Occluded Vocal Tract Exercise In Velopharyngeal Mechanism In Five Patients With Cleft Lip And Palate- Pilot Study
Mariana Arioza Fernandes Almeida, Silvia Dornelles, Luise Stumpf Hubner, Chenia Moreira Blessmann Garcia
Universidade Federal do Rio Grande do Sul

Introduction: The non syndromic cleft lip and palate are included between the severe craniofacial malformations most frequent in human population. The attacked individual may have changes in the velopharyngeal mechanism and thus, put in danger the speech intelligibility.

Objective: To analyze the immediate effect of exercise with semi-occluded vocal tract in the velopharyngeal mechanism of patients with cleft lip and palate.

Method: The sample was composed by 5 individuals with surgically repaired cleft lip and palate submitted to a multidimensional exam, videonasendoscopy, dynamic images analysis of using specialized software, speech analysis through perceptual evaluating and the acoustic analysis and inference self-reported.

Results: All patients had connected speech better after the exercise, accentuated improvement in the overall impression on the emission and vocal projection, greater velopharyngeal closure and positive effect on self-evaluation.

Conclusion: It was observed positive effect of semi-occluded vocal tract exercise when applied to this sample.

Keywords: velopharyngeal sphincter; cleft lip, cleft palate; rehabilitation, semi-occluded vocal tract

A25. Audiologic Findings In Patients With Fetal Alcohol Syndrome
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Hospital de Reabilitação de Anomalias Craniofaciais da Universidade de São Paulo (Hrac/USP)

Introduction: The fetal alcoholic spectrum disorder is a developmental disorder that affects about 0.2% of births and the main etiology is the prenatal alcohol exposure. Clinical findings include cleft lip and palate, micrognathia, hypertelorism, microcephaly and digital anomalies. The Fetal Alcoholic Syndrome (FAS) is the most severe form of this spectrum. Three types of hearing impairment are associated with fetal alcoholic spectrum, including delayed maturation of the auditory system, sensory hearing loss and intermittent conductive hearing loss. The last one occurs as a result of recurrent serious otitis media caused by a malformed Eustachian tube, due to embryogenic alterations of the first and second branchial arches.

Objective: Describe the audiometric findings in 10 patients with FAS.
**Methods**: This retrospective study included medical records analysis of 10 individuals with FAS enrolled at the Hospital for Rehabilitation of Craniofacial Anomalies (HRAC-USP), previously submitted to audiological assessment composed by audiometry, tympanometry and hearing antecedents by experienced audiologists of the Speech and Hearing Division of HRAC-USP.

**Results**: Most subjects had positive hearing antecedents: hypoacusis was referred by 42% and 58% had at least one current or previous episode of otalgia, otorrhea or otitis. All types of tympanometric curves were found, with a higher prevalence of the abnormal ones (60%). Pure tone audiometry thresholds were within the normal range in most cases (85%), with conductive hearing loss in only 3 ears (15%).

**Conclusion**: Individuals with FAS showed a high rate of hearing complaints and tympanometric abnormalities, requiring a long term audiological and otological follow-up.

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**A352. Audiology Students Attitudes And Hearing Behaviors**

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**Introduction**: Young people are usually exposed to noise, so it’s important to know about their attitudes and behaviors towards noise, and the consequences of those exposures. It includes investigations about these questions in young who studies about hearing.

**Objectives**: To identify the attitudes and the hearing habits of audiology students about environmental noise and leisure activities and to relation with their major.

**Methods**: 50 audiology students of a Brazilian University from both genders, with age between 17 and 24 years old were included in this study. They answered an adapted version of Youth Attitude to Noise Scale (YANS) questionnaire. They also answered about some hearing symptoms and feelings in relation to noise. Descriptive statistics was used to characterize data.

**Results**: Hearing habits questions showed students are eventually or never exposed to noise in their activities, except for loud music on headphones, but most of students (76%) does not have hearing problems. Most students do not adapt with daily noises around them, they feel loud noises as problem and they hope they can help to change this. Half of students believe their habits are not harmful to hearing and 60% believe their habits have changed since they entered in University.

**Conclusion**: Audiology students worry about their hearing and they are struggling to be in silent rooms. They believe their attitudes can influence environment. Physiology and hearing diseases classes may change attitudes and behaviors towards noise.

**Keywords**: Audiology, Hearing, Noise Effects, Noise Perception

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**A1722. Auditory Evoked Potentials of Late Latency and Cognitive Potential in Aphasic Individuals**

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**Introduction**: Considering the neurological disorders as risk factor for auditory processing disorders, aphasic patients constitute a risk group. Auditory processing disorders can be identified by electrophysiological tests such as auditory evoked potentials of late latency (LLAEP) and cognitive (P3), which verify the integrity and functioning of the auditory pathway.

**Objective**: To analyze the findings of the auditory evoked potentials of late latency (LLAEP) and cognitive (P3) in aphasic individuals.

**Methods**: Seventeen aphasic individuals due to a stroke, with a mean age of 63.4, were evaluated by LLAEP and P3.

**Results**: Of the 17 individuals, only 11 got the waves P1 and N1, 10 presented the wave P2 and only six presented the waves N2 e P3. Association was found when correlated the findings of LLAEP with gender only for P1 in the left ear (p = 0.027). Association were found when correlated the findings of LLAEP with age (p = 0.049), education (p = 0.041) and characterization of aphasia. There was no correlation with the time of presentation of stroke and completion of speech therapy before evaluation.

**Conclusion**: The LLAEP and P3 have proved useful and important for evaluating aphasic individuals.

**Keywords**: evoked potentials, auditory; electrophysiology; aphasia; event-related potentials
Objective: Check the performance of the trained ear and the untrained in Staggered Spondaic Word test, after auditory training.

Methods: 12 individuals, 12-15 years who had asymmetry in the percentages between the ears in Staggered Spondaic Word; this asymmetry varied with a minimum value of 2.5% and a maximum of 17.5% between the ears and was observed in all subjects. The sample was divided in groups, the altered physiological mechanism of selective attention group and the altered selective attention and temporal processing group. Both were submitted to the auditory training the ear with the worst performance, organized in eight sessions.

Results: There was improvement of Staggered Spondaic Word after the intervention, with statistical significance in all groups, both in the right ear and the left ear. In the group with the alteration selective attention mechanism, the average values in percentage of correct answers in the right ear changed 80.42% to 94.17% at the end of training; in the left ear, changed 76.25% to 94.17%. In the group with alteration selective attention and temporal processing, the average values in percentage of correct answers in the right ear changed 77.08% to 92.92% at the end of training; in the left ear, changed 80.83% to 94.17%. All subjects improved their performance in both ears, reaching the normal range.

Conclusion: The training was effective for both the ears.

A168. Body Balance: A Portrait of elderly active population with complaints of Dizziness
Isabela Schroer Neis, Luciele da Silva Prates, Valdete Alves Valentins dos Santos Filha
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Introduction: Combined with multiples comorbid, arising from age, balance disorders are considered main significant aspects identified in this population, with emphasis on dizziness, imbalance and falling, as the major factors which limit the life of elderly. The posturography evaluation and visual analogue scale have been valuable tools in evaluation of body balance in the elderly population.

Objective: Evaluate the integration of visual system, somatosensory, vestibular system in elderly active population with dizziness and/or vertigo, through dynamic posturography, relating to the degree of the uncomfortable symptoms of these on quality of life.

Methods: The sample is constituted by 33 active elderly, that have complaints about dizziness and/or vertigo, 75% women and 24.2% men, the mean age of 65 years old. All participants underwent anamnesis, posturography, and asked about the level of discomfort of complaint, by evaluating the Escala Visual Análoga- EVA (Visual Analog Scale) during a healthy action in the university.

Results: It was found that 42.43% of elderly participants complained about the dizziness and vertigo, 30.30% imbalance, 27.27% imbalance associated with falls. Regarding to posturography, 25% of the elderly had good integration on the sensory systems; 33% difficulty in integration of systems, especially the visual preference and 42% had difficulty in integration of all systems. In the Escala Visual Análoga was observed degree of notes between 4 and 10 on discomfort of symptoms, with mean of 7.3.

Conclusion: The population evaluated, mostly women, presented difficulty in integration between systems; with an impact of dizziness on quality of life in elderly people.

A62. Characterization Of Patients Assisted At A Hearing Health Service In 2014
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Introduction: Hearing is considered essential for communication between people, ensuring the participation of the same society we live in. One of the possible solutions to minimize hearing difficulties arising from a hearing impairment is the use of hearing aids.

Objective: To characterize the patients prothetizades in the public hospital during one year.

Methods: In 2014, participated in the study 763 patients, 50% males (n = 381) and 50% female (n = 382). Of these 52% (n = 398) were new cases and 48% (n = 365) were replacement cases.

Results: 98% (n = 753) of the patients showed bilateral hearing loss and 1.3%(n = 10) unilateral. Most showed sensorineural hearing loss with moderate degree. 1416 received hearing aids, being 92% (n = 1308) bilateral and 8% (n = 108) unilateral. Regarding the type of hearing aid, 58% (n = 447) were fitted with BTE with conventional mold, 25% (n = 194) with intracanal, 10% (n = 76) with open fit and 6% (n = 46) with receiver-in-the-ear. As for technology classified by the Unified Health System, 51.5% of the patients (n = 393) were fitted with hearing aids type A, 38% type B (n = 290) and 10.4% of type C (n = 80).

Conclusion: Most of the patients received hearing aids for the first time, had bilateral sensorineural hearing loss with moderate degree, received the type A BTE model with conventional mold.

A308. Check The Degree Of Comfort/Discomfort Of Students In Relation To The Acoustic Environment Of A Municipal School Of Paraná
Adele Cristina Segala Castro, Teresa Maria Momensohn dos Santos
Instituto de Estudos Avançados da Audição

Introduction: The student must spend a greater effort to concentrate during the school period when the background noise of the classroom is high.

Objective: to verify the degree of comfort/discomfort caused by acoustic environment where the teaching-learning process occurs for students at a municipal school of Paraná.

Method: 184 students enrolled in 4th. and 5th. years of elementary school responded to a questionnaire on their perception of environmental noise based on Hans (2000) and Libardi et al. (2006). Each Participant answered to the questionnaire individually in the classroom.

Results: to the question “what is bothering you at school?” 67% responded “too noisy”, 8%, â€œlow illuminationâ€œ and 7% â€œtemperatureâ€œ and â€œinadequate furnishingsâ€œ. To the question “what’s the annoyance that noise brings you in the classroom”, 36.4% complained of difficulty to hear professor; 27.2% complained of interference when they are in an evaluation moment; 20.7% that noise bothers in reading text aloud; 11.4% complained about the difficulty in solving math exercises and 4.3% of the negative effect on production activities and text interpretation. Likert scale analysis for acoustic comfort showed that higher discomfort levels were the talk inside and outside the classroom, the noise of dragging furniture, the noise in the sports court and reforms in school.

Conclusion: Noise background in school bothers not only teachers but students too. Actions to improve this environment are very necessary.
A291. Clinical And Videofluoroscopic Evaluation Of Swallowing In Children With Suspected Dysphagia
Lenice de Fatima da Silva Munhoz, Suelly Cecília Olivan Limongi
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Introduction: Studies which describe and compare clinical and videofluoroscopic evaluation of swallowing in children with suspected dysphagia are few.

Objectives: To describe the clinical signs and symptoms indicators of pharyngeal phase swallowing dysfunction observed in clinical evaluation of swallowing and the videofluoroscopic findings of oral, pharyngeal and esophageal phases in children with suspected dysphagia; and to identify clinical signs and symptoms associated with isolated laryngeal penetration and laryngeal aspiration.

Methods: Retrospective analysis of data from clinical and videofluoroscopic evaluations carried out in 55 children from 1 month to 7 years and 11 months old. To clinical evaluation, the A setback Protocol for Clinical Assessment of Pediatric Dysphagia was used. To videofluoroscopic, oral, pharyngeal and esophageal phases dysfunctions were analysed. To statistical analysis, Chi-square and Fisher’s Exact Tests were used.

Results: Cervical auscultation alteration, cough, choking and oxygen desaturation were the clinical signs and symptoms more observed. In videofluoroscopic, oral phase dysfunctions were less frequent with thin fluid (p = 0.032) and more frequent with purée (p < 0.001). Pharyngeal phase dysfunctions were more frequent with thin fluid (p = 0.010) and less frequent with thickened fluid (p = 0.003) and purée (p = 0.045). In esophageal phase, about half of the children showed gastroesophageal reflux. Choking was the only clinical sign associated with isolated laryngeal penetration thin fluid (p = 0.044).

Conclusion: The professional should be alert on the swallowing dysfunctions types that patient presents to define the more safe consistencies to swallow, and on choking presence in thin fluid clinical evaluation due to probably isolated laryngeal penetration occurrence in children with suspected dysphagia.

A314. Comparison Of Two Protocols In The Analysis Of Brainstem Auditory Evoked Potential - Baep With Speech Stimulus
Débora Durigon da Silva, Rúbia Soares Bruno, Jordana da Silva Folgearini, Fernanada Freitas Vellozo, Mirtes Bruckmann, Michele Vargas Garcia
Universidade Federal de Santa Maria

Introduction: BAEP with speech stimuli is produced in the subcortical region, reaching greater synaptic coverage than non-verbal stimuli. It is indicated to evaluate individuals with alterations in speech, language, auditory processing and learning.

Aim: Comparing the different BAEP protocols with speech stimulus, analyzing morphology and latency of the waves.

Method: This study consisted of 32 subjects, from clinical audiology service of a University Hospital. We used the Intelligent Hearing Systems (IHS) equipment with two stimulation protocols: three series of 1000 sweeps followed by two series of 3000 sweeps, analyzed by the resulting waveform in both cases. After marking, the information was confronted with the navigator-Prô equipment. Visual analysis of the tests was carried out by the researcher. For the morphological analysis, it was considered the increase of amplitude of the waves C, D, E and F and, the abrupt reduction in the amplitude of the wave O, for the latencies, the reference values were considered.

Results: There was no difference between the two used protocols in relation to morphological analysis, because in both protocols the tracing differs from the navigator-Prô. In the latency analysis, there was no difference between the two protocols. However, when compared to navigator-Prô values, there is a significant difference.

Conclusion: It was possible to compare the different protocols and the morphology tracing in IHS is different from the Navigator-Prô in both protocols, as its latencies cannot be used in research with IHS equipment.

A532. Correlation Between Acoustic Reflex And Performance In The Sustained Auditory Attention Ability Test
Maria Renata José, Maria Fernanda Capoani Mondelli, Mariza Ribeiro Feniman
Fob/USP

Introduction: Studies have raised the relationship between auditory attention and the acoustic reflex, and the influence of this mechanism in the separation between stimulus and noise so that the focus of attention is only to the stimulus.

Objective: To verify the correlation between the acoustic reflex and performance of adult and elderly subjects in Sustained Auditory Attention Ability Test (SAAAT).

Methods: Ethical approval: process #34/2011 (FOB-USP). Participated 76 subjects aged between 18 to 83, of both genders and without complaint of inattention. The assessment consisted of applying, pure tone audiometry, speech audiometry, immittance and SAAAT. The test performance is verified by the total error score (the result of a sum of inattention errors and impulsivity) and the vigilance decrement.

Results: Was observed a weak correlation (negative) between the total error score and contralateral acoustic stimulation (CAS) in the frequencies of 500 Hz and 2000 Hz in the right ear and, 1000 Hz in the left ear. Regarding the type of response, weak correlation (negative) was found between inattention and CAS in the frequency of 500 Hz in the right ear and 2000 Hz in the left ear and, as impulsivity, there was a weak correlation (positive) between the ipsilateral reflexes in frequency of 2000 Hz and CAS in 1000Hz (negative) in the left ear.

Conclusion: This study found correlation between the acoustic reflex, in some surveyed frequencies, mainly in contralateral condition, in the performance of subjects in SAAAT, suggesting influence of the acoustic reflex in the sustained auditory attention ability.

A503. Correlation Between High-Frequency Hearing Loss And Hearing Loss At Medium Frequencies And The Performance Of Adults And Elderly In The Sustained Auditory Attention Ability Test
Maria Renata José, Maria Fernanda Capoani Mondelli, Mariza Ribeiro Feniman
Fob/USP

Introduction: studies conducted with children observed the influence of hearing loss on Sustained Auditory Attention Ability Test (SAAAT).

Objective: To investigate the correlation between high-frequency hearing loss and hearing loss at medium frequencies and the performance of adults and elderly subjects in the Sustained Auditory Attention Ability Test.

Methods: Ethical approval: process #34/2011 - Ethics Committee in Research of the FOB-USP. Participated in the...
study 90 subjects: GI: 40 subjects with bilaterally normal hearing; GII: 27 subjects with bilateral sensorineural hearing loss in high frequencies (4000 Hz, 6000 Hz and 8000 Hz); and, GIII: 27 subjects with bilateral sensorineural hearing loss at medium frequencies (500 Hz, 1000 Hz and 2000 Hz) and high frequencies, aged over 18, of both genders, and without complaint of inattention. The assessment consisted of applying Attention Questionnaire, pure tone audiometry, speech audiometry, immittance and SAAAT. The test performance is verified by the total error score (the result of a sum of inattention errors and impulsivity) and the vigilance decrement.

**Results:** Regarding the type of response was observed weak correlation (positive) between hearing loss (medium and high frequencies) and inattention, and moderate correlation (positive) between hearing loss and impulsivity. In the performance of the SAAAT was verified moderate correlation (positive) between the total error score and hearing loss.

**Conclusion:** There was verified correlation between high-frequency hearing loss and hearing loss at medium frequencies in the performance of SAAAT, showing negative influence of hearing loss in the performance of adults and elderly in SAAAT.

**Keywords:** Attention; Hearing

**A50. Correlation Between Results Of Hearing Screening And Social Participation Restriction In Middle-Aged Adults And Elderly**

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**Universidade Federal do Rio Grande do Sul (UFRGS)**

**Introduction:** The restriction of social participation by hearing loss is often the individual ages. 

**Objective:** To investigate the correlation between the results of the hearing screening and evaluation of participation restriction caused by hearing loss in middle-aged adults and elderly.

**Methods:** The sample consisted of individuals of both genders. Initially it was performed otoscopy. The following participants answered Hearing Handicap Inventory for Elderly (HHIE-S) and following the hearing screening was made, using portable equipment (Hearcheck Screener, Siemens). The equipment emits pure tones at 1000Hz (20, 35 and 55dBHL) and 3000Hz (35, 55 and 75 dBHL). As a criterion of “pass”, the individual should hear all sounds except 20dBHL at 1000Hz, for even individuals with normal thresholds may not realize the pure tone that intensity.

**Results:** We evaluated 71 patients, aged 53 to 87 years (mean 69.27 ± 7.71 years), 66 women (92.96%). They passed the hearing screening 14 (19.72%) individuals. With respect to HHIE-S results, it was found that the score ranged from 0 to 34 points (mean 6.37 ± 8.64). Only 13 (18.31%) subjects had scores indicative of participation restriction. When the analysis was made between the results of the hearing screening (pass / fail) and the results of the HHIE-S (presence / absence of social participation restriction), it was found that there was no correlation (r = 0.15 - p = 0.8).

**Conclusion:** among the evaluated individos there was no correlation between the results of the hearing screening and restriction of social participation.

**Keywords:** hearing loss, middle aged, aged

**A33. Determining Factors In The Improvement And Worsening Of Tinnitus Perception**

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**Introduction:** In the assessment of patients with tinnitus, the report that some factors may diminish or enhance the perception of this symptom is common.

**Objective:** To analyze factors considered as determinants of improvement and worsening in the tinnitus perception by individuals affected by the symptoms.

**Methodology:** The participants of this study were seen at an outpatient clinic for evaluation of individuals with chronic tinnitus. All mentioned completed a questionnaire about the factors that may worsen and improve tinnitus, prepared by the group responsible for the research. For a list of situations presented by the researchers, based on specialized literature, individuals should respond if there was improvement, worsening or if the situation did not change the perception of tinnitus.

**Results:** The sample consisted of 698 patients seen between 2002 and 2014, with 466 (66.76%) females and 232 (33.2%) were male. The ages ranged from 9 to 89 years, mean 58.1 years. Through analysis of the factors, it became clear that the silence (65.4%), night time (62.4%) and anxiety (49.7%) are factors that accentuate the perception of tinnitus. As improvement factor, individuals mentioned especially the presence of environmental noise (37.1%) and rest (16.9%).

**Conclusion:** In this analysis is possible to verify that in this sample, quiet situations and anxiety accentuate the perception of tinnitus. The presence of environmental noise and rest help to decrease the perception of the symptom.

**Keywords:** tinnitus, anxiety, rest

**A77. Depressive Symptomatology In Elderly Users Of Hearing Aid**

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**Introduction:** To get old is part of all human bodies. Associated with aging, we can find hearing loss and depression, becoming difficult the contact of elderly with others, generating loneliness and difficulty in their oral communication.

**Objective:** To assess elderly patients at the hearing health service accredited by the National Health System in the city of Curitiba, Brazil and verifies that the use of hearing aid can reduce depressive symptoms in this population.

**Methodology:** This is an experimental study from a descriptive nature, where it analyzes the results obtained by applying Geriatric Depression Scale in a group of 61 individuals before and after the use of hearing aids.

**Results:** All individuals completed the questionnaire before the adaptation of the prosthesis and at least six months after use. From 61 respondents 34% had signs of depression. When comparing the results of the questionnaire before the use of hearing aids and after six months of use, a reduction of 21% was found.

**Conclusion:** The study led us to conclude that use of hearing aids in patients with depressive symptoms is not only a way to minimize the negative effects of hearing loss, but also minimize the depressive symptoms of these patients. The questionnaire proved to be easily applicable. In the near future, it is expected that the hearing health service apply the questionnaire in order to facilitate access to necessary care to this population with depressive symptoms, focusing on quality of life.

**Keywords:** Elderly, depression, hearing loss, hearing aid
A629. Development Of A Virtual Environment On Breathing Function
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Introduction: breathing is one of the vital functions of the body and is essential for the maintenance of life. Preventive actions of respiratory disorders can be used by the population as well as the early self-diagnosis and the early care for treatment based on the knowledge of the subject.

Objectives: this study aimed to develop a Virtual Learning Environment on breathing function for young people, in particular adolescents.

Methods: the Virtual Learning Environment was elaborated by Wordpress tool, and the stages of analysis, design, development and implementation were followed. All the texts are available on the Virtual Learning Environment and were evaluated by the Flesch Reading Index.

Results: the Virtual Learning Environment, in blog format, designed for adolescents, containing information on breathing function was developed in eight separate topics and a session of “curiosities”. Clear and accessible language for the target audience was used in all posts. Current topics of interest such as mouth breathing, snoring, apnea, respiratory allergies were written in more detail.

Conclusion: the virtual page "How do I breathe?" is available for access on internet at the address: https://comoerrespdio.wordpress.com. Regarding the theme, it is expected that Virtual Learning Environment provides information to adolescents on breathing function, allowing them to disseminate such knowledge to others and identify signs and symptoms of changes in respiratory function and thus contribute to early diagnosis.

Keywords: Breathing, Distance Education, Internet

A660. Dysphagia and Level Of Intake Analysis By Mouth of AIDS Patients With Progressive Multifocal Leukoencephalopathy
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Introduction: Progressive multifocal leukoencephalopathy is a demyelinating disease, whose main symptoms are: hemiparesis, ataxy, aphasia, dysarthria and dysphagia.

Objective: Verify the presence of dysphagia pre and post therapy in patients with HIV and progressive multifocal leukoencephalopathy.

Methodology: The presence, degree of dysphagia and level of intake by mouth were analyzed through the Dysphagia Outcome and Severity Scale (O’Neil) and the Functional Oral Intake Scale (FOIS) in 12 patients with a mean age of 48 years.

Results: Two patients (16%) had normal swallowing, with FOIS level 7. Five (42%), moderate oropharyngeal dysphagia, 40% with initial FOIS 4 and 60% with initial FOIS 5. Five (42%) patients had severe oropharyngeal dysphagia, initial FOIS 1. Only two (40%) of the patients with moderate dysphagia were rehabilitated and started to present functional swallowing with FOIS 6, after an average of 7 sessions of therapy. Only one patient (20%) with severe oropharyngeal dysphagia was rehabilitated, with final FOIS 5 after 6 sessions of therapy. The remaining patients with severe dysphagia (80%) evolved to gastrostomy after 12 therapy sessions.

Discussion: The high number of patients with moderate and severe dysphagia was justified by the high viral load and reduced CD4+ cell counts associated with local lesions, which in this study was presented mostly on the posterior fossa and temporoparietal lobe.

Conclusion: Moderate and severe dysphagia were found in nearly 85% of the sample and most patients were not rehabilitated.

Keywords: Dysphagia, Progressive multifocal leukoencephalopathy, Acquired Immunodeficiency Syndrome

A122. HINT Brazil: Speech in Noise Recognition Test in Children - Preliminary Study
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Introduction: Auditory processing refers to the efficiency by which the Central Nervous System uses auditory information and is related to certain auditory skills such as speech recognition in noise. The Hearing in Noise Test (HINT) allows the measurement of the Speech / Noise ratio (S/N). It has been used in the evaluation of patients with cochlear implantation or Hearing Aid users. In Brazil, it was adapted into Portuguese and applied in adults. There are no studies to establish the parameters of normality for children, in the brazilian literature; if so, they could help diagnose students with complaints of auditory processing.

Objective: Analyze speech recognition in noise for normal hearing children.

Method: There were evaluated 26 students between 8 and 10 years, of both genders, without hearing or school...
complaints, and results within the normal range in the basic audiological evaluation and on the dichotic digits test. Using headphones, 4 lists were applied with 20 sentences each, and searched the S / N ratio in the following conditions: Noise front, Noise right and Noise left. At the end, the equipment calculated the Composite Noise, which corresponds to the weighted average of the tested conditions.

**Results:** The S / N Noise ratio for males was -6.15 dBHL and for females was -6.11 dBHL. Regarding age, the average was -5.28 dBHL at 8 years, -6.03 dBHL at 9 and -6.74 dBHL at 10.

**Conclusion:** The evaluated children recognized the sentences presented at a lower intensity to noise, around 5 dB.

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**A56. Hospitalized Nursing Mothers Knowledge about Breastfeeding, Speech and Language Pathology**

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*Universidade Federal de Sergipe*

**Introduction:** Group guidelines about breastfeeding and speech and language healthy cover aspects such as language, myofunctional orfacial system, speech and language pathology aspects. Verify acceptance of made group intervention.

**Methods:** It’s a interventionist and comparative study with 163 hospitalized nursing mothers from a public maternity hospital in Aracaju. Nursing mothers were divided in two groups according to type of hospitalization (Kangaroo Neonatal Intermediate Care Unit and Common Postpartum Room). Assertiveness Test was applied it and it concerns about breastfeeding, speech and language pathology, followed by the guidelines. Acceptance test were applied too. We model the nursing mother knowledge in the assertiveness test using Birnbaum’s Unidimensional 3 Parameters Model under Item Response Theory that describes the items. We used Mann-Whitney test to compare estimated knowledge between the groups. P-values under 5% were considered statistical significant.

**Results:** There was no statistical significant correlation with hospitalization time and knowledge level. Acceptance test values above 85%. The higher is the noise level and the number of sources, the worse is the condition for the child to listen, pay attention, understand, assimilate, learn or concentrate.

**Conclusion:** Nursing mother group guidance as discursive practice about breastfeeding, speech and language pathology was considered well accepted. This health educational activity provided access to information independent of hospitalization time and hospitalization type of nursing mothers. The good intervention acceptance concludes viability of expand those practices in hospital environmental.

**Keywords:** Common Postpartum Room; Kangaroo Neonatal Intermediate Care Unit; Health Promotion; Breastfeeding; Humanization of Assistance

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**A704. Influence Of Music Education In The Auditory Behavior Of Children 8-9 Years Old**

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*Universidade Federal de São Paulo*

**Introduction:** Music is seen as a resource to encourage the development of skills involved in auditory processing. Purpose: To evaluate and compare the everyday auditory behavior in children with musical experience when compared to children without musical education reported by parents of children 8-9 years old, with and without musical education.

**Method:** The study included 40 children aged 8 and 9 years of both sexes: 20 students of music (study group) and 20 without music education (control group). Was used the SAB Scale, consisting of a questionnaire on the auditory behavior with 12 questions about how the individual deals with the world of sounds in everyday situations, which was answered by the parents of the children. The higher the score obtained on the scale, better the auditory behavior the individual, which 60 points the highest score possible. The statistical analysis took into account the level of significance of 5%.

**Results:** Children with musical education had a score of 50.8 and 50 points in the age group of 8 and 9 years, respectively. With regard to children with music education, the score obtained was 54 and 56.4 in children aged 8 and 9 years, respectively. Thus, the results showed better auditory behavior in children with musical experience when compared to children of the same age without music education, with a statistically significant difference between the groups with and without music education in the range of 9 years.

**Conclusion:** There was influence of musical experience in everyday auditory behavior of children.

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**A306. Identification Of Sources Of Noise And Estimation Of Classroom Noise Level Of A Municipal School In The City Of Cambé, Paraná**

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*Instituto de Estudos Avançados da Audição*

**Introduction:** To identify the noise sources and to estimate the sound pressure level of the noise inside classrooms of a school in the city of Cambé (PR).

**Methods:** The sample was comprised of 184 students enrolled in 4th. and 5th. years of elementary school and 18 teachers/staff of a school in the city of Cambé/Paraná. Sound levels of the classroom and the playground during physical education class were estimated with a sound pressure level meter before and after a hearing awareness program.

**Results:** The most frequent causes of noise in the classroom were people talking (36%) noise from the sports court (24%), the noise of chairs and tables (16%) and school reform (11 percent). Noisier locations were the sports court (40%), the schoolyard (42%) and the classroom (9%). The noise level in the classrooms showed medians between 50 and 84 dB (A). The courtyard, during activity time, peaked at 89 dB (A) decreased to 52 dB (A) outside these hours.

**Conclusion:** the values in dB (A) found on school outweigh the values recommended by resolution 01/90 ABNT, 40-50dB (A) to classroom. Background noise can interfere in the teaching learning process.

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**A30. Late Latency Auditory Evoked Potential and Cognitive: virus holders of Acquired Immune Deficiency Syndrome**

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*Universidade Federal do Rio Grande do Sul*

**Introduction:** central nervous system and the immune system are the main targets of infection by human immunodeficiency virus, which may cause impairment throughout the auditory pathway, including the central auditory system. In this case, are common changes in electrophysiological tests. Objectives: To describe and analyze the responses obtained in the late latency auditory evoked
A91. Piercing Lingual And Its Effects On Oral Functions
Taisa Giannecchini Gonçalves de Souza
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Introduction: The piercing is a form of adorning the human body, typically via perforations introduced sterilized where metal pieces are inserted. However, there are numerous factors that harm the pierced site, causing lesions in 100% of cases. The lingual piercing causes changes in the mucosa and serves as a focus for many infections.

Objectives: To describe the effects of tongue piercing to perform oral functions specified by users and develop a prevention program.

Resumed Report: participants were 30 users Lingual Piercing for at least one year, who answered a questionnaire about the effects of adornment for your general health and with respect to oral functions. 80% reported difficulty speaking after laying Piercing, mainly feel tongue-tied and pain on average up to 2 months after placement. 60% felt discomfort or difficulty to produce any sound and all reported difficulties in chewing, but got used to the new tongue movements. 60% developed a parafunctional habit to show the Piercing and 40% had throat infections after placement. 90% consider their right speech, but refer excessive salivation and locked articulation.

Conclusion: After placing the lingual Piercing, users have speech disorders and chewing for at least two months, 60% of respondents developed a parafunctional habit and 90% reported excessive salivation and locked articulation, which are symptoms that impair intelligibility Speech. We believe that the speech pathologist as a health agent should inform them about these consequences and move on to guide them. The simple removal of Piercing eliminates its negative effects.

Keywords: piercing, speech

A634. Profile Analysis Of Patients Attending The Hearing Health Service Derdic / Pucsp For 9 Years
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Introduction: Considering the hearing impairment issues in Brazil, the Ministry of Health realized the need to organize the rehabilitation system in the different levels of care, which culminated in the establishment of the national policies - Política Nacional de Atenção à Saúde Auditiva in 2004. After nine years of implementation it is possible to evaluate the work done by proposing improvements for the coming year.

Objective: to analyze the waiting time between the diagnostic process and the hearing aid (HA) selection and between the selection and delivery of HA of 8179 patients attending the Hearing Health Service (HHS), from 2004 to 2012.

Method: The records of the institution were analyzed, through an Excel spreadsheet and controlled by the administrative sector. Place of reference, date of birth, gender, age, etiology, diagnosis date, date of HA selection, receiving date of HA and date of audiological follow up were analyzed and a simple statistical analysis was performed.

Results: The results point to the growth in the number of visits, with stability from the year 2008; the number of patients did not have excessive growth over the years, thus maintaining an average of 918 patients between 2006 and 2012. The characterization according to gender and age also has no change over the years. The time between the diagnostic procedures, selection and receiving date of HA have varied the most.

Conclusion: there is a necessity to control the processes performed for the constant improvement of service and better patient care.

A38. Prolonged Endotracheal Intubation And Dysphagia In Pediatric Patients
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Introduction: Prolonged intubation has been reported in the literature as a predictor of oropharyngeal dysphagia.

Objective: To describe the impairments in swallowing pattern of pediatric patients undergoing prolonged intubation (> 48 hours), by systematic bedside evaluations using the Clinical Pediatric Dysphagia Assessment Protocol (PAD-PED).

Methods: Prospective observational cross-sectional study. Ten children (age range: one month to seven years) were assessed 24 to 48 hours after extubation, and swallowing was classified according to the Pediatric Dysphagia Severity Scale. Subsequent bedside assessments were also conducted until oral-feeding reintroduction.

Results: Alterations in both oral and pharyngeal phases were found for most patients undergoing endotracheal intubation. The initial assessment after extubation revealed moderate to severe dysphagia in 70% of the subjects (p-value = 0.02). All patients underwent on average five subsequent assessments. At discharge, the final assessment revealed that 70% of subjects presented normal swallowing and 30% presented mild dysphagia, according to the PAD-PED Scale. This improvement on patients’ swallowing was statistically significant (p-value = 0.02). Spearman Correlation Test showed positive and significant correlation between endotracheal
intubation for more than five days and the occurrence of dysphagia (R = 0.88, p-value = 0.01).

Conclusion: Most of the subjects presented abnormalities in oral and pharyngeal phases of swallowing, showing an important risk for tracheal aspiration, especially for those who have undergone endotracheal intubation for more than five days. However, future studies with a larger sample using complementary objective methods of evaluation are necessary, in order to corroborate the clinical findings.

Keywords: intubation tracheal; dysphagia; swallowing disorders

A26. Relationship Between The Presence Of Videolaryngoscopic Signs Suggestive Of Laryngopharyngeal Reflux And Voice Disorders In Teachers
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Objective: To analyze the relationship between the presence of videolaryngoscopic signs suggestive of laryngopharyngeal reflux (LPR) and the voice disorder (VD) for teachers.

Method: research, cross-cutting, with convenience sample that had as inclusion criteria, subjects have over 18 years, be a teacher female, seek care with complaining of VD and/or LPR. The exclusion criteria were: smoking, and provide respiratory changes. All subjects met the following instruments: Vocal Production Condition – Teacher (VPC-T), including the Screening Index for Voice Disorder (SIVD); and Voice Handicap Index (VHI). There was sample collection speaks for voice perceptual assessment and all underwent review of otolaryngology.

Results: Were evaluated 121 teachers, with a mean age of 43 years and 7.8 class hours per day. Only 24.0% of the teachers did not have vocal fold lesions and 42.1% had videolaryngoscopic signs suggestive of LPR. In the group of teachers with the presence of LPR signs, the most common symptoms of SIVD were: dry throat, hoarseness, throat clearing; the average VHI was 17.9 points. There wasn’t association between voice disorder and presence of videolaryngoscopic signs suggestive of LPR. In the multiple binary logistic regression analysis, the independent factors for the LPR were age and score (tertile: 13-20) VHI.

Conclusion: There was no association between VD and LPR, but between age and VHI score.

A47. Relationship Between The Result Of Binaural Interaction Test And The Phonological System In Children With Phonological Disorders
Diana Weber Bartz, Carolina Nunes Laux, Cecilia Vieira Peruch, Maria Inês Dornelles da Costa Ferreira, Márcia Salgado Machado, Leticia Pacheco Ribas
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Introduction: During the process of language acquisition, hearing plays a fundamental role, because through the integrity of the structures involved, enables quality of sound information by exposure to speech. To assess these structures, there is a battery of behavioral assessments aimed at identifying which hearing abilities are altered, called assessment of central auditory processing.

Objective: To investigate the relationship between the result of binaural interaction test Masking Level Difference, which comprises the assessment of central auditory processing, and the composition of the phonological system of children with phonological disorders, in order to check for associations that can help understanding of atypical language acquisition process.

Methods: A quantitative, observational and descriptive study, developed through secondary lifting a database consisting of speech therapy evaluations of 57 children with phonological disorders, aged between 5 and 10 years (CEP process n° 621.047).

Results: Of these 57 children, 23 (40.3%) present the result Masking Level Difference standard and 34 (59.7%) have changed the result. In the relationship between phonological acquisition of phonemes in initial and medial onset, there was statistical significance between the non-acquisition of /S/ and /R/ early-onset and /S/ and /Z/ in medial onset with the test result changed.

Conclusion: The results of this study indicate weak relationship between binaural interaction and the phonological disorder, and possibly other skills are involved. Studies relating the entire battery of assessments of auditory processing in more homogeneous samples are fundamental to the understanding of these cases and to formulate new rehabilitation proposals.

A43. Risk Factors For The Disorder Of Swallowing in Cerebral Palsy
Ruth Siqueira Grawer, Michelle Apellanis Borges, Laura Fuchs Nunes Casa do Menino Jesus de Paragua

Introduction: Cerebral Palsy represents a group of permanent motor disorders in developing brain. These disorders can result in changes in swallowing, leading to respiratory and nutritional disorders.

Objectives: Analyze the clinical risk factors for the disorder of swallowing in 37 individuals with Cerebral Palsy.

Method: transversal study of qualitative and quantitative character in a philanthropic institution in Porto Alegre-RS. Were included in the survey individuals diagnosed with Cerebral Palsy. Using clinical evaluations in deglutition Protocol, which are the variables: cheek tone, alterations of bite, sialorrhea, breathing, labial occlusion, laryngeal elevation, Classification of motor function Grossa (GMFCS) and Functional Oral Intake Scale - FOIS.

Results: The patients studied, 55.5% were male and the average age was 16 years. Among them, 97.2% possess some degree of swallowing disorder. It has been observed in individuals that 67.5% showed facial tone changed, of these, 64% showed hypotonic tone; 78.3% presented alterations of bite, being the open bite (72.4%) the most frequent; 81% absence or incompetence of labial occlusion; 37.8% presented sialorrhea. About to breath, 56.7% use Oro-nasal breathing, 21.6% oral, 10.8% nose and 10.8% use of tracheotomy; 67.5% presented elevation and anteriorization laryngeal adequate during swallowing of saliva; about GMFCS 70.2%, are at level 5 and in FOIS 32.4% are at level 1.

Conclusions: Disorders in swallowing are associated with respiratory complications and with increase in mortality, the findings of the assessment being essential to assist in speech therapy prognosis and therapeutic process.

Keywords: Cerebral Palsy; Deglutition; Disorders

A322. Speech Of A Child With Unilateral Hearing Loss: Phonetic Evidences
Karina Arreco Fiorotti Cruz, Maria Sarah Tristão Ferraz, Mabel Gonçalves Almeida, Aline Neves Pessoa-Almeida
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**Introduction:** Acoustic and perceptual analysis can be considered useful clinical tools to investigate the speech characteristics of unilateral hearing loss children. Studies that analyze the correspondence between evidence of the development of prosodic aspects indicate to the diversity parameters that are used in the evaluation and monitoring of these subjects that relate the implications of articular and acoustic feedback.

**Objectives:** Aimed at describing methodological approach with perceptual and acoustic correlates of the speech samples from unilateral hearing loss children.

**Methods:** Speech samples of a child, 8 years boy, were collected during speech therapy sessions. The perceptual analysis was based on the Vocal Profile Analysis Scheme for Brazilian Portuguese and the recorded corpus was analyzed through the ExpressionEvaluator script ran by Praat software v5.2.10. The measures extracted comprised the fundamental frequency-f0, first f0 derivative, intensity, spectral slope and long-term mean spectrum.

**Results:** Such methodological addressed leads to the possibility to detail the articular maneuvers adopted by the children, which indicates probable strategies in trying to attain the acoustic-articulatory targets. In this example case, association of minimized of amplitude movement of articulators with adjustments of laryngeal hypotension, decrease in rate of speech and minimized extension of pitch and loudness, associated with falsetto showed that cases of unilateral hearing loss require therapeutic strategies that consider the inseparable relationship between auditory processing and speech production adjustments.

**Conclusion:** The phonetic model showed the variety of possible and predictable vocal configurations resulting from the perception and speech production in unilateral hearing loss.

**Keywords:** Auditory Perception; Acoustic Analysis; Cochlear Implant

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**A547. Speech Recognition In Elderly Listeners With Complaint Of Difficulty Understanding Of Fast Speech**

Bianca Peres Santana, Lílliane Desgualdo Pereira

**Universidade Federal de São Paulo**

**Introduction:** The time-compressed speech test has recently published in Brazilian Portuguese in the manual of central auditory processing Pereira and Schochat, 2011.

**Objective:** To evaluate the performance in this test that measures the ability of auditory closure in the elderly listeners and compare difference about the age and presence of complaint.

**Method:** The first group was composed of 18 elderly participants with self-reported complaints of difficulty understanding fast speech. They were distributed in two age groups: 60-69 years (n = 10) and 70-79 years (n = 8). 15 elderly people without the complaint, distributed in the same two age groups: 60-69 years (n = 10) and 70-79 years (n = 5), formed the second group. All the elderly speakers of Brazilian Portuguese, had symmetrical hearing, and hearing level with normal measures (64.8%) and 38 abnormal results (35.2%). In the caloric test, 60 patients presented normal results (55.5%) and 48 abnormal findings (44.5%). Abnormal SVV and normal caloric test results occurred in 23 cases (21.3%), normal SVV and abnormal caloric test results occurred in 33 cases (30.5%), combined abnormal SVV and abnormal caloric test results occurred in 15 cases (13.8%). There was no significant difference between the number of normal and abnormal findings of SVV and caloric test (p = 0.444).

**Conclusion:** Separately or concomitantly, SVV and caloric test often reveal abnormal findings in vertiginous patients, highlighting the importance of performing both procedures in the neurotological evaluation.

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**A53. Subjective Visual Vertical And Caloric Test In Vertigo Patients**

Maristela Mian Ferreira, Adriana Marques da Silva, Thais Grigol, Leslie Palma Gorski, Heloísa Helena Caovilla Malavasi Ganança, Mauricio Malavasi Ganança

**Universidade Federal de São Paulo/Escola Paulista de Medicina (Unifesp-Epm)**

**Introduction:** The ability to judge whether an object is in the vertical position is called subjective visual vertical (SVV); and caloric test stimulates each ear and thus helps identify the injured labyrinth.

**Objective:** To compare findings in the SVV and caloric test in vertigo patients.

**Materials and Methods:** 108 patients were submitted to two assessments. Binocular SVV was measured by the bucket method. The patients indicated the estimated position in which a fluorescent line within a bucket reached the vertical position. It was considered as a normal result when the average deviation was found up to 3°. The caloric test was performed at temperatures of 50°C and 24°C and were classified as normal or altered. Data were tabulated and submitted to statistical analysis.

**Results:** In the SVV evaluation, 70 patients presented normal measures (64.8%) and 38 abnormal results (35.2%). In the caloric test, 60 patients presented normal results (55.5%) and 48 abnormal findings (44.5%). Abnormal SVV and normal caloric test results occurred in 23 cases (21.3%), normal SVV and abnormal caloric test results occurred in 33 cases (30.5%), combined abnormal SVV and abnormal caloric test results occurred in 15 cases (13.8%). There was no significant difference between the number of normal and abnormal findings of SVV and caloric test (p = 0.444).

**Conclusion:** The auditory closure was not affected by the presence of complaint of difficulty understanding fast speech. However, the younger group had a better performance when compared with the older group.

**Keywords:** auditory perception, auditory tests, elderly patients
Materials and Methods: Eleven patients fitted at Reouvir were asked for a subsequent fitting remotely with the audiologist landed at Fundação Otorrinolaringologia and patients stand at Reouvir. All related materials were acquired locally with a low-cost price structure in mind.

Results: Robust willingness from patients whose asserted the potential of having a clinic to perform fitting services nearly their dwelling.

Conclusion: Telefitting is an important tool to crave more public clinics near patients’ dwelling with the back of a credentialed clinic.

Keywords: Hearing aids, patient satisfaction, public policies, telemedicine, quality improvement

A37. The Effect Of Auditory Training In Self-Perception Of Voice Quality Of Voice Professionals
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Introduction: Hearing disabilities can affect the treatment of dysphonia.

Objective: To evaluate the effect of the process of isolated vocal speech therapy and combined with auditory training for the improvement of vocal self-perception of voice professionals.

Method: 12 young adults, professional voice, both genders, with dysphonia. All participated in assessment and reassessment vocal and PAC, comprising the questionnaire QV, Visual Analogue Scale (VAS), GRBASI -G scale, Vocal Assessment Protocol and voice recording; Dicótico de Dígitos-TDD test, Frequency-Pattern Test TPF, Random Gap Detection Test - RGDT, before and after the approaches of isolated and combined vocal intervention, and without intervention. Statistics performed with non-parametric tests, significance level of 0.10 due to the sample size.

Results: The combined intervention provided significant improvement \( p = 0.068 \) in the auditory abilities of ordering and temporal resolution. Interventions, isolated and combined, proved to be effective \( p = 0.068 \) for the vocal self-perception. In perceptual assessment and phonation time, post- intervention, the group of subjects with vocal intervention and or hearing improved.

Conclusion: The vocal intervention combined with auditory training had a positive impact on self-perception of vocal quality and effectiveness in the improvement of the auditory abilities of temporal ordering and temporal resolution.

A31. The Influence Of Personal Habits In The Perception Of Tinnitus
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Introduction: Tinnitus can have a negative effect on patient’s quality of life. The professional responsible for the evaluation, diagnosis and treatment can help the patient to identify situations where the symptom is perceived with less intensity, which can assist in the therapy to be adopted.

Objective: To determine which habits interfere with the patient’s perception of tinnitus, accentuating or reducing the perception of the symptom.

Methodology: We assessed 725 patients treated in an specialised outpatient clinic, with 272 (37.52%) men and 453 (62.48%) women. All patients answered a questionnaire developed by the research group, based on specialized literature, containing information regarding daily habits and the perception of improvement or worsening of the tinnitus symptom. For each habit presented by the researcher, individuals should respond if they perceived improvement, deterioration or if there was no change of the tinnitus perception.

Results: Most patients report that the practice of physical exercises (77.43%), eating habits (93.40%), fasting (91.69%), alcohol consumption (83.26%) and tobacco (92.76%) do not change the perception of tinnitus, against expected by researchers and described in the literature. Still in relation to physical exercise, we highlight the presence of contradictory data regarding the habit. While most do not realize the difference (77.43%), some consider it an improvement factor (9.14%) and other (13.41%) worsening of the symptoms’ perception.

Conclusion: The data analysis shows that the group of patients evaluated do not observe relationship between habits and the improvement or worsening of tinnitus perception.

Keywords: habits; tinnitus; questionnaire

A356. The Performance Of Auditory Training Sessions In Individuals With Auditory Processing Disorder
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Introduction: For the auditory training is challenging is recommended to keep the rate of success versus error approximate 70/30%.

Objective: Check the performance of individuals with auditory processing disorder in auditory training sessions with dichotic listening.

Methods: 19 individuals 12 to 15 years, of both sexes. These were submitted to auditory training based on Dichotic Interaural Intensity Difference, proposed by Frank Musiek and organized in eight sessions, lasting 50 minutes each. Stimuli were worked numbers, onomatopoeia, phrases and syllables, on the steps of separation and binaural integration. Subjects were separated by group, according to the alteration in the physiological mechanisms: selective attention and temporal processing. In each of them, called Group selective attention and Group temporal processing, and both mechanisms: Group selective attention and temporal processing.

Results: The groups had averages above the expected hits. In the first four sessions were worked stimuli with numbers, onomatopoeia and phrases (binaural separation) and all groups had averages above 90% correct. The fifth and sixth session, held with syllables stimuli were more challenging groups had averages above 69%. In the seventh session, with stimuli numbers, binaural integration stage, the groups had averages above 80%; in the first stage of the eighth session, with onomatopoeia stimuli, binaural integration stage, the groups had averages above 97%, in the second stage of the eighth session, with syllabic stimuli, binaural integration stage, the groups had averages above 48%.

Conclusion: The auditory training found that syllables were more challenging than stimuli with digits, onomatopoeic sounds and phrases.

Keywords: auditory training, auditory processing disorder, dichotic listening

A51. Tinnitus In Patients With Chronic Otitis Media
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Introduction: Chronic otitis media is an inflammatory condition lasting at least three months, usually accompanied by irreversible tissue changes. Among the many symptoms present in individuals with chronic otitis media is tinnitus.

Method: Patient records data were analyzed treated at a specialized clinic in the care of patients with chronic otitis media in a tertiary hospital. They were included in the analysis if the results of evaluations carried out from 1999 to 2014.

Results: A total of 1103 medical records of patients of both genders, with similar distribution among females (51.2%; n = 565) and male (48.7%, n = 538). The age of patients ranged from 2 to 89 years, with a mean of 28.9 ± 18.9 years and median of 24 years old. In relation to tinnitus, 55.5% (n = 612) reported the presence of this feature, and 28.9% (n = 177) mentioned bilateral tinnitus and 70.2% (n = 435) unilateral tinnitus, and 35.1% (n = 215) in the right ear and 35.1% (n = 215) in the left ear. In five cases the patients were unable to determine whether the tinnitus was unilateral or bilateral (0.8%).

Conclusion: The data analysis showed high prevalence of tinnitus in patients with chronic otitis media, and in most cases there was presence of unilateral tinnitus.

Keywords: otitis, tinnitus, otitis media

A144. Transition From Tube To Oral Feeding In A Newborn With Laryngomalacia And Oropharyngeal Dysphagia
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Introduction: Laryngomalacia is the most common cause of inspiratory stridor in children and it may be associated to dysphagia, leading to prolonged hospitalization.

Objective: To describe speech-language therapy for swallowing and feeding transition in a newborn diagnosed with laryngomalacia and oropharyngeal dysphagia.

Resumed Report: Case report of a preterm newborn (27w3d), extremely low birth-weight (795g), adequate for gestational age. At 56 days of life, the patient underwent to a bed-side swallowing-feeding evaluation which revealed abnormal non-nutritive sucking pattern with uncoordinated tongue movement, and impaired breathing-swallowing coordination with increase of inspiratory stridor. Speech-language therapy consisted of oral-motor stimulation associated to swallowing training with minimum volume. The transition time from tube to full oral feeding was 54 days, and a total of 33 speech-language therapy sessions were carried out. The volume for swallowing training was gradually increased as the newborn have not presented changes in cardiorespiratory parameters. At 86 days of life, the newborn underwent to nasofibroscopy and videofluoroscopy that revealed a mild laryngomalacia and silent micro-aspirations for thin liquids, respectively. Based on these results, the milk was thickened to nectar-like consistence for flow control. At 86 days of life, the newborn have reached full oral feeding without difficulties on sucking-swallowing-breathing coordination.

Conclusion: This study reinforces the important role of speech-language therapy associated to an accurate diagnosis given by objective exams on the transition to oral feeding, in a more secure and efficient way.

Keywords: deglutition disorders, laryngomalacia, infant

A302. Vocal Evaluation And Voice Handicap Index In Patients With Adductor Spasmodic Dysphonia Being Treated With Botulinum Toxin
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Introduction: Adductor spasmodic dysphonia is characterized by involuntary spasms of the laryngeal muscles, committing communication.

Objective: Assess the effectiveness of treatment with botulinum toxin using the perceptual vocal and visual parameters and the Voice Handicap Index.

Method: 16 individuals with adductor spasmodic dysphonia. All individuals were subjected to: the application of botulinum toxin type A, recording of the vocal sound waves, filling the Voice Handicap Index before the botulinum toxin injection, in the first follow-up on average 36 days after, and in the second follow-up on average after 137 days.

Results: for the perceptual auditory and visual analysis of vocal sound waves, conducted by two adjudicating voice specialists, revealed in the comparison between the pre-application and the first follow-up a decrease in the severity of the oscillation intensity, voice breaks, and vocal tremor (p = 0.002). Comparing the pre-application and the first follow-up, for the Voice Handicap Index, a decrease in the values of total score (p = 0.039) and of emotional mastery (p = 0.035) was observed, whereas comparing the pre-application and the second follow-up, there was a significant decrease only for functional mastery (p = 0.03).

In this way, between, grading the severity of vocal quality and the total score of the Voice Handicap Index, a moderate correlation was evident in the pre-application and second follow-up.

Conclusion: the treatment with botulinum toxin for individuals who participated in this study proved effectiveness in the decrease of symptoms, as well as in a vocal impact which created changes in the phonatory function and facilitated communication.

A164. Vocal Self-Assessment Protocols Provide The Same Information About The Dysphonic Patient?
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Introduction: The use of self-assessment instruments gives specific information of the voice problem impact that cannot be derived from any other kind of evaluation.

Objectives: To compare the results of six instruments answered by patients with behavioral â€” BD and organic â€” OD dysphonia, correlating them with vocal aspects.

Methods: 103 patients (77 with BD, 26 with OD) answered the Brazilian versions of six instruments: Voice-Related Quality of Life â€” V-RQOL, Voice Handicap Index â€” VHI, Vocal Performance Questionnaire â€” VPQ, Vocal Tract Discomfort Scale â€” VTD, Voice Symptom Scale â€” VSS and Vocal Signs and Symptoms List â€” SSL. Vocal samples were collected for auditory-perceptual analysis to classify the dysphonia severity and type (rough, breathy or tense).

Results: None of the instruments correctly identified 100% of the dysphonic individuals. The SSL identified 102 of the 103 dysphonic patients and the VSSS, 100 of the 103. Numerous correlations were found among the protocols, more prevalent in subjects with BD; the strongest correlation was...
between frequency and intensity scales of the VTD: corr = 0.946 and the total score of the VHI and VoISs: corr = 0.917. The VHI and VoISs showed weak correlations with speech and sustained vowel tasks, voice type did not cause greater screening error in the protocols.

Conclusion: Different instruments of voice problem impact provide supplementary information, especially to patients with BD. Evaluation of the vocal deviation for speech task correlates better with the self-assessment protocols, apart from the voice type.

Keywords: Voice; Dysphonia; Evaluation Studies; Self-Assessment

A8. Vocal Welfare Of Teachers: A Proposal For Intervention Developed By Distance Mode Learning
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Introduction: Among the professional voice users, teachers have been much researched, however, few initiatives have been directed to review the speech-language intervention related to this audience.

Objective: The objective of this study is to present the results of a pilot study of the Program Welfare Vocal, in the Distance Learning mode for the teachers of the public schools of São Paulo city, developed in partnership between the City Hall of São Paulo and the Voice laboratory of the Catholic University of São Paulo. The program is focus on to aware the teachers regarding to Welfare Vocal.

Method: 75 teachers finished a workshop of 40 hours offered in Distance Learning mode containing two presential meetings, 8 modules, 8 Forums, 8 reviews and 16 chats. In the end, a questionnaire in Likert scale, was distributed in order to assess the form and content of the workshop. We opted for the descriptive analysis of the data.

Results: Most of the answers, corresponding to 71 teachers was: the workshop was important for professional learning (94%); reflect about the content (94%); enabled expose ideas to other participants (68%); had support from tutors (81%); felt encouraged to stay in the workshop (80%); and believe that the course duration fit their needs (77%).

Conclusion: The perspective of health education in the Distance Learning may be an important option for the aspects of health promotion and disease prevention, reaching as much people as possible, thus promoting teachers self-care.
A269. Vertigo as the first symptom of a central lesion: a case report
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Introduction: Medulloblastoma is a primary neo-plasm of the CNS, which develops in the cerebellum, common in children, with one third of those in adolescents and adults, and in men. The symptoms are insidious and progressive, with intracranial hypertension frame, ataxia, nystagmus, among others.

Objectives: To show that a vertigo frame with nystagmus highly suggestive of peripheral frame positioning, may reveal a central lesion in a little affected age group. Show the importance of infrared digital videonystagmography in helping in the topographic diagnosis of central lesions.

Resumed report: 43 year old male patient, complaining of occasional dizziness of 5 minutes long, two months of evolution, which worsened when the patient turned to the left and improved at bedtime. Dizziness evolved insidiously to a persistent and more intense picture. The Dix-Hallpike revealed a horizontal nystagmus without latency, beating to the right position to left and left to right positioning, a little more intense than the last. In the maneuver to side channel showed nystagmus with the same features found in the Dix-Hallpike. Patient did not respond to canalicular repositioning maneuver for side channel when it was referred to neurological assessment. MRI showed a lesion in the posterior fossa, involving both cerebellar hemispheres, cerebellar vermis and brainstem. Immunohistochemistry confirmed diagnosis of medulloblastoma.

Conclusion: Rare tumor in adults, with an insidious vertigo and nystagmus positioning suggesting lateral canal BPPV, had the final outcome one medulloblastoma. Diagnosis confirmed by immunohistochemical study following inconclusive biopsy.

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Introduction: Acute invasive fungal rhinosinusitis (AIFRS) is an aggressive and rapidly progressive infection that predominantly affects immunocompromised patients. Gadolinium (Gd) enhanced magnetic resonance imaging (MRI) is the gold standard exam to evaluate intracranial and orbital extension.

Objective: This case report aims to highlight the importance of Gd MRI in the early approach of suspected AIFRS.

Resumed report: We report a case of a 1-year-old patient presenting pancytopenia, fever and rhinorrhea, in a context of failure of bone marrow transplant due to myelodysplastic syndrome. CT scan of nasal sinuses showed thickening of paranasal sinuses mucosa on both sides. Nasal endoscopic evaluations in a 3 day-period didn’t evidence any lesions on nasal mucosa. Two days after, patient presented edema of left inferior eyelid and proptosis. New CT scan showed worsening in nasal congestion on left nasal cavity and periorbital edema. We performed endoscopic evaluation under general anesthesia, with no evidence of necrosis or ischemia, but lack of bleeding after biopsy of nasal mucosa. Fungal culture showed aspergillus. Gd MRI was performed and demonstrated non-enhancing areas in post-contrast T1-weighted images of left nasal cavity, rhinofarynx, soft palate, periorbital soft tissue and meninges, suggesting necrosis/ischemia caused by AIFRS, with no possibility of surgery resection. There was not recovery of pancytopenia, and patient died three days after.

Conclusion: Because of the aggressive nature of AIFRS, early diagnosis is most important to achieve a better treatment outcome. Besides serial nasal endoscopic evaluation, Gd MRI should be considered sooner in the approach of immunocompromised patient presenting fungal rhinosinusitis.

A1727. Adductor Spasmodic Dysphonia - Management update
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Introduction: Adductor spasmodic dysphonia (AdSD) is a focal dystonia of the intrinsic laryngeal adductor musculature. For several years, AdSD was seen as a psychosomatic condition or a personality disorder. Therefore, the offered therapeutic option was limited to speech therapy and psychotherapy. Over the years a better understanding of the pathophysiology of the disease allowed more satisfactory treatment options.

Objectives: To provide an evidence-based update on the treatment of adductor spasmodic dysphonia (AdSD) based on recent publications.

Data Synthesis: This article reviews the recent publications over the past 10 years with respect the therapeutic management of AdSD. Although not curative, treatment of AdSD is commonly performed with injections of botulinum toxin. The best method and dosing for injection remain in question. The addition of speech therapy to botulinum toxin has been reported with mixed results. Surgical treatments include selective recurrent laryngeal nerve section, thyroarytenoid muscle myectomy, endoscopic laser thyroarytenoid myoneurectomy, type II thyroplasty, and selective laryngeal adductor denervation-reinnervation, all of which have been validated in the literature.

Conclusion: Periodic injection of botulinum toxin type A into the vocal folds is the most common and widely accepted and clinically proven treatment of AdSD. However, surgical treatment options have also been reported as a viable alternative. All of these options still need further research with a larger number of patients and long-term follow-up. The surgeon’s experience is essential for the choice of surgical technique. It is important to provide patients with thorough explanation based on advantages and disadvantages of each procedure.

A7. Allergic Fungal Rhinosinusitis: Case Report and Literature Review
Emelyn dos Santos Barril, Mariana Lombardi Guidi, Krystal Calmeto Negri, Godofredo Campos Borges, Jose Jarura Jorge Jr
Pontifícia Universidade Católica de São Paulo

Introduction: Rhinosinusitis can be defined as inflammation of the nasal mucosa and paranasal sinuses. Allergic fungal rhinosinusitis is presented in a subclinical form with
signs and symptoms that derive from a local and/or systemic inflammatory response. Computed tomography is the gold standard for diagnosis and surgical planning confirmation. The procedure of choice called FESS (functional endoscopic sinus surgery) aims to restore the physiology of ventilation and drainage of the sinuses.

**Objectives:** Reporting a case of allergic fungal rhinosinusitis and identifying important aspects of this pathology and treatment.

**Resumed report:** Female, 63, with chief complaint of headache pain in the infra-orbital region for 12 years without effective treatment, accompanied by nasal obstruction and greenish secretion in the left nasal cavity. The computed tomography scan of the left maxillary sinus shows the sinus to be completely obliterated by content with soft tissue density. During the surgery, brownish purulent material was visualized in the left nasal cavity and polyposis degeneration in the middle meatus, compatible with fungal rhinosinusitis.

**Conclusion:** For the diagnosis of allergic fungal rhinosinusitis, the present mucin characteristics are more important than the histology of respiratory mucosa. The goals of surgery are to restore the permeability and ventilation of the nasal ostium, to establish a diagnosis and to remove the thickened allergic mucin. The surgery improves symptoms and quality of life, but it does not work in all aspects of the complex pathophysiology of this disease and, consequently, has no healing power alone.

**Keywords:** Rhinosinusitis, Chronic Rhinosinusitis, Allergic Fungal Rhinosinusitis

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**A215. Analysis of Results and Post-Operative Complications in Tympanoplasty - Hospital Otorrinos Feira De Santana - BA**

**Introduction:** Tympanoplasty is a surgical procedure for chronic perforation closure of the tympanic membrane and / or reconstruction of the ossicular chain. The size and location of the perforation depends on the infectious agent, the severity of the infection and its chronicity.

**Methods:** The study was conducted prospectively with patients with chronic otitis who underwent tympanoplasty during the period from 2008 to 2014. The data was statistically analyzed through software SPSS 17.

**Results:** 112 patients undergoing tympanoplasty were analyzed after being diagnosed with chronic otitis. Among those, 92% progressed without surgical infection and 9 (8%) with infection; 77% had full tympanic membrane and 23% had residual perforation; 66 (59%) reported improvement of hearing, 26 (24%) stated that the hearing remained the same and 20 (17%) reported worsening; 104 (93%) did not present any complications at the end of follow-up.

**Conclusion:** The chronic otitis is a disease that leads to chronic inflammation of the middle ear, associated with perforation of the tympanic membrane (TM) and intermittent otorrhea. Changes in the middle ear mucosa and mastoid are not permanent and, in general, the symptoms are mild with long periods without otorrhea. CT is unnecessary and generally does not present changes. Surgical treatment consists of tympanoplasty.

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**A465. Analysis of Nasal Polyposis Recurrence Rate in Patients undergoing Polypectomy Surgery in a University Hospital**

**Introduction:** Nasal polyposis is a disorder affecting 1–4% of the population and its treatment of choice is endoscopic sinus surgery. It is known that the recurrence rate is not uncommon, often resulting in the need for other surgical approaches.

**Objectives:** To analyze the nasal polyposis recurrence rate in patients undergoing polypectomy with sinusectomy in University Hospital

**Methods:** A retrospective, self-study, with 128 patients undergoing endoscopic nasal surgery between 2010 and 2014. We conducted a review of medical records, analyzing the results of pathology, the nasal polyposis recurrence rate through nasal endoscopy and the need of surgical reappraisal.

**Results:** Of the 128 selected patients who underwent endoscopic nasal surgery, 113 had pathology result of inflammatory nasal polyps and 15 with other diagnoses (inverted papilloma, lymphoid hyperplasia, olfactory neuroblastoma and squamous cell carcinoma). Were excluded 14 patients whose medical records were not possible to be revised (external file) as well as 15 patients with other diagnoses. Patients who could not have their postoperative results analyzed for various reasons was 5%. The nasal polyposis recurrence rate was 4.2% up to 2 months, 12.7% of 2 to 6 months, 11.7% of 6 months to 1 year and 7.4% after a postoperative year. Of patients with relapse that required surgical reappraisal totaled 17%.

**Keywords:** nasal, polyposis, endoscopic, recurrence

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**A258. Angioleiomyoma of the Nasal Septum: Case Report**

**Introduction:** Leiomyomas are benign tumors of myogenic origin that may occur wherever smooth muscle is present. They are classified into 3 histological subtypes: vascular (angioleiomyoma), nonvascular and epithelioid. Vascular leiomyoma is an uncommon type of leiomyomas that is rarely found in head and neck area. Due to the lack of smooth muscle in the nasal cavity, which can be found only among the walls of blood vessels and as piloerector muscle in the vestibule, they rarely occur in this region, presenting only about 1% of all benign tumors in the nose and paranasal sinus. The septum is the rarest place of onset.

**Objectives:** Presenting a rare case of an angioleiomyoma of the nasal septum.

**Resumed report:** M.M.M.B, a 18 year-old male, presented at our service with a painless mass in his left nostril, which was growing progressively in the last four months until obstructing his left nostril. He complained nasal obstruction, and some episodes of epistaxes. The rinoscopy showed a reddish, well-demarcated, solitary mass that seemed to be attached at the nasal septum. The computerized tomography showed a polypoid neoformation of soft tissue density in the anterior part of the left nasal cavity attached to the nasal septum. He underwent a nasal endoscopic surgery where we removed the mass and the pathology study revealed an angioleiomyoma.

**Conclusion:** Even though those are a rare type of tumor, they should be considered as differential diagnosis of nasal tumors.
Keywords: angioleiomyoma; leiomyoma; nasal septum

A266. Angiolymphoid Hyperplasia with Eosinophilia: Case Report
Nucleo de Otorrino Bh

Introduction: Angiolymphoid hyperplasia with eosinophilia is an uncommon vascular tumor. Its etiopathogenesis remains undefined, probably representing vascular neoplasm or reactive cicatricial phenomenon. Its incidence is higher in the third and fifth decades of life, and predominantly in females. Most lesions are located in the periauricular, scalp and forehead. It is characterized by nodules or papules with angiomatoid aspect and, in their majority, asymptomatic. The standard treatment is surgical excision and there is no known risk of malignant transformation.

Objectives: Uncommon case of angiolymphoid hyperplasia with eosinophilia in a male patient, which was subjected to the procedure of surgical excision with good results.

Resumed report: IADS, 68 years old, male, complaining of a nodular lesion and pruritus in right auditory canal for 6 months. Upon examination, it was observed a granulomatous nodule in internal region of right tragus and was indicated to biopsy resection. After return in a month, the surgical wound was in good cicatricial aspect, and incisional biopsy showed cuts of skin revealing proliferation of blood vessels lined by endothelium prominent epithelioid in the dermis. There was associated lymphocytic inflammatory infiltrate with scattered eosinophils. The lesion was removed with free margins and the findings were compatible with angiolymphoid hyperplasia with eosinophilia.

Conclusion: As a general rule, the angiolymphoid hyperplasia with eosinophilia is an asymptomatic disease, however, they may cause pain, itching and spontaneously bleeding. The treatment of choice is surgical excision. The patient in question was greatly benefited by surgery, without recurrences.

Keywords: angiolymphoid hyperplasia; eosinophilia; auditory canal

A601. Atypical Presentation of Malignant Otitis Externa
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Introduction: Malignant otitis externa is a potentially lethal necrotizing infection of the external auditory canal, mainly affecting immunocompromised individuals. It should always be suspected in patients with persistent ear pain or otorrhea that does not respond to routine treatment for acute diffuse otitis externa.

Objectives: This study presents an atypical case of malignant otitis externa with confounding physical examination. Diagnosis was resolved through imaging studies.

Resumed report: Sixty-three year old male patient, with comorbidities such as hypertension, diabetes and advanced nephropathy, presented with persistent earache, with hyperemia and edema of external auditory canal. No granuloma was present at physical examination. Peripheral facial paralysis House Brackmann grade IV was associated. Signs of osteomyelitis diagnosed by bone scintigraphy performed for the follow up of prostate cancer were present. Temporal bone CT scan revealed bone erosion particularly at the tip of mastoid. Patient rapidly improved earache with intravenous and topical ciprofloxacin treatment, however, facial paralysis worsened. Antibiotic was switched to cefepime and patient underwent radical mastoidectomy.

Conclusion: Malignant otitis externa corresponds to one of the most difficult to treat ear disorders. Despite the absence of all typical signs and symptoms, it must always remain as a differential diagnosis of persistent earache, especially in immunocompromised patients.

A209. Evaluation of patients with hearing loss seen at the Audiology Clinic of otorhinolaryngology service in Bahia
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Introduction: Hearing loss affects a significant portion of the world population and has important socio-economic impacts. It is extremely important the specific definition of hearing loss and its degrees, if it’s conductive or mixed sensorineural (SNHL), as well as the age of installation, if prenatal, perinatal or postnatal.

Objective: To evaluate the audiological findings of patients with SNHL served in audiology clinic in Bahia.

Materials and Methods: This prospective study evaluated 401 patients with SNHL outpatient clinic of the Hospital Audiology Otorrinos in Feira de Santana in Bahia, in the period 2012-2015.

Results: The bilateral loss was 61.3% of patients, progressive 70.3%. Idiopathic 74.2% and 18.7% presbycusis.

Conclusion: The evaluation of audiological findings is important to define the etiology of loss and appropriate intervention.

A645. Bilateral Stenosis of the Internal Auditory Conduit: Case Report
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Introduction: MLMOL, 7 months Age in Hearing Loss Research, IN fails the hearing screening and Imaging exams indicate bilateral stenosis of the internal auditory Conduit. During follow-up after two years and rigorous evaluation to hearing status of the patient was suitable bilateral cochlear implant.

Objective: Describe OS post audiological results cochlear implant hum patient with bilateral profound hearing loss, arising from bilateral stenosis of the internal auditory Conduit.

Resumed report: Patient with profound hearing loss due to stenosis of bilateral internal auditory canal and suspected of cochlear nerve agenesis. Despite significant radiological changes to child during audiological evaluations had residual hearing signals. Bilateral cochlear implant was appointed and since then the patient continues with speech therapy, evolving with improved sound perception and improves the behavioral pattern

Conclusion: Despite significant changes in imaging tests, which suggested cochlear nerve agenesis, we emphasize the importance of hearing and behavioral assessment preoperatively in order to predict more safely the benefits of a patient in relation to the cochlear implant.
A179. Calcifying Epithelioma of Malherbe (Pilomatricoma): Case Report
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Pilomatricoma is a benign skin tumor whose origin is in the hair cells. It represents 0.1% of skin tumors. It can occur at any age, but most often in children and young adults. There is no consensus in the literature about the prevalence of gender.

Objective: To report an unusual case report on a female patient, elderly, with scalp lesion.

Resumed report: C.C.C, 66 years, presents a nodule in left posterior cervical region, on the scalp 1 year ago, painless, with rapid growth in the last two months. The patient also has nasal polyposis, asthma, hypertension and osteoporosis. Physical examination revealed a nodule of 1.5 cm, firm consistency, solitary, painless, in nape of the neck. Ultrasonography showed solid nodule on the nape of the neck measuring 1.6 x 1.6 cm with linear hyperechoic foci that produce posterior acoustic shadowing suggesting calcification, adjacent to this, it was observed nodular hypoechoic elongated formation measuring 0.9 cm without lymphnode enlargement. There was made the resection with no injury. Histologic examination showed in macroscopy a brownish firm nodular formation of 2.5 x 2.0 x 1.4 cm. The histologic cuts are compact with cretaceous granules.

Microscopy: histologic cuts using HE show circumscribed benign skin tumor. It is characterized by trabecular proliferation of squamous epithelium with areas of necrosis (mummification) accompanied by dystrophic calcification. This result is compatible with pilomatricoma. After six months of follow-up, doesn't have relapses.

Conclusion: It is important to consider the pilomatricomas as differential diagnosis of head and neck nodes in order to provide appropriate treatment.

A351. Case Report: Restorative Palatopharyngoplasty in Velo-Pharyngeal Stenosis
Nathalia Senra Santos, Ana Carolina Daflon Scoralick, Felipe Figueiredo, Luiz Felipe Lira de Moraes, Alonço da Cunha Viana Junior, Daniella Leitão Mendes
Hospital Naval Marcilio Dias

Introduction: Vorpharyngeal surgery is one of the techniques for the surgical treatment of OSAS, with good results when properly indicated. Like any surgical procedure, it has risks. Among the postoperative complications, the velopharyngeal stenosis presents with incidence of 1% and it is a very serious situation because of the limitations of surgical correction, but mainly for their recurrent nature. This complication can be related to exaggerated and large resection of the palatal mucosa, as well as bleeding.

Objectives: Description of the surgical technique for the resolution of velo-pharyngeal stenosis.

Resumed report: Male, 39 years, with a history of OSA, submitted to 3 pharyngeal surgery in 2011 - the last two motivated by nasopharyngeal stenosis and palatal scar retraction in the first one, referring snoring and nasal obstruction in late post operative period. Fibronasolaryngoscopy demonstrating fibrous scar tissue around the circumference in the transition from the nasopharynx to the oropharynx, with a significant decrease in spot diameter, and Videolaryngoscopy demonstrating fibrocicatrical stenosis posterior tonsillar pillars and soft palate with the posterior wall of the oropharynx, except for tiny region in the uvula. Submitted restorative palatopharyngoplasty with affixing skin graft from the supraclavicular region on the posterior wall of the pharynx and flap rotation of the buccal mucosa toward the nasopharynx extending the retropalatal space. After 6 months follow-up still holds patent airway.

Conclusion: The technique seems to be a treatment option for the correction of velo-pharyngeal stenosis, requiring longer follow-up to assess the long-term outcome.

A182. Case Report: Fibrous Dysplasia of the Middle Turbinate
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Introduction: Fibrous Dysplasia is a rare benign fibrous osseous disease that happens replacement of normal bone by fibrous connective tissue, with the presence of irregular osteoid trabeculae. It mainly affects the population in the first three decades of life. Fibrous Dysplasia affect particularly membranous bones such as the tibia and femur, and rarely occurs in the sinonasal tract and is therefore unusual in the middle turbinate.

Objectives: To report a case of a patient with Fibrous Dysplasia in middle turbinate, diagnosed by pathology.

Resumed report: Female, 46 year-old, complaining of chronic predominantly frontal throbbing headache, high intensity. The patient reported improvement using paracetamol and worsening the handling of the hair, pressure and high intensity sounds. On physical examination, space occupying lesion in middle turbinate the right nostril. TC: enlargement of right middle turbinate with ground-glass appearance. It performed endonasal surgery to remove the tumor, with lower and middle right turbinectomy and correction of cerebrospinal fluid fistula. The pathological examination showed respiratory mucosa and bone tissue with mesenchymal spindel cell proliferation, consistent with Fibrous Dysplasia. On the 12th day after surgery, the patient presents with headache, no bleeding or runny nose and crusts at rhinoscopy.

Conclusion: Fibrous Dysplasia in middle turbinate despite its benign behavior and unusual location should not be overlooked. To diagnose recurrence and malignant degeneration early is essential to accurate monitoring.

A506. Case Report: Oral Pemphigus
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Introduction: Pemphigus is a rare autoimmune disease in which the immune system produces autoantibodies against skin proteins, like desmoglein. The desmoglein proteins maintain the skin intact and, as it ruptures, it may develop cutaneous and mucosal (including oral mucosa) bullous dermatitis. The cause of pemphigus is unknown, however there is evidence of people genetically predisposed.

Objective: Report a case of oral pemphigus and discuss its importance for clinical practice.

Resumed report: 77 year old white male presented at the consult with painful oral lesion for about 1 year. The patient used dental prostheses both superior and inferior with mal adaptation. Physical exam evidenced erytematous, ulcerative, non secretive erosion at genian mucosa and hard palate. Biopsy was preformed and histopathology suggested findings...
compatible with pemphigus. The patient started on corticotherapy and regression of the lesion could be observed.

**Conclusion:** Pemphigus is one cause of oral lesion among a large variety of differential diagnosis. As rare disease, it is often misdiagnosed. Therefore, it is important to the otolaryngologist to be aware of this pathology so it can be early detected and treated.

**Keywords:** pemphigus, oral lesion, autoimmune disease

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**A119. Case Report: A Rare Case Of Bilateral Schwannoma**

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**Introduction:** Vestibular schwannomas are the most common benign tumors originating from the posterior cranial fossa: intracranial tumors represent between 2 and 7% of cases. The annual incidence in the population is 1:200,000. However cases of bilateralism are rarer and are associated with syndromic diagnosis such as neurofibromatosis type 2. Sudden deafness and vertigo occur in 26% and 27% of cases, respectively, and are associated with sudden occlusion of the labyrinthine artery due to tumor expansion. The facial paralysis occurs between 10 and 30% of cases, typically in tumors larger than 2 cm, generating facial paralysis or numbness in the face. Audiometric tests, electrophysiological and vestibular are used for etiologic diagnosis. MRI has a close to 100% accuracy for this type of tumor. The treatment may be performed by clinical observation, the growth control by stereotactic radiation therapy or surgical excision.

**Objective:** To report the clinical case patient with bilateral schwannomas associated with sudden deafness.

**Resumed report:** RAPS, 50, white. Patient entering the HSJA with deafness, left peripheral paralysis and vertigo with sudden beginning three days ago. Denies comorbidities and / or systemic symptoms. Normal otoscopy and paresthesia of left facial. Audiometry: bilateral sensorineural hearing loss of high index of discrimination. MASTOID CT: normal. MRI skull: bilateral schwannoma and fourth ventricle tumor. Complementary exams showed nodule mammary and after biopsy was diagnosed infiltrating ductal carcinoma. Liquor: absence of neoplastic cells.

**Conclusion:** Patient clinically stable, with primary tumor in the mammary region being assisted by the neurocirurgical team, waiting oncology conduct.

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**A582. Case Series - Use of Tracheoesophageal Prosthesis in Patients who Underwent Laryngectomy**

Janaina Kopp, Nathalia Tesserolo Dias, Gustavo Guimaraes Rangel, Sharon Maria Soares de Lima Avila, Christiane de Sousa Lopes, Renato Ponte Portela Aguiar

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**Introduction:** The larynx is one of the most important organs of the neck. It is responsible for basic functions such as speech (phonation), breathing and swallowing (airway protection). Frequently the surgical treatment proposed for severe laryngeal pathologies generates loss of vocal function. One of the vocal rehabilitation options is the tracheoesophageal prosthesis.

**Objective:** The purpose of this paper is to demonstrate the experience of HFSE Otorhinolaryngology service in application and exchange of voice-producing prosthesis.

**Resumed reports:** Three patients were selected for the implementation of tracheoesophageal prosthesis, two male and one female. These patients underwent total laryngectomy due to laryngeal cancer. It was performed margin expansion of tracheostomy and placement of voice prosthesis under general anesthesia in patient 1. Patient 2 went through application of prosthesis phonation under local anesthesia. Patient 3 was subjected to voice prosthesis exchange under local anesthesia.

**Conclusion:** The tracheoesophageal prosthesis phonation prosthesis is a good choice for vocal rehabilitation in laryngectomized patients, with low risk of postoperative complications and significant improvement in quality of life. In addition to bringing advantages such as not compromising the principles of cancer surgery, not being contraindicated in patients who will undergo radiotherapy, ease of learning and adaptation, good voice quality and more.

**Keywords:** phonation prosthesis; vocal rehabilitation; laryngectomy; tracheoesophageal prosthesis

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**A673. Challenge in the Diagnosis of Mucosal Leishmaniasis: Case Report**

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Hospital Socor

**Introduction:** Leishmaniasis is a group of diseases caused by protozoan parasites of Leishmania genus. Isolated mucosal leishmaniasis is an infrequent presentation of American Tegumentary Leishmaniasis (ATL). Although the nasal mucosa is the preferred site for the mucosal form of the disease, it can also be located on the lips, mouth, pharynx and larynx. They are characterized by ulcerative-vegetative lesion accompanied by coarse granulations. Patients usually complain of pain, dysphagia and odynophagia. The differential diagnosis can be done with other granulomatous diseases such as blastomyicosis, leprosy and tuberculosis.

**Objectives:** The aim of the present study is to describe an atypical presentation of ATL, without cutaneous manifestations, and to discuss its approach.

**Resumed report:** A 64-year-old man, farmer in an endemic area, complained of persistent dysphagia and nasal obstruction of 6 months’ duration. Physical examination revealed extensive ulcer-eroinfiltrative lesion in soft palate and uvula, accompanied by mucosal edema and purulent discharge. Tissue biopsy showed a non-specific granulomatous reaction, with an inflammatory infiltrate, without leishmanias. Treatment with parenteral pentavalent antimonal at dose of 20 mg/kg/day was initiated. Complete healing with only residual nasal adhesions was seen after 1 month. Conclusion: Besides the difficulty in identifying parasites, the disease is often mistaken with other benign or malignant lesions. Thus, it is necessary to use several methods to confirm diagnosis and it is very important to consider epidemiologic features concerning leishmaniasis since its laboratorial diagnosis is not very sensitive and it is often inaccessible.

**Keywords:** Mucosal leishmaniasis, diagnosis, American Tegumentary leishmaniasis

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**A378. Cholesteatoma of External Auditory Canal Simulating a Malignant Tumor of Temporal Bone. Report of Two Cases**

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Faculdade de Medicina do Acre

**Introduction:** The cholesteatoma of external auditory canal is a rare disease. The squamous cell carcinoma and the
basal cell carcinoma can be differential diagnosis. This case relates has the objective to report two cases of cholesteatoma of external auditory canal in kids, with fast evolution.

**Resumed report:** LEOA, 11 years, female, presented a 40 day left otalgia, with hearing loss and purulent otorrhea. At the otoscopy, there was a nodulated lesion, with hyperemia and secretion in the external auditory canal. The computerized tomography (CT) scan showed a tumor eroding bony limits of the left external auditory canal. The patient was submitted to surgery and biopsy, that indicated cholesteatoma of external auditory.

SAB, 11 years, female, presented a 2 months foul and yellowish otorrhea, with hearing loss in the right ear. At the otoscopy, there was purulent secretion and epithelial lamellae in the external auditory canal, with an integrate tympanum. Audiometry showed conductive hearing loss at right, and the CT scan revealed a bony eroding limits of the right external auditory canal with a lesion at the tympanum cavity. The patient was submitted to an explorer tympanotomy to remove this epithelial peeling from the external auditory canal, and the histology showed a cholesteatoma of external auditory.

**Conclusion:** Patients with otalgia and otorrhea that presented a tumor at the external auditory canal could have cholesteatoma, malignant tumors or benign tumors. The CT and the intrasurgical findings can be used to measure pathology and programming surgery.

**A180. Chondroma and Chondrosarcoma of the Larynx:** Report of 4 Cases
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**Introduction:** Chondroma and chondrosarcoma are rare head and neck tumors from cartilaginous tissue. Currently, approximately 250 to 600 cases of laryngeal chondroma and chondrosarcoma have been reported in the medical literature. Because both chondroma as well as chondrosarcoma have been reported in the medical literature, it’s important to investigate a tumor in the larynx, 4 weeks. Adenoidectomy is the first choice for surgical treatment of chronic rhinosinusitis, specially in younger children, but exhibited effectiveness only in half of the patients.

**Objectives:** To present the surgical results and the long follow up of 4 patients with cartilaginous tumors of the larynx, one chondroma of the cricoid progressing to low-grade chondrosarcoma, 2 chondromas of cricoid and 1 thyroid chondroma

**Material and methods:** Three of the tumors were of the cricoid cartilage and one of thyroid cartilage. Patients were submitted to: total laryngectomy (1), Cricotireoideotraqueostomy (2), and tracheostomy with partial laryngostomy (1), follow up 2-15 years (mean - 9.25 years)

**Discussion:** Most of the previously described laryngeal cartilaginous tumors originally were reported as chondromas, with possible misdiagnosis to low-grade chondrosarcoma. The main problem in managing is the high recurrence rate after local excision, which has to be attributed to the frequent involvement of the cricoid cartilage and the minimal resection margins often required to preserve a functional residual larynx

**Conclusion:** Diferents diagnosis has to be reminded in patients with cough, hoarseness, dysphagia, dyspnea and mainly in unexplained vocal cord paralysis with subglotic mass. The head and neck CT scan is the best exam to indentify those lesions. In chondroma and chondrosarcoma tumors the conservative surgery has been proposed with good results

**Keywords:** Chondroma; Chondrosarcoma; Cartilaginous tumors; Larynx

**A685. Chronic Otitis Media with Effusion in Adult with Difficult Treatment – A Differential Diagnosis**
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**Introduction:** In cases of chronic otitis media with effusion in adult, it’s important to investigate a tumor in the ipsilateral nasopharynx. Other cause of fluid in middle ear is cerebrospinal fluid leak, is a rare event and usually related to temporal bone trauma.

**Objective:** To highlight the importance of investigation in cases of chronic otitis media with effusion.

**Resumed report:** A female, 71 years old, with hearing loss and tinnitus in the left side for 4 months. She had no history of otorrhea or temporal bone trauma. The exam presented slight retraction in the left tympanic membrane. The audiometric exam demonstrated light sensorineural loss in the right side and mixed loss in the left side, with gap of 20 dB, tympanometry with type B curve. The computed tomography of temporal bone showed liquid in the left middle ear, ossicular chain intact and no tumors in nasopharynx. A tympanotomy was performed, with exit of clear effusion and placement of ventilation tube. Afterwards, the patient presented intermittent clear otorrhea. A tomography and a magnetic resonance were done. Both exams showed liquid in middle ear and no communicational signal to the central nervous system was found. A tympanomastoidectomy was performed and during the surgery was found a cerebrospinal leak in the tegmen tympani that was repaired.

**Conclusion:** Chronic otitis media with effusion might represent the presence of cerebrospinal fluid in the middle ear, even if there isn’t a history of temporal bone trauma or meningitis.

**Keywords:** otitis media, effusion, cerebrospinal fluid leak, otoliquorrhea

**A348. Chronic Rhinosinusitis in Childhood: Therapeutic Update**
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Centro Universitário São Camilo

**Introduction:** Chronic rhinosinusitis is an inflammatory disease that affects the mucosa of the nose and the sinuses, and lasts at least 12 weeks. This condition is common in children and the treatment prevents recurrences and complications. The treatment is initially clinical. In case of therapeutic failure we can resort to surgical treatment.

**Objectives:** To evaluate the main therapeutic methods, both clinically and surgically. Among the available surgeries, we will approach the adenoidecotomy, Balloon Catheter Sinuplasty and Functional Endoscopic Sinus Surgery.

**Data synthesis:** The antibiotic therapy lasts, on average, 4 weeks. Adenoidecotomy is the first choice for surgical treatment of chronic rhinosinusitis, specially in younger children, but exhibited effectiveness only in half of the patients. Functional Endoscopic Sinus Surgery is the best option in children older than 6 years and didn’t show significant change in facial growth. Balloon Catheter Sinuplasty assists and complements Functional Endoscopic Sinus Surgery, but couldn’t replace it. For being less invasive, is very effective and has fewer complications.

**Conclusion:** Chronic rhinosinusitis is a common problem in children, and often is associated with asthma, allergic
rhinitis, nasal polyps, among others. When clinical treatment failure occurs, surgical treatment should be considered, but it must be in accordance with the indications for each type of pathological condition, age and be the least invasive as possible. Among the surgical treatments available we conclude that the adenoectomy, Functional Endoscopic Sinus Surgery and Balloon Catheter Sinuplasty are effective and safe procedures, with few complications.

**Keywords:** Rhinosinusitis, treatment, functional endoscopic sinus surgery, adenoectomy, children

**A87. Branchial Cyst as a Cause of Incomum Bulging of Tonsil**

Lúcia Oliveira Resende, Rosane Siciliano Machado, Roberta Bak, Luiza de Souza Mello

**Introduction:** Branchial cysts, although congenital, are rarely visible at birth, since at this time there is no liquid inside to slacken it. Presents a branchial cyst case of 2nd crack causing bulging tonsils.

**Resumed report:** Male patient, 82, sought ENT Service with dysphagia for all consistencies, globus and drooling for 5 years. Oroscopy if observed bulging in-store right tonsil reaching midline. Puncture of the lesion with milky material outlet has been made. Submitted Resection getting histopathological results of branchial cyst. The patient developed significant remission.

**Discussion:** Cysts may have communication with the base of the tonsil and extend from the supraclavicular fossa to the skull base. However, this is not the habitual.

**Final comments:** This case demonstrates that the branchial cyst may be the cause of bulging of tonsillar and should be considered in the differential diagnosis for this condition.

**Keywords:** branchial cyst, dysphagia, otolaryngological complaints

**A421. Nasolabial Cyst**

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**Hospital Central da Polícia Militar**

**Introduction:** The Nasolabial cyst is a rare cyst development, non-odontogenic and soft tissue, unilateral and sometimes bilateral. Often asymptomatic, promoting nose’s wings elevation and nasolabial folds deletion. Those most affected are women between 40 and 50 years. The diagnosis is obtained through clinical, radiographic and histopathology.

**Objective:** To review a present literature on the subject and show a case of nasolabial cyst in a female patient with 61 years old.

**Resumed report:** 61 years old female, went to the otorhinolaryngology service with a increased right nasal cavity accompanied by local pain and partial nasal obstruction from the right nostril. It was did a clinical examination together with a nasal endoscopy and radiology images. On the CT scan it was found a mild septal deviation to the right. According with clinical and radiological features, the hypothesis has been elucidated of a nasolabial cyst. She underwent a surgery and histopathological studies to confirm the diagnosis. After surgery, the patient showed clinical improvement.

**Conclusion:** The diagnosis is done by clinical, imaging and histopathology studies. Clinically, it is characterized by an increase in volume, slow growing, asymptomatic or symptomatic. It presents as a lump or swelling smooth, mobile, only in soft tissue between the upper lip and nasal aperture. It can cause elevation of the nostrils, facial asymmetry, and nasal obstruction. Histopathological study is the best to confirm the diagnosis. The treatment is total excision of the lesion, the prognosis is favorable with few relapses.

**Keywords:** non-odontogenic cyst nasolabial, diagnosis, treatment

**A499. Clinical and Histopathological Independent Prognostic Factors in Oral Squamous Cell Carcinoma: A Retrospective Study of 90 Cases**

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**Hospital Araújo Jorge**

**Introduction:** This retrospective hospital-based study reviewed and evaluated the outcome of patients with oral squamous cell carcinoma (OSCC) with the aim of identifying factors affecting the clinical course and survival.

**Methods:** Patients with a follow-up of at least 12 months were included. The data collected such as tumor size, staging, histological grading, locoregional involvement and survival rates were statistically analyzed for the presence of factors valuable for prognosis; survival curves were processed in accordance with the Kaplan-Meier method. Differences in the expression of variables in different grading levels were investigated. Cox's proportional hazard model for (grading, age, T, N) also was calculated.

**Results:** Mean patient age was 55.7 years in women ($n = 29$) and 62.4 years in men ($n = 61$). A total of 5 patients were identified with Broder's/World Health Organization grade 1 histology, 52 with grade 2, and 31 with grade 3; 2 patients were identified as carcinoma in situ. Gender and risk factors seemed to be unrelated to prognosis, whereas a significant increase in mortality was seen in patients over age 70. Histological grading, tumor size, and neck involvement were related, as independent factors, in predicting survival.

**Conclusions:** Our analysis reveals a statistically significant relationship among histological Broder's grading of malignancy, tumor size, locoregional involvement, and survival rates, underscoring the utility of tumor differentiation in predicting the clinical course and outcome of OSCC.

**A98. Clinical Manifestations And Nasal Endoscopic Finds Of Allergic Rhinitis In Patients With Cystic Fibrosis - Case Series In A Reference Center On Brazilian Northeast**

Thais Sampaio Silva, Bianca da Silva Vinagre Nascimento, Tassia Milenna Oliveira de Souza, Clara Monica Figueiredo de Lima, Marcus Miranda Lessa, Edna Lucia Santos de Souza

**Federal University Of Bahia**

**Introduction:** Allergic Rhinitis occurs in 31.7% of Brazilian children between 7 and 14 years and it has an impact on heath quality. There are few data about its prevalence among cystic fibrosis patients.

**Objective:** To describe the clinical manifestations and endoscopic finds of allergic rhinitis prevalence among cystic fibrosis patients.

**Methodology:** descriptive study, case series. Patients were submitted to otolaryngology evaluation and flexible nasal endoscopy. Inclusion criteria were diagnosis of cystic fibrosis and more than 2 years old. Exclusion criteria were non-execution of nasal endoscopy or clinical evaluation.

**Results:** 38 patients were selected, with a mean age of 10.81 years ($\pm$ 4.34), 65.78% were male. Clinical manifestations of allergic rhinitis were anterior rhinorrhea (63.15%), nasal obstruction (57.89%), nasal itching (52.63%) and sneezing (39.47%). The nasal endoscopic finds were hyaline secretion (78.94%), nasal mucosa edema (78.94%) and nasal mucosa paleness (26.31%).
**Conclusion:** The population of this study presented a higher prevalence than the pediatric population in general. The control of allergic rhinitis is important to improve health quality and respiratory condition of cystic fibrosis patients. 
**Keywords:** clinical manifestations, endoscopy, cystic fibrosis, allergic rhinitis

A523. Clinical, Histopathologic And Prevalence Of Oral Leukoplakia
Orlando Schuler de Lucena, Amanda Carvalho Villa de Camargo, Fernanda Wiltgen Machado, Pablo Alves Auad Moreira, Luciene Mayumi Sato, Antonio Carlos Cedin
Real e Benemérita Sociedade Portuguesa de Beneficência de São Paulo
- Clinica Ivan F Barbosa

**Introduction:** Oral leukoplakia is the most common lesion found in the oral cavity, term first used by Ernst Schwimmer in 1877, to characterize white lesions of the oral mucosa unknown cause. This injury is characterized as a white board of the oral mucosa, not removable by scraping, whose surface can presentar is smooth, rough or warty, which is located more frequently in the oral mucosa and the labial commissure. This injury has an important clinical feature of cancer due to their enhanced potential for malignant transformation related to exogenous carcinogens such as tobacco, alcohol, sunlight, and infections of the oral cavity. There is a significance in the early diagnosis and treatment to prevent malignant transformation of these lesions. For both authors make a thorough literature review of clinical forms and characteristics of the lesion, as well as the various forms of treatment possible.

**Objective:** Conduct a literature review of various publications on the prevalence of these lesions, their diagnosis and treatment.

**Data Synthesis:** scientific research in sites such as Medline, Pubmed and Capes journals, published articles and books related to lesions of the oral cavity. It was observed that there is little literature on this subject, and this when presented is very old.

**Conclusion:** A correct approach, with early diagnosis and treatment, enables the excision of lesions that have a strong pre-malignant character, thus highlighting the importance of a thorough investigation.

**Keywords:** leukoplakia; oral epithelial dysplasia; malignant transformation; oral diseases

A672. Clival Chordoma Presenting As Nasopharyngeal Mass: Case Report
Helena Cunha Sarubi, Renata Cristina Cordeiro Diniz Oliveira, Emidio Oliveira Teixeira, Danielly Solar Andrade Oliveira, Aureliano Carneiro Barreiros
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**Introduction:** Skull base chordomas represent a challenge to the otolaryngologist because of its rarity, biological behavior, and resistance to treatment. Chordomas are known to originate from embryonic remnants of the notochord, presenting from the skull base to sacrum. Chordomas arising from the skull base/clivus are typically locally aggressive with lytic bone destruction. The ideal treatment may be radiotherapy alone or combined with a gross total resection. Because of the risk of late complications, the radiotherapy dose is often limited and the probability of cure is low. Recently, the transnasal endoscopic approach has improved morbidity and mortality allowing also for excellent removal rates.

**Objectives:** Our aim with this case report is to describe the incidental finding of a clivush chordoma nasopharynx and to discuss its approach.

**Resumed report:** A 19-year-old male sought medical attention because of ear fullness, nasal obstruction and snoring, refractory to clinical treatment. Nasal endoscopy revealed septal deviation to the right (Cottle zones II and III) and tissue in adenoid topography occupying 80% of the cavum. It was proposed to the patient septoplasty and adenoidectomy but during the procedure a nasopharyngeal mass was identified and biopsied. Tissue histology was compatible with chordoma. After workup performed, surgical approach was planned with neurosurgery.

**Conclusion:** Chordoma of skull base can sometimes present as nasopharyngeal mass which can be mistaken for primary nasopharyngeal mass. To avoid delay in diagnosis, nasopharyngeal extension of an intracranial chordoma should be considered in the differential diagnosis of any mass in nasopharynx.

**Keywords:** Clival chordoma, nasopharyngeal mass, skull base

A1732. Cochlear Implant In Waardenburg Syndrome Type 4
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Hospital de Reabilitação em Anomalias Cranio Faciais

**Introduction:** Waardenburg syndrome (WS) is an autosomal dominant inherited pigmentary disorder in which abnormal distribution of melanocytes, characterized by a piebald-like distribution of patchy depigmentation of the hair and skin. Other distinctive noncutaneous features include pigmentary abnormalities of the iris (heterochromia irides) and a broad nasal root, secondary to lateral displacement of the inner canthi of the eyes. Congenital sensorineural hearing loss occurs in one in five patients and, conversely, an estimated 2 to 35 percent of cases of congenital deafness results from the disorder. WS type 4 also has features of Hirschsprung disease (deafness and pigmentary abnormalities in association with aganglionic megacolon). While the prevalence of WS is estimated at one in 40,000, the WS type 4 is much less common than the other types.

**Objectives:** To report a case of a patient with WS type 4 underwent cochlear implant surgery and discuss the presentation, incidence, and diagnostic audiology evaluation in the light of current literature.

**Resumed report:** A girl of 10 months old, carrier of congenital megacolon, was referred to our hospital to investigation diagnosed of fail in newborn hearing screening. The examination and investigation concluded the diagnosis of WS4 and profound bilateral congenital sensorineural hearing loss. The patient underwent cochlear implant.

**Conclusion:** Children with hearing loss should have a complete history, physical examination, and formal audiologic testing to determine the type and etiology of hearing loss and the optimal treatment plan. Early identification and effective treatment of hearing loss improves language, communication, and cognitive skills.
A390. Intra and Extracranial Developments in Medium Otitis: Literature Review
Stephanie Risso, Carlos Eduardo Borges Rezende, William Jose Gilioti, Morgana Moreno Bosch
Centro Universitário São Camilo

Introduction: Otitis media have various forms and among main ones are acute otitis media and chronic otitis media (cholesteatoma or not). Otitis media generally have a good outcome, but there are risks of complications. These are divided into extra and intracranial. Extracranial: labyrinthine fistula, subperiosteal abscess, mastoiditis, temporozigomático abscess, Bezold’s abscess, parapharyngeal abscess, nasal paralyse, petrositis and labyrinthitis. Intracranial: meningitis, epidural abscess, subdural empyema, brain abscess, sigmoid sinus thrombophlebitis and otogenic hydrocephalus.

Objectives: Identifying the complications of otitis media, distinguishing as the incidence, development, management and treatment of each entity.

Data synthesis: Among extracranial complications, the brain abscess is the most lethal entity and subperiosteal abscess is commonest. Of the chronic cholesteatomatous otitis media, predominates the labyrinthine fistula. It is the erosion of the bone overlying the semicircular canal. Already labyrinthitis results from the spread of infection from the cochlear window membrane. The most common intracranial complication is meningitis, more associated with acute otitis media. The treatment of complications is based on admission of patient, myringotomy with culture and sensitivity, intravenous antibiotics and mastoidectomy in all cases related to chronic otitis media or recorrentes.

Conclusion: When the doctor knows the complications and signs and symptoms, the early diagnosis and the best prognosis. Computed tomography is mandatory when you suspect some otogenic complication. The incidence and mortality of complications reduced after the advent of antibiotics. The extracranial complications are more common, but the intracranial are more lethal.

Keywords: otitis media, intracranial complications, extracranial complications.

A102. Complication Of Tonsillectomy - Lingual Artery Pseudoaneurysm, Branch Of The External Carotid Artery
Pilar Campos Saavedra, Lucas Sieburger Zarro, Paulo Tinoco, Saulo Bandoli de Oliveira Tinoco, Aline Araujo Saraiva, Lara Bonani de Almeida Brito
Hospital São José do Avai

Introduction: Adenotonsillectomy is one of the most traditional surgeries performed in the world. Many complications can arise from this procedure, including pseudoaneurysm, rare entity, but which can result in death.

Objectives: Report case occurred lingual artery pseudoaneurysm occurred at our institution.

Resumed report: Minor, five years, underwent adenotonsillectomy surgery without complications and released after 24 hours of admission in good condition. In a review of the 7th postoperative day, the patient was asymptomatic. On the 12th postoperative day, the child presented 02 episodes of vomiting with blood. On examination: dehydrated, pallor, tachycardia, normotensive, oroscopy unchanged. Laboratory tests with 16% hematocrit. Minor sent to the operating room, being viewed major bleeding in left tonsil store. Held regional suture and cauterized to control bleeding. Referred to the Pediatric ICU where he presented new oral bleeding, required transfusion of six red blood cells bags. After controlling bleeding, returns to the pediatric ICU where he remained sedated, intubated for 02 days with hemodynamically stable. Arteriography performed by vascular surgery team, which identified lingual artery pseudoaneurysm, branch of the external carotid artery. Embolization performed uneventfully.

Conclusion: Although rare, pseudoaneurysms can lead patients to death and should be considered in cases of severe bleeding after tonsillectomy. Patient had no bleeding, with hemodynamic stability. At time found to outpatient treatment.

A103. Cystic Adenoid of Larynx: A Case Report
Pilar Campos Saavedra, Lucas Sieburger Zarro, Aline Araujo Saraiva, Paulo Tinoco, Marina Bandoli de Oliveira Tinoco, Saulo Bandoli de Oliveira Tinoco
Hospital São José do Avai

Introduction: Adenoid cystic a relatively common tumor in major and minor salivary glands, however, its rare in the larynx due to shortage of this cell type in this region. The incidence is higher in females of 5th-6th decade of life, and subglottic. The patient is usually asymptomatic and when symptoms are present, are characterized by progressive dysphonia, cough and airway obstruction.

Objectives: Report a rare case of laryngeal adenoid cystic.

Resumed report: ZDS, 36, male, black with complaints of dysphonia a year ago, recently associated with decubitus dyspnea. It evolved to orthopnea, dysphagia, weight loss. Smoker for over 10 years with smoking history of 10 pack / year. Clinical examination oroscopy unchanged. Videolaryngoscopy: they were not displaying the vocal cords because of the presence of tumor vegetating in supr glottic region (piriform sinuses, aritenoides and epigote). Referred to the operating room held laryngeal microsurgery and biopsy. In the immediate postoperative patient developed respiratory distress and stridor, requiring tracheostomy. Biopsy of the lesion showed undifferentiated neoplasm, and requested that immunohistochemical revealed adenoid cystic. Forwarded to the Oncology Service, where it was held radiotherapy. With clinical improvement, is in attendance a year ago and currently decannulation process.

Conclusions: Adenoid cystic carcinomas are rare in the larynx, especially in young males. Treatment is much discussed, some authors advocate surgical treatment, with or without association with radiotherapy because although the tumor is radiosensitive there is no cure reports. In the patient report showed clinical improvement does not require surgical approach. It is etunic in decannulation process.

A577. Daytime Sleepiness Prevalence Among Truck Drivers In The State Of Pará, Brazil
Hospital Universitário Bettina Ferro de Souza / Universidade Federal do Pará

Introduction: According to the Brazilian Federal Highway Police, 186,698 highway accidents were recorded in Brazil in 2013 and 68,593 in 2014. The excessive sleepiness is a common cause of traffic accidents to be associated with long working hours, fatigue, stress, deprivation and poor sleep quality.

Objective: To evaluate the prevalence of daytime sleepiness among truck drivers in Pará, Brazil, in 2013 and 2014.
Methods: Observational and cross-sectional study with application of the Epworth Sleepiness Scale and epidemiological questionnaires to 400 truck drivers in Pará, Brazil. Data collection occurred during the program "Health Command on the Highways" of the Brazilian Federal Highway Police in 2013 and 2014. Statistics Analysis was taken by Biostat 5.0.

Results: The mean age was 41.77 ± 10.09 [15-72]. 99.75% were male. The average working hours was 10.8 ± 2.90 [2-24]. The average daily sleep time was 7.83 ± 1.59 [3-12]. The average of Epworth Sleepiness Scale was 4.51 ± 3.17 [0-16] and its evaluation revealed that 79.75% had normal patterns of daytime sleepiness [0-6], 12% had borderline values [7-9], 7.5% had mild daytime sleepiness [10-14] and 0.75% had moderate daytime sleepiness [15-20].

Conclusion: The prevalence of mild daytime sleepiness in truck drivers in Pará, Brazil, found was 7.5% and, moderate, 0.75%. There was no excessive daytime sleepiness. However, 12% of respondents had scores in the borderline of Epworth Sleepiness Scale, which supports the need of additional protocols and clinical evaluation to diagnose sleep disorders in this population.

A261. Deviated Non-Traumatic Nose As A Child: Case Report
Karolline Estrela Campodonio Nunes, Natália Maria Couto Bem Mendonça, Susan Benaion Tabasnik, Gustavo Cittadin Del Prato, Artur Grinfeld, Lucas Soares Passos Guimarães
Hospital Otorrinos Feira de Santana—BA

Introduction: Rhinoplasty has become one of the leading cosmetic surgeries today.

Resumed report: B.A.T., male, 14 years old, afro descendent, single, student, reported to Hospital Otorrinos plastic surgery service with nose diverted since childhood without history of trauma. The main component of such nose is defect in the development of the nasal septum. In this patient, we performed rhinoplasty with open technique and correction of the septum according to Goldman. Nasal tip definition was performed with Strut, placing the spreader graft in the concave side of the septum through subperichondral tunnel and side, transverse and paramedian osteotomies. To obtain satisfactory surgical results, one must understand the nasal anatomical and physiological structures, with a preoperative and intraoperative thorough evaluation.

Conclusion: The surgical approach requires deviated noses anatomical knowledge, combined with good surgical technique to lead to good results. Correction determines, in addition to a significant improvement in quality of life for patients, improved nasal functionality.

A264. Deviated Nose After Functional Septoplasty: Case Report
Natália Maria Couto Bem Mendonça, Karolline Estrela Campodonio Nunes, Susan Benaion Tabasnik, Gustavo Cittadin Del Prato, Matheus Freitas Leite, Artur Grinfeld
Hospital Otorrinos Feira de Santana—BA

Introduction: Rhinoplasty has become one of the leading cosmetic surgery today.

Resumed report: N.Q., male, 16, student, afro descendent, single, reported to Hospital Otorrinos plastic surgery service with nose diverted one year after performing functional septoplasty with no history of trauma. Surgical approach in this patient consisted of rhinoplasty with open technique and correction of deviated nasal septum according to Goldman. After that, nasal tip definition was performed with Strut, placing Spreader Graft on the concave side of the septum through subperichondral tunnel, lateral and paramedian osteotomies. The patient in question had performed septoplasty by Goldman technique one year earlier, especially suitable for cartilaginous deviations. In this technique, we must preserve the K area, avoiding postoperative complications.

Conclusion: To obtain satisfactory surgical results, one must understand the nasal anatomical and physiological structures, with a preoperative and intraoperative thorough evaluation.

A278. Ectrodactyly Associated To Ectodermal Dysplasia And Cleft Lip/Palate: Report Of A Family Case of EEC Syndrome
Julianne Wagner, Letícia Gregory, Prícula Slieter, Gabriela da Cunha Pereira, Paulo Ricardo Gazzola Zen, Rafael Fabiano Machado Rosa
Universidade Federal de Ciências da Saúde de Porto Alegre

Introduction: EEC syndrome (Ectrodactyly, Ectodermal dysplasia, and Cleft Lip and/or Palate) is an autosomal dominant genetic disorder characterized by a variable clinical picture that includes ectrodactyly (lobster claw hands and feet), ectodermal dysplasia and oral clefts. Objectives: to report a family case of EEC syndrome.

Resumed report: The patient is the second child of parents with age 26 years (mother) and 42 years (father). She was born by cesarean section due to fetal distress weighing...
Her neuropsychomotor development was appropriate for her age. The evaluation of the child through the karyotype was normal (46,XX). Moreover, this is a syndrome in which individuals, despite having multiple malformations, often have a normal intelligence. The sister of the patient was a five-year-old healthy girl. At physical examination, it was also noted a sparse and dry hair. These findings were also checked on her mother. The evaluation of the child through the karyotype was normal (46,XX).

Conclusion: Our report aims to draw attention to the diagnosis and genetic counseling of EEC syndrome. As this is an autosomal dominant genetic condition, the risk to offspring, both for the mother as the child in the future, is 50%. Moreover, this is a syndrome in which individuals, despite usually having multiple malformations, often have a normal intelligence.

Keyword: EEC syndrome

A110. Endoscopic Surgery In Child With Periorbital Cellulitis And Epidural Abscess
Pilar Campos Saavedra, Aline Araujo Saraiva, Lucas Sieburger Zarro, Paulo Tinoco, Marina Bandoli de Oliveira Tinoco, Saulo Bandoli de Oliveira Tinoco
Hospital São José do Avaí

Introduction: When the infectious process extends besides the nasal mucosa, we're facing to a complication of acute rhinosinusitis. The spread of infection can occur with continuity (retrograde thrombophlebitis) or contiguity (direct extension of the sinus wall). A small number of individuals develops complications, that can be bone, intracranial (meningitis, abscess, empyema) or orbital complications. The frontal sinus is the most commonly associated with intracranial infection, followed ethmoid, sphenoid and maxillary sinus. Treatment is due with intravenous antibiotic therapy accompanied by surgery depending on the extent of the sinus and intracranial disease and should be consulted both general surgeon and neurosurgeon in all cases and performed an endoscopic sinus surgery.

Objectives: Report clinical case of evolution of acute rhinosinusitis in our institution.

Resumed report: ELG, 15 years old, white, residing in Muriaé-MG. The patient was referred HSJA with periorbital edema in left eye after acute rhinosinusitis episode. Made use of antibiotics featuring worsening periorbital edema, photophobia and local pain. CT sinuses; opacification of the maxillary, ethmoid and frontal sinus in left side with obstruction of drainage ostium. CT scan: pneumoencephalus and epidural abscess in left frontal region. Patient taken to the operating room for endoscopic sinus surgery. Conservative treatment in for Neurosurgery team.

Conclusion: Patient evolved satisfactorily after surgery, with reduction of periorbital edema and epidural abscess. It is receiving outpatient treatment for Otolaryngology and Neurosurgery teams.

A477. Endoscopic Surgery Of Juvenile Nasopharyngeal Angiofibroma Associated With A Literature Review Of Hematological Complications After Embolization
Nathalia Tesserolo Dias, Gustavo Guimaraes Rangel, Janaina Kopp, Sharon Maria Soares de Lima Avila, Christiane de Sousa Lopes, Renato Ponte Portela Aguiar
Hospital Federal dos Servidores do Estado

Introduction: Juvenile Nasopharyngeal Angiofibroma is a rare benign tumor, although considered aggressive because of its local invasion capacity, with cranial invasion in ten to twenty percent of the cases. It is commonly found in teenagers and young men, the gold standard treatment is complete surgical resection of the tumor.

Objective: The objective of this study is to report a case of Juvenile Nasopharyngeal Angiofibroma, which was subjected to endoscopic surgery after embolization, in which, was associated with a review of the literature emphasizing on preoperative and post-surgical hematological complications after embolization.

Resumed report: The patient is a male teenager, 14 years old, who was seeking medical treatment due to tumor in left nostril, epistaxis, nasal obstruction ipsilateral and headache. These symptoms began in July 2014. He went through preoperative embolization and endoscopic sinus surgery, successfully resecting completely the tumor in February 2015. During surgery the total blood loss was 1820ml, however blood transfusion was not necessary.

Conclusion: The endoscopic sinus surgery alone, without any external incisions, for the treatment of Juvenile Nasopharyngeal Angiofibromawas enough to safely resect the patient’s tumor completely. Despite the embolization, during the intra-operative stage the patient’s blood loss was of 1820ml. Therefore, blood transfusion was not considered necessary. In the literature, there is still controversies between risks and benefits on Juvenile Nasopharyngeal Angiofibroma preoperative embolization.

Keywords: Juvenile Nasopharyngeal Angiofibroma; endoscopic sinus surgery; embolization

A101. Endoscopic Transnasal Access Transphenoidal For Pituitary Adenomas : Surgical Experience Of A Tertiary Southern Brazil Hospital
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Santa Casa de Misericórdia de Porto Alegre

Introduction: Endoscopic transnasal transphenoidal approach has been well established as a technical option in skull base surgeries. It allows preservation of nasal anatomy and less post-operative discomfort than the traditional microscopic technique. The present study was aimed to review a case series.

Methods: Retrospective study of pituitary tumors operated on at Hospital São José by the endoscopic transnasal transphenoidal approach between 2010 and 2014. Thirty-nine patients (25 women) from 11 to 71 years-old. All patients were operated on by the otolaryngologist and then the neurosurgeon. The closure was performed with a mucosal flap plus the abdominal muscle fascia and fibrin glue.

Results: Twenty-five tumors (67%) were macroadenomas and 13 (33%) were microadenomas. The most common symptoms were progressive visual field impairment (69%) and headache (23%). Thirteen patients (33%) had cerebral spinal fluid leakage and received a lumbar drain in the immediate post-operative. The main complications were post-operative epistaxis (20%), late cerebral spinal fluid fistulae (5 cases), transient post-operative diabetes insipidus (7 cases) and transient ophthalmic deficit. One patient died because of post-operative meningitis related to cerebral spinal fluid leakage of difficult resolution.

Conclusion: Endoscopic transnasal transphenoidal approach is a useful method to offer less morbidity. The present study demonstrates that a learning curve is a key point in this approach, as less complication rate was observed.
A significant improvement was the reduction of intensive care unit staying and total hospitalization period. The endoscopy and adequate interaction between otorhinolaryngologist and neurosurgeon allow better results for treating this pathology.

A578. Enlarged Vestibular Aqueduct: A Report Case
Júlia da Silva Almeida, Flavia Vieira Dias, Edna Patricia Churry Ramirez, Maria Eugenia Peduzzi Dalmachio, Raphaella Costa Moreira Simen
Hospital Universitário Antonio Pedro - Universidade Federal Fluminense

Introduction: Enlarged vestibular aqueduct is a congenital malformation of the temporal bone that predisposes to early onset of hearing loss and vestibular disorders. Some cases are associated to other inner ear malformations or to genetic syndromes. The age of hearing loss diagnosis varies from infant to adult. It may present progressive, sudden or fluctuating pattern. The criteria that define this condition at temporal bone computed tomography are: a diameter larger than 1.5mm in the midpoint or than 2mm in the external operculum. Hearing aids are recommended for moderate or severe cases and cochlear implantation has presented good results.

Objective: To present a case of a 14-year-old patient with sudden hearing impairment and tinnitus in right ear, with imaging evaluation showing bilateral enlarged vestibular aqueduct.

Resumed Report: A 14-year-old male patient with sudden tinnitus and hearing loss in the right ear. History of poor school performance. No risk factors for hearing loss and familial history was reported. Physical examination was normal. Audiometry revealed neurosensorial hearing loss, severe in the right ear and moderate in the left, with speech recognition threshold of 52% and 96%, respectively. Computed tomography revealed severe in the right ear and moderate in the left, with speech recognition threshold of 52% and 96%, respectively. Computed tomography and MRI of the temporal bone showed enlarged vestibular aqueduct on both sides. We chose to treat with hearing aids and regular follow up, with audiological evaluation.

Conclusion: The variety of onset and clinical presentation of enlarged vestibular aqueduct requires special attention in the diagnostic process. Early diagnosis allows more favorable rehabilitation treatments such as cochlear implants which is a possibility for the patient studied.

A112. Epidemiologic Profile of the Ambulatory of Tinnitus of the Hospital Otorrinos Feira de Santana, Bahia
Matheus Freitas Leite, Erica Cristina Campos e Santos, Maria Laíza Fernandes Neves Abreu, Lucas Soares Passos Guimarães, Karolline Estrela Campodonio Nunes, Sandro de Menezes Santos Torres
Hospital Otorrinos de Feira de Santana

Introduction: Tinnitus is a very common symptom at the ENT clinic. By definition is a sound not being generated in the environment at that time. It affects about 17% of the population in some countries. In Brazil, the data are not yet well defined, but it is possible that some 28 million Brazilians have already had some form of tinnitus.

Objective: Evaluate the epidemiological profile of patients bearers of tinnitus the ambulatory of tinnitus the Hospital Otorrinos in the period 2011-014. Material and Methods: In a total of 162 patients with tinnitus complaint was instituted a questionnaire about the characteristics of tinnitus. A profile of these patients was mounted with subjective responses.

Results: Most of our patients are females (75%) and show hi discomfort level (52%). The cause is most frequently idiopathic (59%) and patients showed good acceptance and adaptation to AASI (53%).

Conclusion: The most tinnitus is idiopathic and improves with time. Adaptation using AASI is evident.

Keywords: buzz, sound amplification device, generator suppression of tinnitus

A210. Epidemiological Profile of Patients Suffering From Vestibulopathies Treated In Hospital Naval Marcílio Dias
Alexandre José de Sousa Cunha, Daniella Leitao Mendes, Luiz Felipe Lira de Moraes, Thiago Chaluff de Matos Fonseca, Natalia Mello do Vale, Elisa da Costa Carvalho Almeida Lopes
Hospital Naval Marcílio Dias

Introduction: Dizziness is one of the most common symptoms related during otorhinolaryngologists visits. The appropriate diagnosis of the most variable disorders that presents this symptom is essential for a better handling of the patient. To do that, the otorhinolaryngologist physician has vast resources, among which , the clinical history, physical examination, laboratory, imaging and audologic exams, and the vectonystagmography.

Objectives: Evaluate the profile of patients with vestibulopathies submitted to vectonystagmography in Hospital Naval Marcílio Dias.

Methods: Descriptive, transversal and retrospective study with 320 patients, conducted from January/2013 to July/2014. Variables studied: sex; age; type of vestibulopathy â€“ irritative, bilateral deficit, unilateral deficit and central.

Results: The sample consisted of 320 patients, 43.7% males and 56.3% females, the prevalent age group was >51 years. The most common vestibulopathy was peripheric irritative (61%), followed by deficit(30%) and central (9%).

Conclusion: Vestibulopathies affected more women, with more than 51 years, and the irritative type was the most common type found. The results encountered in Hospital Naval Marcílio Dias were similar to the general population. Even now, vectonystagmography continues to be a valuable method in the evaluation of patients with dizziness.

Keywords: Dizziness, Vestibulopathies, Vectonystagmography, Irritative, Deficit

A252. Epidemiological Profile Of Patients With Chronic Ear - Hospital Otorrinos Feira De Santana - BA
Matheus Freitas Leite, Luciana Brito Corrêa, Thiara Lessa Silva, Maria Laíza Fernandes Neves Abreu, Lucas Soares Passos Guimarães, Sandro de Menezes Santos Torres
Hospital Otorrinos

Introduction: Chronic otitis media (COM) is a process of inflammatory nature of middle ear and mastoid with or without a tympanic membrane perforation and otorrhea, potentially leading to a conductive or mixed hearing loss. It is estimated that over 20 million people worldwide suffer from COM. COM can be divided into two groups: simple and suppurative. The latter group is subdivided into not cholesteatomatous (COMNC) and Cholesteatomatous (CCOM). The radical mastoidectomy surgery is indicated for these cases, and constitutes in cleaning and clearing of the mastoid and posterior and superior bony wall of the external auditory canal (EAC).

Methods: Study was conducted prospectively with patients with COMNC and CCOM. They underwent surgery in a medical residency in otorhinolaryngology in Feira de Santana - BA during the period between 2008 and 2014. We monitored during postoperative for 8 months.
Results: We performed 259 surgeries in the period, 18% of the surgeries were radical mastoidectomy (MR), 39% tympanomastoidectomy (TM) and 43% tympanoplasties (TP). There was a predominance of females in all types of surgeries, with assessment of hearing subjectively postoperative and important improvement percentage.

Discussion: The data obtained in this study confirms the benefit of surgery in the treatment of chronic otitis media.

Conclusion: Other studies correlating both subjective and objective improvement of hearing in the evaluation of patients with chronic otitis media undergoing surgery are needed.

A405. Epithelioid Hemangioma: Case Report And Literature Review
Carolina Affonso Solano, Flavia Capone, Sarah Cristina Beirith, Danielle de Araujo Torres, Jacqueline de Mattos Coelho, Cassio Aguiar Coelho
Hospital Federal da Lagoa

Introduction: The epithelioid hemangioma is a rare benign vascular neoplasm, usually located in the head and neck. The treatment is eminently surgical, being the diagnostic made after histopathological examination. The disease is most prevalent among women and recurrent bleeding can lead to anemia.

Objectives: The aim is to present a case of epithelioid hemangioma of the external auditory canal and report a literature review of this disease.

Resumed report: The case report is about a 31 year old woman with hearing loss and a tumor in the right external auditory canal, first noted three years earlier, with progressive growth, notably during the pregnancy. At physical examination, a compressible mass was observed in the external auditory canal, apparently without involvement of the tympanic membrane. The audiometry detected a conductive hearing loss and the computed tomography showed a mass with density of soft tissues, located at the external auditory canal, without contiguity with the middle ear. We performed a surgery, with total resection of the tumor and the histopathological examination revealed epithelioid hemangioma. The patient is in clinical follow up, with no relapse of the disease until now.

Conclusion: Although the localization of this kind of neoplasm in the pinna is known as the most common one, there are few reports of epithelioid hemangioma in otorhinolaryngologic literature. It is important to the ear, nose and throat physicians to recognize the epithelioid hemangioma as one of the differential diagnoses of the head and neck masses.

Keywords: epithelioid hemangioma, external auditory canal, vascular neoplasm

A488. Ethmoidal Mucocele: Case Reports
Luiz Felipe Lira de Moraes, Nathalia Senra Santos, Ana Carolina Daflon Scoralick, Felipe Figueiredo, Alônco da Cunha Viana Junior, Daniella Leitao Mendes
Hospital Naval Marcilio Dias

Introduction: Mucoceles are cysts (epithelium-lined cavities) of mucous content that affect the paranasal sinuses. They develop because of scarring and obstruction of the sinus ostium, whether from chronic sinusitis, trauma, or surgery. They have expansive nature, slow growth, commonly erode the bony sinus wall and can have serious complications of brain and orbital invasion, with potential for abscess and rupture.

A476. Evaluation Of Cardiovascular Risk Factors In Professional Drivers With Excessive Daytime Sleepiness
Fabricio Leocadio Rodrigues de Sousa, Erika Baptista Luiz Badarane, Guilherme Silva Machado, Jessica Ramos Tavares, Giovanni Vielmond Borges da Silva, Mariana Tótola Força
Hospital Universitário Bettina Ferro de Souza

Introduction: The work activities are hampered by excessive sleepiness, as well as increasing the risk of traffic accidents in the case of professional drivers. In Brazil, up to 7.6 % of traffic accidents are due this problem. The sleep quality as well as quality of life is reduced in patients with chronic diseases. The Epworth Sleepiness Scale is an easy to perform questionnaire which evaluates daytime sleepiness. Several breathing sleep disorders such as obstructive sleep apnea syndrome are related to cardiovascular risk factors and systemic hypertension.

Objectives: To identify cardiovascular risk factors in professional drivers with excessive daytime sleepiness diagnosed by the Epworth Sleepiness Scale.

Methods: Cross-sectional, retrospective, descriptive study in which we used the database of the Federal Highway Police. 400 drivers’ data were analyzed. Of the total sample, 33 had excessive daytime sleepiness (Epworth sleep scale above 10) and of these, 06 (18.18 %) had hypertension, 06 (18.18 %) were smokers, 01 (3.03%) had diabetes mellitus and 20 (60.6 %) were alcoholics.

Conclusion: The main cardiovascular risk factor in professional drivers with excessive daytime sleepiness was alcoholism. Alcohol is probably the inducing sleep substance most used by mankind, in other words, has a synergistic relationship with sleep deprivation, which increases the chances of traffic accidents.

Keywords: Excessive daytime sleepiness, cardiovascular risk factors, Epworth

A595. Evaluation Of Excessive Daytime Sleepiness And Body Mass Index Among Truck Drivers
Guilherme Silva Machado, Jessica Ramos Tavares, Fabricio Leocadio Rodrigues de Sousa, Rafael Scherer, Giovanni Vielmond Borges da Silva, Erika Baptista Luiz Badarane
Hospital Universitário Bettina Ferro de Souza

Introduction: The leading cause of excessive sleepiness is chronic sleep deprivation. In motorists the poor sleep quality can lead to health hazards and affect their concentration, increasing the risk of accidents.

Objectives: To evaluate the possible correlation between EPWORTH and body mass index (BMI) among truck drivers enrolled in the program “Health Command on
Highways” developed by the Federal Highway Police from January 2013 to December 2014.

Methods: The study is analytical and descriptive statistical nature, quantitative reasoning, following a cross-sectional and retrospective approach, based on the Federal Highway Police database. They included all questionnaires records and anthropometric measures applied to truck drivers in the survey period.

Results: 400 truck drivers were evaluated, most of them males and only one female. Age ranged between 19 and 72 years old. More than half of truck drivers had high BMI values, 40% were obese and 40% were overweight. 5.25% of the truck drivers participants had the score of Epworth Sleepiness Scale above 10. The Relative Risk Ratio was 2.08 among truckers overweight or obese compared to those with normal BMI, and P > 0.05 (Binominal Test).

Conclusion: was concluded that overweight or obese truckers have twice as daytime sleepiness compared to those with normal BMI.

A570. Extensive Fibrous Dysplasia of the Temporal and Sphenoid Bones
Eliana Freitas Cardoso, Alexandra Torres Cordeiro Lopes de Souza, Carolina Catherine Lacerda Elias, Pablo de Oliveira Lima, Carolina Figueira Selorico, Nicolau Tavares Boehchem
Hospital Federal de Bonsucesso

Introduction: Fibrous Dysplasia is a osteodysplasia which etiology is still controversial. The disease often occurs isolated on a single bone. The involvement of the cranio-facial skeleton is not uncommon, occurring mainly in the jawbone, mandible and more rarely in the temporal bone. Men and caucasians are more affected.

Objectives: To report a rare presentation case of Fibrous Dysplasia which not only affect the temporal bone, but also involves the sphenoid bone.

Resumed Report: A 23-years-old previously healthy white man presented with history of intermittent tightening temporoparietal headache, which started 5 years before admission and gradually increased in severity. Moreover, he described aural fullness, intermittent otorrhea and right temporal enlargement. On examination, there was narrowing of the external auditory canal with debris and fetid ear discharge. Nasal endoscopy showed polyps lesions in septal side of right middle turbinate. Mastoid CT scan showed homogeneous radiodense image in sphenoid sinus. CT scan of the skull base revealed a single lesion involving the long process of the incus, and normal thresholds in the left side. CT and MRI scans showed a single lesion involving the long process of the incus, stapes, and the oval window. No bone erosion was observed. Exploratory tympanometry was performed under general anesthesia. As the lesion was surrounding the stapes and the footplate, it was decided to perform a near-total removal. Histological analysis revealed a low-grade plasma cell tumor. Systemic hematological assessment, including bone marrow biopsy, was normal. The patient was further submitted to radiotherapy and oral chemotherapy. After 6 months of follow-up, imaging assessment of the temporal bone revealed total remission. A small air-bone gap was still observed and the patient referred a mild, well-tolerated tinnitus.

Conclusion: This case illustrates the importance of Fibrous Dysplasia in otorhinolaryngology, specially when there is neck and face involvement. It can affect vital structures of the skull base, destroy tympanic membrane and form cholesteatomas. There is no specific therapy and constant monitoring is required.

A172. Extracranial Meningioma
Ana Júlia Elorza Moraes dos Santos, Eron Mosciati, Camila Nogueira Merlo, José Roberto Chodraui
Nucleo de Otorrinolaringologia de Ribeirao Preto

Introduction: Meningiomas account for 14-18% of intracranial neoplasms. About 20% of these present extracranial expansion to locations such as the orbit, nasal cavity, paranasal sinuses, middle ear and nasopharynx. Primary extracranial meningioma of the sinonasal region is a rare neoplasm, especially in children. The diagnosis of these tumors is difficult, based on clinical history, physical examination and diagnostic procedures (fiberoptic endoscopic examination, computed tomography and magnetic resonance imaging).

Objectives: The extracranial meningioma, although rare, should be part of the differential diagnosis of epithelial tumors, neurogenic lineage, odontogenic tissues, vascular and hematology.

Resumed Report: Patient, female, 14 years old, she developed diplopia insidiously sought ophthalmic specialty, who asked cranial computed tomography. After, the patient was referred to the otorhinolaryngology service due to a mass that was in the frontal sinus, not compromising intracranial region, seen in the picture. Underwent complete tumor excision and sent to the pathological, which showed meningioma.

Conclusion: Treatment for primary meningioma of the sinonasal region is surgical with complete excision of the lesion and with no need of adjuvant treatments.

A211. Extradural Plasmocytoma Within The Middle Ear Cleft: An Unusual Presentation
Roberto Dihl Angeli, Gisiane Munaro, Flavia Ribas Demarco, Marina Lise
University Hospital, Universidade Luterana do Brasil (Ulbra)

Introduction: Solitary extramedullary plasmocytomas (EP) are neoplasms of the plasma cell system that arise outside of the bone marrow. These lesions make up 4% of all plasma cell tumors and occur mainly in the upper aerodigestive tract. Its occurrence in the temporal bone is absolutely unusual.

Objective: To describe a case of solitary EP within the middle ear cleft and its surgical management.

Resumed report: 62 year-old female presented in our department with a several-month history of progressive right-sided tinnitus. Audiological assessment revealed a moderate, conductive low-frequency hearing loss in the right side and normal thresholds in the left side. CT and MRI scans showed a single lesion involving the long process of the incus, stapes, and the oval window. No bone erosion was observed. Exploratory tympanometry was performed under general anesthesia. As the lesion was surrounding the stapes and the footplate, it was decided to perform a near-total removal. Histological analysis revealed a low-grade plasma cell tumor. Systemic hematological assessment, including bone marrow biopsy, was normal. The patient was further submitted to radiotherapy and oral chemotherapy. After 6 months of follow-up, imaging assessment of the temporal bone revealed total remission. A small air-bone gap was still observed and the patient referred a mild, well-tolerated tinnitus.

Conclusion: expansive lesions within the temporal bone may represent a focal manifestation of a systemic disease. In the absence of an ultimate diagnosis, a partial, near-total removal proved to be the best surgical option in order to preserve ossicular integrity.
E-Posters

**Introduction:** Cochlear Implant is a commonly performed procedure for severe to profound deafness. Post-implantation facial nerve stimulation is one of the best known and most frequent complications of the cochlear implant (CI) procedure.

**Objective:** This case reports aims to present a case of an 18-year-old patient presenting inadvertent facial nerve stimulation after CI.

**Resumed report:** Patient was diagnosed with profound bilateral sensorineural hearing loss at 1-year-old. She established oral language but didn’t show good gain with hearing aids. At 17 years old, she started evaluation for CI. CT scan of temporal bone showed a duplicated internal acoustic meatus and cochleas were permeable. It was performed the CI on the left side. There were no complications during surgery, with satisfactory impedance and telemetry. CI activation occurred 4 weeks after and patient showed ipsilateral facial nerve stimulation when emitted sounds. The audiologists couldn’t set a map with satisfactory hearing response without facial spasm, turning off and on each electrode and measuring auditory response and extra-auditory symptoms. CT scan of temporal bone confirmed the close proximity of the basal turn of the cochlea and the labyrinthine segment of the facial nerve.

**Conclusion:** Literature data presents prevalence of facial nerve stimulation ranging from 7 to 14%. We experienced our third case in a 450-case-series during the past 14 years. As we did not observe correlation between facial nerve stimulation and the contiguous electrodes, we were not able to control this signal through programming mode changes. Otology crew and family decided to remove the CI.

**A402. Follow-Up of Respiratory Papillomatosis Laryngeal Giant: A Case Report**
Fernanda Wiltgen Machado, Amanda Carvalho Villa de Camargo, Luciene Mayumi Sato, Orlando Schuler de Lucena, Cristiana Vanderlei de Melo, Alexandre Moron Enoki
Real Benemérita Beneficência Portuguesa de São Paulo - Clínica Dr. Ivan F. Barbosa

**Introduction:** Papilloma is considered the most common benign tumor of larynx with great tendency to recurrence. It presents with hoarseness, but may present with acute obstruction of the airways. The glottis is the most common site.

**Objective:** To report the follow-up two years of patient with laryngeal giant respiratory papillomatosis.

**Resumed report:** MCA, 38, male. Sought service referring accompanied dysphonia dyspnea at rest since childhood with worsening there 03 years. He was diagnosed previously with bronchial asthma. Nasofibrolaryngoscopy performed which showed : the presence of vegetative injury, pedicle, extensive and covering the right vocal fold with significant obstruction route area. Resected June / 2013 without the need for tracheostomy. After the procedure, patients showed significant improvement in voice and dyspnea. Since then, with monthly clinical follow-up with a slight relapse in October / 2013 and submitted to a new resection (March / 2014). Keeping up without relapse to date (March / 2015).

**Conclusion:** Although it is a benign condition when diagnosis is delayed may present with great vocal and respiratory effects, and acute respiratory failure one. Even with high rates of relapse, it is noted that the above case evolved with single submission within 2 years.

**Keywords:** Papillomatosis laryngeal, recidive, dyspnea

**A467. Frontal Reconstruction With Modified Lotropi With Endonasal Endoscopic Surgery**
Fernanda Tan Miyamura, Bruno Salgado de Campos, Ana Carolina Favaro de Santana, Flaviana Magalhaes Lima Verde, Alexandre Felippin Neto, Antonio Mauricio Lopes Facchinetti
Instituto Felippu de Rinologia

**Resumed report:** T.S.A, male, 38 years old, with front CCT history 15 years ago in Japan. The frontal bone and skull base was submitted reconstruction surgery with titânio board.One year ago oneself developed severe frontal headache and acute rhinosinusitis recurrences. The patient even came to our service because the symptoms above without improvement with requested clinics. We ask him face sinus CT scan and cranial MRI.

**A321. Fronto-Ethmoidal Osteoma in Gardner Syndrome**
Christiane de Sousa Lopes, Sharon Maria Soares de Lima Avila, Nathalia Tessarolo Dias, Janaina Kopp, Renato Ponte Portela Aguiar, Gustavo Guimaraes Rangel
Hospital Federal dos Servidores do Estado

**Introduction:** Gardner syndrome is an autosomal dominant form of polyposis characterized by the presence of multiple polyps in the colon together with tumors outside the colon. This disease is caused by mutation in the APC gene and it is a form of familial adenomatous polyposis. It can be associated with osteomas, supernumerary or retained teeth, nasopharyngeal angiofibroma, desmoid tumors, among others. Osteomas are more frequent in males, between the second and fourth decades of life and in 80% of cases located in the frontal sinuses followed by ethmoidal sinuses.

**Objective:** Report a case of Gardner syndrome in which the diagnosis was based on the findings of fronto-ethmoidal osteoma, supernumerary teeth in maxillary sinuses, seen in the CT scan of paranasal sinuses.

**Resumed report:** An 18-year-old male, who searched for medical care due to frontal headache, for several months. The TC SPN showed fronto-ethmoidal osteoma bigger than 3 cm, combined with supernumerary and unerupted teeth in maxillary sinuses. The clinical examination revealed a 2cm osteoma in the occipital region. The clinical suspicion of Gardner’s syndrome was raised. Colonoscopy and the following histological examination confirmed the presence of colonic adenomatous polyps. Afterwards, he underwent upper gastrointestinal endoscopy confirming adenomatous polyps in the gastric fundus.

**Conclusion:** After closing the diagnosis, the patient was scheduled to conduct total colectomy with ileorectal anastomosis and his family members advised to undergo colonoscopic examination. After surgical recovery, he will be submitted to resection the osteoma by external osteoplastic approach.

**Keywords:** Osteoma; Gardner Syndrome; Adenomatous Polyps

**A438. Fulminant Case of Death From Otitis Media**
Adriano Sergio Freire Meira, Christiane Kulzer Birck, Thais Eugênio Gomes, Junior Alvaro Vitorino de Pontes, Bruno Leonardo Barbosa Machado, Nelson Jose Barboza Quintino
S.O.S Otorino

**Introduction:** In nowadays the use of antibiotics and vaccination has prevented the death from otitis media, we present the case of a child who died in just 20 hours of symptoms began

**Objectives:** To present a rare case.
Resumed Report: Male, 3 years old, comes to the office after previous treatment for otitis media, prior treatment was done with clindamycin 14 days, audiometric and impedance exams were normal after that, arrives at the office with symptoms that had started the night before and complaining of ear pain without vomiting. Otoscopy was performed with intense bulging, starts the use of ceftriaxone in hospital and scheduled myringotomy eight hours later, after fasting, four hours after all, father reports child with mental confusion. On the way to the surgical center has a Cardiorespiratory arrest being sent to intensive care unit, after six hours, brain death was diagnosed, culture was made and discovered an extremely aggressive form of Streptococcus pneumonia.

Conclusion: Streptococcus pneumoniae bacteria are grampositive, facultative anaerobic organisms, are common inhabitants of the respiratory tract and may be isolated from the nasopharynx of 5% to 70% of healthy adults, before routine use of pneumococcal conjugate vaccine, the burden of pneumococcal disease among children younger than 5 years of age was significant. In USA an estimated 200 children died every year as a result of invasive pneumococcal disease, in this case the child was not at risk group but had not made use of the vaccine.

Keywords: otitis, pneumococcal, middle ear

A311. Giant Cell Tumors Of Temporal Bone And Infratemporal Fossa
Norimar Hernandez Dias, José Vicente Tagliarini, Regina Helena Garcia Martins, Thais Gomes Abrahão Elias, Antonio Carlos Marao, Iury Lima Veloso
Hospital das Clínicas - Faculdade de Medicina de Botucatu - Unesp

Introduction: Giant cell tumors (GCT) are rare benign neoplasms commonly found in the long bones. Only 1-2% of these lesions present in the head and neck, skull base being a commonly reported site (temporal, sphenoid and ethmoid bones) and other sites including the mandible, maxilla and soft tissues of the neck. The temporal bone is a common site of occurrence of GCT in the skull base, and has a locally destructive character potentially dangerous.

Objective: Report a case of GCT in the temporal bone and infratemporal fossa.

Resumed report: Male patient, 44, referred to our hospital with progressive hearing loss the right for 6 years and ear fullness. Submitted to three previous mastoidectomies no evidence of immune system involvement. After two mastoidectomies, with chronic nasal obstruction and exophthalmos in the right eye, Nasal endoscopy showed mucosal degeneration in middle meatus of right nasal cavity and parasanal sinuses CT scan showed an expansive lesion right with skull base invasion and ipsilateral orbit, important osteitis associated, in addition to opacification of the parasanal sinuses. After two biopsies performed via endoscopic endonasal, it was not evidenced fungus or histopathological alterations that proving fungal etiology. Considering the clinical history, ENT physical examination and imaging tests, after the event discussed with neurosurgeon and infectious decided on treatment as chronic RSFI, associating surgical dissection wide local and systemic antifungals. During patient monitoring developed progressive

A235. Inflammatory Pseudotumor in Nasopharynx : Case Report
Manayra Lourenzo Cunha Carvalho, Alessandra de Oliveira Brandão Pinheiro, Paula Lourençato, Bruno Borges Taguchi, Silvio Antonio Monteiro Marone, João Paulo Peral Valente Hospital e Maternidade Celso Piero - Puc Campinas

Introduction: Inflammatory Pseudotumor (IPT) is a benign process mimicking malignant processes and has been found in almost every organ system. The orbit is the most common location in the Head and Neck. Sinonasal pseudotumors are extremely rare and typically have an aggressive presentation.

Objective: Describe a large skull base presentation of inflammatory pseudotumor in a elderly patient.

Resumed report: AC, 79, female, complaining of pain, fullness and otorrhea in right ear for about 4 months. She had undergone various treatments, including antibiotics and steroids. Otoscopy showed a polypoid lesion in right external auditory canal (EAC). Audiogram test revealed a right mixed hearing loss. Nasal endoscopy: mild edema of the Rosenmuller fossa (without any exofitic lesion). CT/MRI: Solid lesion with infiltrative enhancement and poorly defined boundaries and epicenter located on the right nasopharynx and bone destruction in the skull base. Sorologies and autoimmune tests were negatives. First biopsy (Rosenmüller fossa and EAC polyp) showed only a nonspecific chronic inflammatory process. After that a transnasal endoscopic approach to the skull base was used to reach the lesion deeply and the IPT diagnosis was confirmed by histopathological analysis.

Conclusion: IPT are idiopathic lesions of uncertain etiologies believed to be initiated by any inflammatory stimulus and its often misinterpreted as a carcinoma. Head and neck IPT account in less than 5% of all cases. The most common clinical presentation is nonspecific nasal mass. Multiple biopsies are often needed to diagnosis. Steroids are the first line treatment, but also surgery and radiotherapy have been used.

A657. Invasive Fungal Rhinosinusitis : An Interesting Case
Simone Rennó Rosa, Marcelo Mendes Tepedino Júnior, Débora Fridman, Frederico Vieira de Oliveira, Ana Claudia Alves, Miguel Soares Tepedino Policlínico de Botafogo

Introduction: Invasive fungal rhinosinusitis (RSFI) presents classically in immunocompromised patients, characterized by high morbidity and mortality, fundamental rapid diagnosis, in order to correct the etiological factor for the favorable outcome. Chronic RSFI evolution is beyond 4 weeks, particularly seen in type II diabetics, characterized by minimal vascular invasion, with invasion of subepithelial tissue, without evidence of immune system involvement.

Resumed report: A male patient, 36, without comorbidities, with chronic nasal obstruction and exophthalmos in the right eye. Nasal endoscopy showed mucosal degeneration in middle meatus of right nasal cavity and parasanal sinuses CT scan showed an expansive lesion right with skull base invasion and ipsilateral orbit, important osteitis associated, in addition to opacification of the parasanal sinuses. After two biopsies performed via endoscopic endonasal, it was not evidenced fungus or histopathological alterations that proving fungal etiology. Considering the clinical history, ENT physical examination and imaging tests, after the event discussed with neurosurgeon and infectious decided on treatment as chronic RSFI, associating surgical dissection wide local and systemic antifungals. During patient monitoring developed progressive
improvement, despite not confirming the histopathological level of disease.

Discussion: In the case presented, although no laboratory evidence of fungal etiology of invasive nature of the disease, the patient had a good outcome with the institution of the classical treatment for chronic RSFI, warning of particular cases in which the clinical history associated with imaging tests are become sovereign in initiating treatment.

A216. Inverted Papilloma With Severe Infectious Complication: Case Report
Alexandre José de Sousa Cunha, Daniella Leitao Mendes, Alonço da Cunha Viana Junior, Luiz Felipe Lira de Moraes, Sabryna Farneze, Thiago Chalfun de Matos Fonseca
Hospital Naval Marccilio Dias

Introduction: Inverted papilloma is a rare benign neoplasm that predominantly affects men between 40-70 years and generally stems from the lateral wall of the nasal cavity, which may compromise the paranasal sinuses. Although benign, it presents locally invasive behavior, with a tendency to recurrence and malignantization potential. The signs and symptoms are nonspecific and may be nasal obstruction, epistaxis and recurrent sinusitis. Diagnosis is made from history, physical examination and complementary tests, such as CT and MRI. The treatment is surgical and the techniques that will be employed needs to be studied and individualized.

Objective: To report a case of inverted papilloma which developed with bacterial sinusitis, osteomyelitis and reduced visual acuity.

Resumed report: 50 years, male with previous endoscopic resection of inverted papilloma 4 years ago, returned with severe headache, pain and edema in the right frontal region, beyond partial blindness in the right eye. Nasal endoscopy showed polyposis in right middle meatus and CT showed right frontal sinusitis with osteomyelitis signals. He was treated with systemic antibiotics and surgery. A Lothrop was performed with the complete removal of the recurrent inverted papilloma and drainage of the abscess. After, an external frontal access was made, with removal of the affected frontal bone and posterior closing with metallic plate. It evolved with remission and partial improvement of visual acuity.

Conclusion: Inverted papilloma is an uncommon condition that should always be suspected in unilateral polyposis. Despite being a benign tumor, can present aggressive behavior and frequent relapses. The complete removal of the lesion is essential to avoid the recurrence.

A104. Jugular Glomus - Case Report
Pilar Campos Saavedra, Aline Araujo Saraiva, Lucas Sieburger Zarro, Paulo Tinoco, Marina Bandoli de Oliveira Tinoco, Paulo Bandoli de Oliveira Tinoco
Hospital São José do Aval

Introduction: Glomus tumors are the most common benign tumors of the temporal bone, often with slow growth and may causing bone erosion; rarely have aggressive behavior. Incidence peaks in the 5th decade of life, with low incidence slight predilection for females. Glomus tumors are very vascularized and the most common symptoms are pulsating tinnitus and hearing loss, sometimes it can be expensive, appering a bleeding mass in external auditory canal. CT and MRI scans are very useful in the diagnosis. Arteriography and venography are the main exams in tumor diagnosis and are of great value in determining the surgical approach. The use of embolization preoperatively, reducing the risk of bleeding and facilitates surgical removal.

Objective: Report case in our Institution of jugular glomus.

Resumed report: MADF 45 years. It presents ototirhea frame has 05 years, refractory to otologic treatments and recently hearing loss the same side. Otoscopy bleeding mass presence in the external auditory canal. CT of mastoid: no change, no abnormal contrast enhancement. Performed surgical excision of lesion, intraoperative profuse bleeding and sending the sample to pathology. Report: spindle cell neoplasm with suspected extra-cranial meningioma, recommended immunohistochemical study that confirmed glomus tumor. Patient returns for assessment, when requested cranial MRI: expansive lesion, solid, contrast captante the jugular foramen right. Realized angioresonance and performed brain tumor embolization with posterior approach by neurosurgery team.

Conclusion: Patient with good postoperative evolution, currently lies in monitoring the Otorhinolaryngology and Neurosurgery teams.

A97. Laboratory Evaluation Of Immunity In Patients With Cystic Fibrosis From A Reference Center In Brazilian Northeast
Thais Sampaio Silva, Bianca da Silva Vinagre Nascimento, Tassia Milenka Oliveira de Souza, Clara Monica Figueiredo de Lima, Marcus Miranda Lessa, Edna Lucia Santos de Souza
Federal University Of Bahia

Introduction: Laboratory evaluation of immunity is useful on cystic fibrosis patients follow up. The neutrophil/lymphocyte rate on this group is related to clinical status of these patients.

Objective: To determine the prevalence of laboratorial changes on red cells and immunoglobulins (IgE, IgA, IgM and IgG) levels in patients with cystic fibrosis.

Methodology: Descriptive and cross-sectional study, with records collection about blood rates and immunoglobulins (IgE, IgA, IgM and IgG) during the follow up of cystic fibrosis patients from a reference center in Brazilian Northeast in 2014. Excluding criteria were impossibility of records review.

Results: 20 patients, 55% female, the mean age was 10 ± 4.72 years. 85% of hemoglobin and hematocrit were normal and 15% were reduced. 80% of leukocytes values were normal, 10% of leukopenia and 10% of leukocytosis. There were 55% normal values of segmented neutrophils, 30% of lymphocytopenia, 20% lymphocytosis, 45% eosinophilia, 40% monocytosis. The segmented neutrophils/lymphocyte rate was less than 3 in 70% cases. 8 (66.7%) of 12 patients had high IgE level, 1 (8.33%) of 12 patients had high IgA level. 9 (90%) of 10 patients had normal IgM level, 8 (88.9%) of 9 patients had normal IgG level.

Conclusion: The neutrophil/lymphocyte rate was less than 3 in most patients, indicating a good clinical status of them. It can be related with a good control of disease with drugs and follow up.

Keywords: cystic fibrosis, laboratory evaluation, immunity

A189. Langerhans Cells Histiocytosis: Otologic Involvement In An Unusual Way
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**Introduction:** Langerhans cell histiocytosis is a disorder of reticuloendothelial system, characterized by the proliferation of macrophages. May involve skin, bones and guts. The otologic involvement is common and usually affects middle ear and mastoid.

**Objectives:** To report a case with unusual otologic involvement, where the disease is restricted to external ear.

**Resumed report:** Three-year-old boy hospitalized for liver pretransplant evaluation after diagnosis of probable primary sclerosing cirrhosis. He presented unilateral otorrhea, which was treated in this hospital with intravenous cefuroxime and ciprofloxacin topic, obtaining partial improvement. After this, a polyp in the left external auditory canal was found on otoscopy. He underwent to computed tomography, demonstrating polyp in the external ear without involvement of middle ear and mastoid. Excision of the lesion was performed in the operating room and sent for pathology and bacteriology; the results were inflammatory polyp and Pseudomonas aeruginosa. Bone scan with technetium-99 for malignant external otitis was conducted showing no bone involvement. After 30 days of intravenous ceftazidime without further clinical improvement, biopsy was performed and immunohistochemical study was conducted - bone erosion and Langerhans cells are present. It was performed canaloplasty. Onco-hematology evaluated and started chemotherapy for Langerhans cell histiocytosis.

**Conclusion:** This pathology must be suspected by recurrent otological symptoms and by the presence of granulation tissue. The biopsy with characteristic findings and positive immunohistochemistry for CD1a are diagnostic. Chemotherapy may be the initial treatment or adjuvant in refractory or recurrent forms.

**Keywords:** Langerhans cell histiocytosis, otorrhea, otological symptoms

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**A14. Large Improvements at a Public Rehab Clinic**

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**Faculty Of Medicine University Of Sao Paulo**

**Introduction:** Ordinances 587 and 589 (October 2004) implemented regulated and organized the Brazilian Hearing Rehab Public Policies in the country. Trained and qualified ENTs and audiologists are supplied by best Brazilian institutions and mostly of them earned post-graduation titles to excel the wide range of clinical challenges as aids are now locally designed and manufactured to attend public policies requirements. How to measure patient satisfaction then? Besides such Ordinances demands for a measurement sort of it turned a big deal how to outcome this specification. Reouvir is a SUS credentialed clinic for rehab and had outreached over 11,000 patients and now is about to measure subjective patient satisfaction based on Satisfaction Amplification in Daily Life questionnaire (SADL) also to measure the objective Real Ear Insertion Gain (REIG).

**Objective:** Introducing the results of a pilot project to measure patient satisfaction based on SADL and REIG.

**Materials and Methods:** Twenty patients fitted at Reouvir were asked to answer the SADL also to pass through REIG. An experienced interviewer applied SADL to patients to get their subjective experiences about fitting. Later on an experienced audiologist could have access to more objective measurement REIG.

**Results:** Both SADL and REIG convey how pleasantly are their positive experience with aids rehab.

**Conclusion:** The SADL and REIG are important tools executed even in few retail clinics and gradually will be consistent part of Reouvir routine in accordance with the regulation.

**Keywords:** Hearing aids, patient satisfaction, public policies, questionnaires

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**A1720. Laryngeal Candidiasis: Different Clinical Laryngoscopic Findings**

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**Otorrinolaringologia do HcFmusp**

**Introduction:** The laryngeal candidiasis in immunocompetents patients is uncommon. The classical clinical presentation is the presence of white plaque or pseudomembrane. Unusual findings include chronic laryngitis with leukoplakia and gross appearance mimicking laryngeal carcinoma.

**Objectives:** Characterize patients with laryngeal candidiasis by age, habits and laryngoscopic findings, as well as review the literature on the diagnosis and management of the disease.

**Methods:** Thirty-one patients were included in a retrospective chart review of all cases seen at the Voice Clinic, Division of Otolaryngology, Clinics Hospital, University of São Paulo School of Medicine, from Jan 2005 to Jan 2015.

**Results:** The mean age was 56.42 years (9-80 years), 67.7% patients were on steroid inhalation, 32.2% were smokers, 41.9% former smokers and 25.8% non-smokers. The mainly complaints were dysphonia and dysphagia. The most common presentation was the classical white plaque. Some patients present with a granulomatosis gross aspect and ulcers and it is mandatory in these cases to rule out carcinoma and other systemic diseases. Diagnosis of laryngeal candidiasis in immunocompetent patients can be given based on videolaryngoscopy findings. The definitive diagnosis is made by the demonstration of fungal spores, hyphae or pseudo-hyphae either by tissue biopsy or culture.

**Conclusion:** Because of the similarity of findings and the clinical manifestation, is important that the physician keep in mind the possibility of fungal laryngitis in cases of refractory laryngitis with leukoplakia. If is not considered it can result in inappropriate treatment and even an unnecessary surgical intervention.

**Keywords:** Laryngeal candidiasis, laryngoscopy, laryngeal candidiasis, laryngitis

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**A642. Laryngeal Congenital Malformations: Surgical Approach of 36 Cases**

**José Antônio Pinto, Larissa Souza Barreto, Elcio Izumi Mizoguchi, Davi Knoll Ribeiro, Caue Duarte, Gabriel Santos de Freitas**

**Núcleo de Otorrinolaringologia e Cirurgia de Cabeça e Pescoço de São Paulo**

**Introduction:** The laryngeal congenital malformations are the most common cause of stridor in newborn child and infants who may have different patterns depending on the site of obstruction. We described: laryngomalacia, stenosis, laryngeal cyst, laryngocoele, hemangioma, lymphangioma.

**Objective:** To report and evaluate the cases underwent the surgical treatment of patients with laryngeal congenital malformation. Material and method: Retrospective study of charts of patients with laryngeal congenital malformation which required surgical intervention during the period January 1984 to April 2014.

**Results:** 40 patients selected, 21 (52.5%) were females and 19 (47.5%) males, the diseases were found: 20 laryngeal stenosis (50%) being 1 supraglottic stenosis, 5 stenosis glottic, 8 glottic plus subglottic stenosis, and 6 subglottic stenosis; 15
laryngomalacia (37.5%); 2 laryngeal cysts (5%); 1 laryngocele (2.5%); 1 hemangioma (2.5%); 1 lymphangioma (2.5%). We performed laryngeal microsurgery with the use of cold scalpel or CO2 laser and / or via external approach.

**Conclusion:** The presence of stridor is not unusual, and its presence and etiology should always be investigated. Successful treatment depends on the indication and surgical technique.

**Keywords:** Laryngeal congenital malformations, CO2 laser, Stridor

### A116. Laryngeal Dysplastic Lesions Diversity In The Same Patient

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**Introduction:** Laryngeal cancer is about 25% of malignant tumors of the head and neck and 2% of all malignancies and squamous cell carcinoma is the most common type (about 90% of cases). Occurs varying degrees of histological differentiation in about 90% of cases are originated from previous morphological changes in laryngeal epitelium, pre-malignant lesions.

**Resumed report:** The purpose of this study was to evaluate the clinical presentation and the manifestation of the lesion on the vocal folds at different time of the disease occurring in the same patient. The patient is being followed in the service for seven years. It underwent eleven surgical procedures for removal epithelial lesions, which were presented distinctly.

**Discussion:** Gross lesions in the larynx are clinically evaluated by the emergence of a hyperkeratosis. Importantly, the macroscopic analysis is unable to define the true neoplastic potential they possess. The development of a malignant tumor involves complex interactions between endogenous and exogenous factors. Its clinical manifestations are quite variable and may occur alone or associated injuries, affecting one or both vocal folds, still continuous or separated. New techniques are being developed in an attempt to improve the diagnosis, such as rigid and contact endoscopy, endoscopic autofluorescence and Optical coherence tomography.

**Conclusion:** This article presents the clinical heterogeneity with which intraepithelial lesions, dysplasia and carcinoma in situ, may appear. As well as the importance of adequate follow-up in order to prevent progression to malignancy and enhancing cure rates.

**Keywords:** laryngeal dysplasia, hyperkeratosis, follow-up, cancer

### A703. Laryngeal Malformation in Richieri-Costa Pereira Syndrome: New Findings

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Richieri-Costa Pereira syndrome was described by Richieri-Costa and Pereira, as a new syndrome of acrofacial dysostosis comprising Robin sequence, cleft mandible, and limb defects in five Brazilian individuals.

**Introduction:** It is a rare Brazilian autosomal-recessive syndrome, with short stature, pre and post-axial hand anomalies, clubfeet, and laryngeal anomalies. Mainly clinical signs include microstomia, macroglossia, clinical or radiological abnormal fusion of the mandible, cleft palate/Robin sequence, absent central lower incisors, minor ear anomalies, hypoplastic thumbs, hypoplastic thenar/hypothenar region, mesomelic shortness of upper and lower limbs, hypoplastic halluces, learning disability and language delay. Laryngeal defects were described previously, these defects are characterized by a small round larynx, absence or hypoplasia of epiglottis, hypertrophy of arytenoids and aryepiglottic folds, and a fold in the posterior region of larynx, situated above the glottic level.

**Objectives:** The present study was previously published on American Journal of Medical Genetics and describes laryngeal structural anomalies in 13 new cases with this syndrome, and reviewed four reported cases.

**Methods:** An ear nose and throat specialist and a speech pathologist performed the exam using a flexible nasolaryngoscope and described larynx size and shape, epiglottis, arytenoids, aryepiglottic folds, vocal folds view, vocal folds, a fold at posterior region of the larynx, vocal disorder, and aryepiglottic fold medialization.

**Conclusions:** The 17 individuals examined had the typical laryngeal anomalies. The new findings are laryngeal microweb observed in three patients and anteriorization movement of arytenoids observed in 14 patients.
Objectives: To report a case of laryngeal papillomatosis in an infant who developed glottic obstruction.

Resumed report: Child, 1 year and 10 months old, male, was admitted into the pediatric ENT service with stridor and respiratory distress story with nocturnal exacerbation and during crying. The mother reported onset of symptoms from birth, with progressive worsening. Physical examination showed the presence of intercostal retractions and inspiratory stridor, being held fibronasopharyngolaryngoscopy which showed extensive exophytic lesion in glottis, suggesting laryngeal papillomatosis. Surgical treatment was performed opting for the diode laser. Histopathology revealed suggestive HPV infection. Postoperatively, the patient evolved with favoring breathing pattern, being able to hospital discharge and follow-up.

Conclusion: Laryngeal papillomatosis is a benign tumor lesion, often in childhood, associated with infection by the human papilloma virus (HPV), the most prevalent serotypes are 6 and 11. The sexual route of transmission is the most common; however, the vertical transmission and placentant liquid are other common forms. The diode laser was used to allow act on large areas with less scarring and minimizes adjacent tissue damage. we noted the importance of early diagnosis and intervention to maintain patent airway and minimizing the possible morbidity consequences.

Keywords: laryngeal papillomatosis, infant, HPV, laser diode

A99. Laryngomalacia : Surgical Treatment In A Tertiary Pediatric Hospital

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Introduction: Laryngomalacia is the cyclical collapse of supraglottic tissues during inspiration, causing airway obstruction; it is the most common cause of stridor in childhood, accounting for 60% to 75% of cases in children up to 30 months. The characteristic finding is inspiratory stridor; up to 20% of patients have severe cases, requiring surgical intervention. The supraglottoplasty is the procedure of choice. It is considered the presence of comorbidities such as greater prognostic factor for surgical success.

Objectives: To describe the sample of tertiary pediatric hospital, reporting techniques, surgical success rates and analyzing prognostic factors.

Methods: A cohort study included 32 patients with severe laryngomalacia underwent surgery between July 2007 and December 2014 in a tertiary pediatric otolaryngology service.

Results: In a group of 32 patients, 18 (56%) were male; the average age at which underwent surgery was 5.5 months. In endoscopy, 21 (65%) had type associations laryngomalacia, 34% had associated faringomalacia and 3 (9%) were synchronously tracheomalacia. Twenty-six (81%) patients underwent only resection of aryepiglottic folds and 19% required another procedure. Twenty patients (62%) were isolated laryngomalacia and 12 patients (38%) had gastro-esophageal reflux. After the procedure, 18 patients (56%) were asymptomatic and 2 (6%) required tracheostomy. Comorbidities were the only predictor of postoperative unfavorable outcome.

Conclusion: Supraglottoplasty is a safe procedure, providing significant improvement of severe laryngomalacia in patients without comorbidities.

Keywords: stridor, laryngomalacia and supraglottoplasty

A631. Laryngotracheobronchitis Associated With Coinfection And Superinfection: A Case Report

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Introduction: Laryngotracheobronchitis (croup) is a common respiratory tract infection in children, most often caused by parainfluenza virus - types 1 to 3. It is characterized by acute onset bark cough, hoarseness, inspiratory stridor and respiratory distress.

Objective: Report a case of severe laryngotracheobronchitis associated with viral coinfection and fungal superinfection.

Resumed report: A 1-year-old girl was admitted to the pediatric intensive care unit for evolution of dyspnea associated with suprasternal and intercostal retractions. She had stridor at rest associated with agitation, barking cough, hoarseness, inspiratory wheezing. There was no responsive after 5 days with oxygen therapy, methylprednisolone, nebulized salbutamol and adrenaline and after 2 days with clarithromycin. The radiography of the neck showed the steeple sign. The respiratory virus PCR testing was positive for Parainfluenza types 2 and 4. She also received heliox and budesonide. Nasofibrolaryngoscopy revealed intense edema of glottic and supraglottic areas and presence of ulcers covered with fibrin and hyaline secretion, presence of edema of the interarytenoid region with narrowing of glottis opening e signs of tracheitis. So it was administrated intravenous dexamethasone and fluconazole, considering a fungal infection due to prolonged use of corticosteroids. The clinical symptoms resolved and she was discharged after 2 days from intensive care unit.

Conclusion: Typically, croup symptoms are short-lived. However, some infants with croup have more than one virus detected and 17% with other coinfections. Therefore, when there are prolonged symptoms other causes of stridor must be considered and excluded in order to avoid complications like sineaquias e acute respiratory failure.

Keywords: croup, superinfection, coinfection, severe

A353. Larynx Neuroendocrine Tumor : Case Report

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Introduction: Neuroendocrine neoplasms of the larynx are rare representing approximately 1% of all larynx neoplasms. There are 4 histologic neuroendocrine subtypes: paraganglioma, typical carcinoid, atypical carcinoid tumor and small cell neuroendocrine tumors. Diagnosis is based primarily on light microscopy and confirmed by immunohistochemistry and electron microscopy. Natural history, treatment and prognosis vary widely for the different histologic subtypes, but wide local excision is usually required.

Objectives: To report a case of neuroendocrine tumor of the larynx, in order to discuss management with conservative laryngeal surgery.

Resumed report: A 60 years old caucasian man presented with one-year history of persistent hoarseness. Computed tomography and laryngeal endoscopy revealed a right supraglottic mass, occupying the posterior third of aryepiglottic fold and reducing arytenoid mobility. Direct laryngoscopic biopsy suggested low grade neuroendocrine tumor. A conservative partial laryngectomy via right lateral pharyngotomy, including right aryepiglottic fold, right arytenoid cartilage and posterior third of the true vocal cord was performed. Tracheotomy was performed and was closed in the
second postoperative week. Histopathologic exam confirm initial diagnosis.

**Conclusion:** Laryngeal neuroendocrine tumors are rare, and its evolution depends on the histopathologic subtype and stage. Although the reported data suggest that a wide local excision is adequate treatment, this patient underwent a conservative laryngectomy, with free margins, and an excellent post-operative outcome.

**A599. Lateral Skull Base Inflammatory Pseudotumor: A Case Report**
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**Introduction:** Inflammatory pseudotumor (IPT) is a rare benign tumor, which occur frequently in the lungs, but can also be found in temporal bone. In these cases, clinical presentation involves more often hearing loss, followed by otalgia, otorrhea and tinnitus. IPT is very aggressive and damages critical local structures, which is showed on radiological studies. Therefore, it may be misdiagnosed as malignancy. The mean histopathological findings include fibrosis and inflammatory cell infiltration. Diagnosis of IPT includes those clinical, radiological and histopathological findings. Surgical treatment provided highest number of disease-free patient.

**Objective:** Report a case of IPT which evidences its local damage and aggressively.

**Resumed report:** Fifty-seven years old male patient, complaining about dizziness and hearing loss symptoms in the left ear. Computadorized Tomography (CT) evidenced soft tissue and erosion in the mastoid, tegmen, and cortical bone reaching dura mater of the left middle fossa. He underwent a mastoidectomy and the histopathological study revealed fibrosis and inflammatory cells. The patient presented a progressive hearing loss to anacusis and a few months later had the same clinical event at the right ear.

**Conclusion:** IPT is a rare benign tumor, locally aggressive, frequently misdiagnosed as malignancy due to its clinical and radiological findings. The correct diagnosis including histopathological studies should be performed as quickly as possible, as well as surgical treatment associated with corticosteroids.

**A521. Ludwig’s angina: Case Report and Literature Review**
Real e Beneficência Sociedade Portuguesa de Beneficiência de São Paulo - Clínica Ivan F Barbosa

**Introduction:** The Ludwig's angina is a cellulite originated by an odontogenic infection in the second and third molar involving the submandibular, sublingual and submental spaces. Patients usually present with recent tooth extraction history or poor dental hygiene. It features rapid development, with pain, dysphagia, trismus, neck bulging and respiratory distress in severe cases. The diagnosis is clinical, supplemented by computed tomography and magnetic resonance, indicating extent of the injury and airway compromise. Treatment focuses on airway maintenance, drainage, antibiotic therapy and removal of the causative factor.

**Objectives:** Present the case of Ludwig's angina in private hospital outpatient, clarifying relevant aspects in the differential diagnosis of angina.

**Resumed report:** A.L.O., 52, male, merchant, dental treatment history three months before the onset. Seven days after second molar extraction began intense pain, fever and dysphagia. Treated with NSAIDs, without improvement. Admitted to the ER of Beneficiência Portuguesa de SP Hospital with lockjaw, submandibular bulging, severe sore throat and worsening of general condition. Held abscess drainage and intravenous antibiotic therapy with ceftriaxone and clindamycin. Discharged after three days, with considerable improvement in the general condition and without lockjaw.

**Conclusion:** Although uncommon in patients with better socioeconomic and hygienic conditions, the otorlaryngologist should always be aware of the diagnosis of Ludwig's angina in patients with trismus, submandibular edema and history of dental treatment.

**Keywords:** Ludwig’s angina; Odontogenic infection; submandibular cellulitis; lockjaw

**A709. Managing Drooling For Dysphagic Patients: The Experience Of A Reference Service On The Treatment Of Dysphagic Patients**
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**Introduction:** Patients with dysphagia have difficult controlling saliva. The cause of this difficulty may be associated with cerebral palsy, muscular dystrophy, post stroke, de-myelinating and degenerative diseases. Drooling varies in intensity and is a real problem for these patients and their families. Infections and difficulties chewing are examples of complications due to drooling. The effective managing of drooling is not a consensus and is a real difficulty for the family and the doctor, who must decide which interventions are safe and effective for the patient, depending on the state of the drooling and its consequences.

**Objectives:** To present the sequence of treatment managing drooling for dysphagic patients and the outcomes for them, from 2006 to 2015 at the Hospital das Clínicas da Universidade de Sao Paulo.

**Resumed report:** Drooling is more commonly associated with a dysfunction of the oral phase of the swallow than due to excessive production of the saliva. Many interventions are used to reduce or eliminate drooling. Surgery, medications, botulinum toxin are examples of these therapies.

**Conclusion:** There is insufficient evidence to support one intervention over another. The outcomes observed usually have a sequence depending on the severity of the patient at that moment. The first step usually is based on medications, the subsequent is the therapy with botulinum toxin. Usually, only after these interventions, the family considers surgical treatment: Stensen's duct ligation and submandibulectomy (or Wharton's duct ligation). The last one, but most efficient to prevent infections and aspirative pneumonia is laringotracheal separation.

**Keywords:** Drooling Dysphagia Outcomes

**A425. Mantle Cell Lymphomas: Case Report**
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Introduction: Mantle cell lymphomas are usually lymphoid malignancies disseminated diagnosis, representing approximately 6% of non-Hodgkin's lymphomas (LNHs 1), characterized genetically by translocation t (11, 14) (q13; q32) leading to expression of cyclin D1 (CyD1).

Methods: During hospitalization was conducted tomography face and neck which showed oval mass measuring 9.0 × 5.0 × 6.0 cm, heterogeneous, affecting lateral wall of orbit, zygomatic arch, mandibular branch and lateral and posterior wall of the left maxillary sinus.

Results: Core biopsy performed with removal of three fragments result of mantle cell lymphoma patient and sent to Oncology Service To start chemotherapy. Patient underwent six cycles of chemotherapy so far, remaining asymptomatic in the period.

Conclusion: This report portrays a mantle, atypical lymphoma, because it is a more common disease in men, progression not as fast, although age compatible with the disease. Despite being a type of lymphoma is difficult to treat, early diagnosis and initiation of chemotherapy increase the chance of long-term survival of this patient.

A307. Mastoid Osteoma: Case Report
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Introduction: Mastoid osteoma is a benign mesenchymal origin's tumor which is rare in head and neck origin with incidence of 0.1–1% benign tumors in this area. If their growth significantly occludes the meatus, they may cause cosmetics deformities, conductive hearing loss and recurrent ear infection. The etiology is poorly understood. Surgical resection is the preferred treatment of choice.

Objectives: Describe a rare case of mastoid osteoma leading to conductive hearing loss in a patient with an anacusis contralateral ear.

Resumed report: Young 25-year-old female patient presented to the hospital with the complaints of sudden hearing loss in the left ear. The swelling of the external canal was first noticed the week before. On examination of the patient, a total obstruction of the external canal was visualized. Computed tomography (CT) showed densely calcified bone lesion in the conduct oringin from the mastoid. The middle ear cavity, ossicular chain, inner table of skull were normal with no extension intracranially. Above findings suggested mastoid osteoma. The audiometry showed conductive hearing loss at left ear.

Conclusion: Mastoid osteoma is a mesenchymal benign tumor, which is a rare tumor of head and neck origin. It is more common in females occurring in second and third decades predominantly. The osteoma usually arising from cortex. It shows osteoblastic activity predominantly. Rarely, it can involve the petrous part of the temporal bone. CT is the modality of choice for the diagnosis of mastoid osteoma. Surgical resection is the treatment of choice.

A22. Maxillary Sinus Giant Osteoma
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Irmandade da Santa Casa de Misericórdia de Santos

Introduction: Osteomas are rare benign tumors, but are the most common benign tumors of the paranasal sinuses. They are slow growing and are usually found as an occasional finding in imaging studies. Clinically they can be asymptomatic or symptomatic depending on the location, leading to obstruction of the sinus drainage ostium causing symptoms of rhinosinusitis. The treatment involves surgical removal of osteomas in symptomatic cases and expectant management in asymptomatic ones.

Objective: This article aims to describe a case of maxillary sinus giant osteoma and the importance of surgical treatment on prognosis.

Resumed report: A.C.L.M.O. female patient, 41 years old, came to an ORL department with headache two years ago. Patient reported that two years ago started with unilateral headache on the right side, with 10/10 degree, reporting irradiation to the hemifacial region and teeth on the right side. Due to significant pain component, it was requested a CT scan of the paranasal sinuses which showed opacification with heterogeneous density of the right maxillary sinus, which was seen a bone component occupying and involving the corresponding ostiomeatal unit. The osteoma was removed surgically via nasal endoscopy, with excision of the entire lesion. The pathology confirmed the suspicion of maxillary sinus osteoma on the right side.

Conclusion: The authors presented a case of maxillary sinus giant osteoma in woman, benign tumor with unusual location and gender, which caused ostiomeatal obstruction and significant symptoms. Due to severe pain, the patient underwent surgical treatment with satisfactory surgical result.

A361. Maxillary Sinus Melanoma: Case Report
Karoline Estrela Campodonio Nunes, Erica Cristina Campos e Santos, Matheus Freitas Leite, Lucas Soares Passos Guimarães, Maria Laiza Fernandes Neves Abreu, Tercio Guimarães Reis
Hospital Otorinolaringológico de Feira de Santana

Introduction: Sinonasal malignancies account for only 1% of all malignant tumors and 3-5% of those are located in the head and neck. Malignant neoplasms of melanoma type develop from melanocytes, and its presentation in the extranasal mucosa with an incidence of 0.3 to 2%. Sinonasal melanomas are rare and with poor prognosis.

Objective: The objective of this study is to report a nasal malignant neoplasm of rare incidence.

Resumed report: GGS 72 year-old male presented himself at the otorhinolaryngology clinic reporting episodes of epistaxis for 2 days. Nasal endoscopy showed hypertrophy of unciform and active bleeding from the sphenopalatine artery. Performed surgical cautery and unciform process incision, with the finding of lumpy content and chocolate in the right maxillary sinus, and material sent for biopsy. Histopathologic examination and subsequently immunohistochemistry, showed results compatible with melanoma. Staging diagnosed liver metastasis, he was referred to the Clinical Oncology.

Conclusion: Sinonasal melanomas are rare and with poor prognosis.

Keywords: Melanoma, nasal, sinus
A605. Mixture of 5-Fluorouracil and Triamcinolone in Treatment of Pharyngeal Stenosis after Tonsillectomy
Juliana Cristina Mesti, Laura Schwartz Marinho, Mariana Nagata Cavalheiro, Vinicius Ribas Fonseca, Michel Balvedi Nomura
Hospital da Cruz Vermelha, Filial do Paraná

Introduction: There are several surgical techniques for tonsillectomy, and his feared complication is pharyngeal stenosis, it is difficult to correct, and it takes a narrowing in the oropharynx. The local injections of triamcinolone acetone is a therapeutic option but studies show effectiveness of other drugs in combination with triamcinoa.

Objectives: The aim of the report is to evaluate the efficacy of the mixture of 5-fluorouracil and triamcinolone in the treatment of pharyngeal stenosis post-tonsillectomy.

Resumed report: Included in this report three patients who underwent tonsillectomy in the Cruz Vermelha Hospital ENT service in 2013. After a month of surgery patients reported nasal obstruction. In an oroscopy, obstruction of the soft palate was observed, with accession to the posterior pharyngeal wall. In a rhinoscopy adherence of the soft palate was found, with stenosis and partial obstruction of the airway. Were performed dissection and loosening of the adhesions, with injection of 2.5 ml on each side of the posterior wall of the oropharynx and palate with a mixture of 5-fluorouracil and triamcinolone. In patients 1 and 2, 5 applications were performed, and in patient 3, 8 applications, all of which presented partial reversal of adhesions and complete improvement of palatal function.

Conclusion: In the reported cases, the combined use of triamcinolone acetate and 5-fluorouracil, interspersed with surgical intervention to the partial reversal of adhesions, succeeded to the regression of pharyngeal stenosis, changing the focus in the treatment of choice.

Keywords: tonsillectomy; pharyngeal stenosis; treatment; triamcinolone; 5-fluorouracil

A505. Mucosal Leishmaniasis And Septal Perforation
Paloma Simoni Gama Ferreira, Érica Carla Figueiredo de Souza, Camila Lira Holanda de Lima Barros, Samuel Neiva Almino, Nicole Martusselli de Almeida, Gabriella Soares de Souza
Hospital do Servidor Público Municipal de São Paulo

Introduction: Leishmaniasis has a world prevalence of about 12 milion with 400.000 new cases per year. It is a chronic, non contagious, endemic infectious disease caused by protozoans of the genus Leishmania. Transmission is often due to bites of sandflies in the genus of Phlebotomus and Lutzomyia. The nasal cavity is the most affected area for mucosal lesion and it can occur even without the cutaneous form of the disease. Most common symptoms are nasal obstructions, recurrent epistaxis, nasal discharge and nasal discomfort during forced inspiration.

Objective: Report a case of mucosal leishmaniasis and discuss its importance on clinical practice.

Resumed report: R.A.S.M., female, 48 years old, born and living at São Paulo complains of fetid nasal odor, recurrent epistaxis, and nasal pain for 2 years. Anterior rhinoscopy revealed an anterior septal perforation with granulomatous borders. Lesion biopsy was performed as well as serological tests for granulomatous diseases. Histopathology showed an unspecified inflammatory process. Montenegro test was negative. The first serology test for Leishmaniasis was undetermined (1:40) and second was positive (1:80). After clinical treatment, the septal perforation closed.

Conclusion: The differential diagnosis for mucosal nasal lesion is wide, and Leishmanias is an important cause that should always be investigated. The knowledge of these diseases is fundamental for the otolaryngologist practice as the early diagnosis and treatment can prevent deformities.

Keywords: Leishmanias, septal perforation, granulomatous

A204. Nasal Lymphoma T / NK - Case Report
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Serviço de Otorrinolaringologia e Cirurgia Facial do Hospital Regional de Presidente Prudente - SP

Introduction: Non-Hodgkin extranodal lymphomas present different cell phenotypes: B-cell , T-cell and Natural Killer (NK) 1. The primary nasal lymphoma is uncommon and represents 0.44% of all extranodal lymphomas located in this region. The markers of this lymphoma has tropism for vessels, increasing their membership and causing devastating elects.2 Such features lead to rapid destruction of nose and midface with necrotic granulomatous so the term "midline lethal granuloma" is used to set this disease.4 The extranodal lymphomas of T / NK are an entity described recently by the WHO classification, prognosis and best treatment strategy need to be better defined.

Objective: To report case of nasal lymphoma T/NK attended at Hospital Regional of Presidente Prudente - SP.

Resumed report: DTSS, 24, male, searched service with nasal painful injury that communicated with palate, accompanied by scabs, pus and swelling of the face. Evolution of 2 months. Sinus tomography identified destruction of nasal septum and maxillary and ethmoid veiling bilateral. Was conducting surgical debriement and collects material to biopsy. Histopathological diagnosed Lymphoma T / NK. Patient performed chemotherapy. Follow up hematology service and otolaryngology with no signs of recurrence tumor.

Conclusion: The sinonasal lymphoma is uncommon neoplasm that cause significant destructive lesions. Follow up with hematology is fundamental to driving the disease. Thus, this type of lymphoma should be considered as a differential diagnosis of tumors in this region due to its aggressive and destructive behavior.

A509. Nasal Myiasis On Homeless
Érica Carla Figueiredo de Souza, Paloma Simoni Gama Ferreira, Camila Lira Holanda de Lima Barros, Samuel Neiva Almino, Gabriella Soares de Souza, Fatima Regina Abreu Alves
Hospital do Servidor Público Municipal de São Paulo

Introduction: Myiasis is an infestation of flies larvae that feed on living or dead tissue of the host. Low socioeconomic status, immunocompromised, mental retardation, conditions of poor hygiene are factors that predispose to this infestation.

Objective: The aim of this study is to report an unusual case of nasal myiasis.

Resumed report: PVM, 80, male, homeless, was admitted at hospital, brought by strangers, with mental confusion and larvae in the nose. Sinus CT scan showed only slight thickening of maxillary sinus. After use of ivermectin, we did endonasal surgery to remove larvae, and found 258 in the nasal cavity, without commitment of sinus. After surgery, he was referred to plastic for nasal reconstruction.

Conclusion: Treatment of myiasis is easy to perform and depends on early diagnosis. The starting point of Myiasis control is countering the risk factors.

Keywords: myiasis, homeless, nose
A708. Nasal Reconstruction Biosynthetic Prosthesis: Case Report
Renata Cristina Cordeiro Diniz Oliveira, Helena Cunha Sarubi, Danielly Solar Andrade Oliveira, Aureliano Carneiro Barreiros, Juliana Altavilla Van Petten Machado
Hospital Socor

Introduction: The nose is a structure vulnerable to trauma and if it is not corrected suitably, the trauma will result in anatomophysiological sequel. In post traumatic surgical approach, open rhinoplasty is the most used technique.

Objectives: To report a case of nasal reconstruction with biosynthetic prosthesis held by the Hospital of Otorhinolaryngology Socor.

Resumed report: L.B.C., 50, falling victim with nasal trauma, submitted at the time to surgical treatment to stabilize the fracture and control epistaxis. However, in the late postoperative period, the patient developed nasal obstruction, necessitating surgery.

Conclusion: The use of biosynthetic prosthesis is extremely valuable in facial and nasal reconstruction especially when there is significant bone loss and cartilage, providing better anatomical and functional restructuring with successful surgical result.

Keywords: biosynthetic prosthesis, rhinoplasty, nose, trauma

A316. Nasal Rhabdomyosarcoma in a Child
Adriano Sergio Freire Meira, Christiane Kulzer Birck, Junior Alvaro Vitorino de Pontes, Yuri Ferreira Maia, Nelson Jose Barboza Quintino, Bruno Leonardo Barbosa Machado
Sos Otorino

Introduction: A case of rhabdomyosarcoma in a 2-year-old boy without a pre-existing predisposing factor in family.

Objectives: Describe the case, treatment and findings.

Resumed report: A two-year-old boy was brought in for consultation at ENT emergency by her parents with a mass blocking the left nares completely; causing difficulty in breathing she was diagnosed in the basic attention unit as stridor. CT was performed and showed a large mass in left nares coming from back to front with brain invasion. It was obvious that a biopsy would provide the correct diagnosis. This was done under general anesthesia with an oro-tracheal intubation and histopathological diagnosis RM. Proposis becomes huge after the biopsy.

Conclusion: RM arise from mesenchymal tissue. The head and neck region is the most common site of origin in 40% of cases; RM is the most common type of head and neck cancer in the first 2 years of life. It was not possible to do surgery in that time; the child was referred to the pediatric oncologist and was prescribed chemotherapy, after 9 months resolution of the proptosis and nasal obstruction, in preparation for surgery.

Keywords: rhabdomyosarcoma, nose, child

A107. Neuroblastoma In Infant: Case Report
Pilar Campos Saavedra, Aline Araujo Saraiva, Lucas Siebner Zarro, Paulo Tinoco, Marina Bandoli de Oliveira Tinoco, Saulo Bandoli de Oliveira Tinoco
Hospital São José do Avel

Introduction: Neuroblastomas are originate of the sympathetic nervous system. Despite being corresponds to the extracranial solid tumor most common of childhood, its incidence in children under one year is rare, especially when it comes to cervical region. The symptom commonly found is the increase in abdominal volume by the growth of the tumor mass, unlike the symptoms reported in the case described as stridor, tachypnea and cough.

Objectives: Report a rare case of neuroblastoma in the cervical region in our hospital.

Resumed report: Infant, 41 days of life, male. Mother reports that infant began presenting tachypnea frame, cough and respiratory stridor an increase of 15 days. Worsened breathing pattern and fever after admission. The examination showed small mass in the left cervical region. Orascoopy: normal. Neck CT scan: tumor in the left cervical region with compression and deviation of the trachea. Laryngoscopy showed hardened mass in pharyngeal wall. Taken to the operating room for biopsy of the lesion and tracheotomy to ensure airway. Histopathology confirmed neuroblastoma. Referred to the pediatric oncology service for follow-up and treatment. Performed with chemotherapy reduced the tumor mass.

Conclusions: Neuroblastoma is a rare tumor described in topography and in infants at that age. The treatment is debatable and can be done by combining chemotherapy and surgical resection. In the report, the infant had an uneventful clinical after chemotherapy, not requiring surgical approach at the time. It is eupneic in respiratory adaptation and clinical and normal neurological growth.

A194. Neurocysticercosis And Otorhinolaryngologic Presentation: A Case Report
Sarah Cristina Beirith, Jacqueline de Mattos Coelho, Flavia Capone, Danielle de Araujo Torres, Felipe Barbosa Madeira, José Eduardo Esposito Almeida
Hospital Federal da Lagoa

Introduction: Neurocysticercosis is the most common parasitic infection of central nervous system. It’s an endemic disease in South America, caused by the helminf Taenia solium and it affects humans as definite and suins as intermediate host. Different locations, the amount of cysticercal and the patient immune response determine the disease’s severity. The most common signs and symptoms are seizures, headache, intracranial hypertension, meningitis, psychiatric disorders, hydrocephalus and dementia. Otorhinolaryngologic presentation can be also observed depending on cysticercal location in brain parenchyma.

Objectives: The aim of this report is to present a case of neurocysticercosis with otorhinolaryngologic symptoms as initial presentation.

Resumed report: We report a case of a male patient, 62 years old, complaining about dysphagia, dysphonia and dry cough for a month, progressively worse and evolving with left leg paresis. The computed tomography showed multiple hypodense nodular lesions with peripherical contrast
enhancement distributed along brain parenchyma. The cranial magnetic resonance revealed cystic lesions containing the socalled. Despite the treatment, the patient presented aggravation of dysphagia. Nasofibroscopy showed bilateral vocal fold palsy in paramedial position, demanding urgent tracheostomy.

**Conclusion:** Laryngologic symptoms could be the first one present, specially when the nucleus of tratus solitarius is striken. In this case, the otorhinolaryngological evaluation was primordial to assure a safety airway and thereby to preserve the patient’s life.

**Keywords:** neurocysticercosis, vocal fold palsy, dysphonia

A437. Neuroendocrine Tumor Of The Larynx : Case Report
Débora Angélica Lopes Reis, Jacqueline de Mattos Coelho, Carla Abanches Duarte Machado, Maria Cecilia Sodré Ramos de Souza, Felipe Barbosa Madeira, Rafael Zdanowski
Hospital Federal da Lagoa

**Introduction:** Neuroendocrine neoplasms of the larynx are rare representing approximately 1% of all larynx neoplasms. There are 4 histologic neuroendocrine subtypes: parangangioma, typical carcinoid, atypical carcinoid tumor and small cell neuroendocrine tumors. Diagnosis is based primarily on light microscopy and confirmed by immunohistochemistry and electron microscopy. Natural history, treatment and prognosis vary widely for the different histologic subtypes, but wide local excision is usually required.

**Objectives:** To report a case of neuroendocrine tumor of the larynx, in order to discuss management with conserva
tive laryngeal surgery.

**Resumed Report:** A 60 years old caucasian man presented with one-year history of persistent hoarseness. Computed tomography and laryngeal endoscopy revealed a right supraglottic mass, occupying the posterior third of the aryepiglottic fold and reducing arytenoid mobility. Direct laryngoscopic biopsy suggested low grade neuroendocrine tumor. A conservative partial laryngectomy via right lateral pharyngotomy, including right aryepiglottic fold, right arytenoid cartilage and posterior third of the true vocal cord was performed. Tracheostomy was performed and was closed in the second post-operative week. Histopathologic exam confirmed the diagnosis.

**Conclusion:** Laryngeal neuroendocrine tumors are rare, and its evolution depends on the histopathologic subtype and stage. Although the reported data suggest that a wide local excision is adequate treatment, this patient underwent a conservative laryngectomy, with free margins, and an excellent post-operative outcome.

A1715. Neurotological Disease In Intracranial Tumors
Helio Afonso Guzoni Teive, Luisa Bordignon Félix de Oliveira, Vinicius Riba Fonseca, Rafaela Mabile Ferreira dos Santos, Blanca Simone Zeigelboin
Hospital da Cruz Vermelha do Paraná

**Introduction:** The balance disorders may have their origins in the malfunction of the vestibular receptors or be caused by lesions of various vestibular pathways in the central nervous system, especially the structures located in the cerebelopontine angle region, where the clinical manifestations are externalized, according to areas compromised by many neurotological dysfunctions.

**Objective:** To verify the labyrinthine alterations in patients with intracranial tumors.

Methods: It was performed a retrospective cross-sectional study. We evaluated 21 patients with 13 cases of Vestibular Schwannoma, 4 cases of Von Recklinghausen’s disease, 1 case of squamous cell tumor, 1 case of cerebral hematoma, 1 case of craniopharyngioma and 1 case of arachnoid cyst, aged from 19 to 78 years (14 females and 7 males). All patients underwent the following procedures: anamnesis, ENT examination and vestibular assessment (electronystagmography).

**Results:** Patients showed prevalence of imbalance when walking (83.7%), motion incoordination (48.8%), nystagmus (42.7%) and headache (41.8%). There was prevalence of alteration in the central vestibular system with a predominance of unilateral vestibular deficit disorder (62.0%).

**Conclusions:** Central signs were very variables in each case and the bidirectional or multiple semi-spontaneous nystagmus type was the most often central sign.

**Keywords:** vestibulo-ocular-reflex (VOR); cognitive dysfunction; dysarthria; eye movement

A3. Noise Evaluation in Shopping Mall’s Food Court of the City of São Paulo
Giavana Scachetti, Edmir Américo Lourenço
Faculdade de Medicina de Jundiaí

**Introduction:** Currently, noise levels have been increasing not only in industrial activities, as well as in social and recreational. It is noticed that the noise is intrinsically linked to the development of cities, being larger, the proportion arising harmful urban facilities and typically new city entertain
tment activities. For this reason, there has been concern with controlling the noise level in the field of architectural acoustics, aiming to eliminate, reduce or control the presence of unwanted sounds inside the buildings. The effects brought by noise can cause hearing loss from a temporary to severe hearing symptoms.

**Objectives:** This research aims to quantify sound pressure levels in food courts of shopping malls in the city of São Paulo in order to assess the risk that professionals and patrons of these establishments are exposed.

**Methods:** For this measurements were performed in the center of the food courts in peak hours. The head of the measuring apparatus was a decibel meter Minipa ® brand, model MSL – 1352C.

**Conclusions:** At the end, we found that the noise generated in relation to time of exposure of employees and users are not able to generate irreversible hearing loss, but negatively affects the metabolic and psychological health of these, being the managers and health agencies responsible search for measures aimed at improvement of the quality of these environments, like the sound insulation and separation of food courts in more than one environment.

A494. Oral Squamous Cell Carcinoma: An Epidemiological Study Conducted At Hospital Araujo Jorge In Goiânia - Goiás
Paola Morales Salarini Pinto, Leticia de Avila Cambraia, Taylor Gerhardt, Romnell Vieira, Camila Tanigutti
Hospital Araújo Jorge

**Introduction:** The purpose of this work was to identify the epidemiological profile of oral squamous cell carcinoma (SCC) patients, who were treated at the Hospital Araujo Jorge in Goiânia â€” Goiás, Brazil, from 2008 to 2012.

**Method:** This is a descriptive, cross-sectional study. The studied population comprised 90 cases of oral cancer treated at our department. Data were collected from the register book of head and neck surgeries and from patient...
health charts of the Hospital. The following variables were evaluated: age, sex, patient origin, cancer clinical and pathological staging, anatomical localization and treatment.

**Results:** Results showed that 68% of the cases occurred in men, within the age range of 32 to 86 years. The most common anatomical localizations was oral tongue (44%) and floor of mouth (28%). As per cancer staging, 65% of the patients were classified as stage III or IV, with a 33% regional metastasis. Most of the patients were submitted to surgery associated to radiotherapy and chemotherapy (52%). A significant statistical relation ($p < 0.05$) was found between the variables sex and age, sex and anatomical localization and this latter with age.

**Conclusion:** The results suggest the need of implementing a prevention and oral cancer control policy in Goiás State, Brazil, aiming the reduction of new cases, early diagnosis and better prognostic, alongside the treatment of these neoplastic diseases.

A365. Ornter Syndrome: Case Report Of Three Cases
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**Introduction:** Ornter’s syndrome corresponds to vocal fold paralysis due to recurrent laryngeal nerve compression in intrathoracic path caused by cardiovascular alterations. Hoarseness and aspiration are common.

**Objectives:** To present three cases of Ornter’s syndrome secondary to aneurysms of aortic arch.

**Resumed report:** Case 1: 80 years old, M, smoker, diabetic, hypertensive, sudden hoarseness a year ago. Videolaryngoscopy: left vocal fold paralysis. Normal CT scan of brain, cervical and thyroid. Torax CT identified saccular aneurysm in aortic arch (4 $\times$ 4). Patient without surgical conditions, keeps the vocal fold paralysis after six months. Case 2: 79 years old, F, smoker, hypertension, chronic renal, hoarseness, cough and aspiration one month. Videolaryngoscopy: left vocal fold paralysis and aspiration. Normal CT of brain, cervical and thyroid. Torax CT identified aneurysm in aortic arch (6.9 $\times$ 5.8), and trachea deviation. Patient had no surgical conditions and keeps the vocal symptoms after four months. Case 3: 80 years old, M, extabagista, diabetic, hypertensive, chronic coronary insufficiency, sudden hoarseness and vocal fatigue two months ago. Videolaryngoscopy: left vocal cord paralyzed. Normal CT of brain and cervical. Torax CT showed saccular aneurysm in aortic arch (4 $\times$ 4). Patient keeps vocal symptoms after five months.

**Conclusions:** Left recurrent laryngeal nerve is vulnerable to intrathoracic compressions as in the Ornter’s syndrome. We highlighted the importance of image exams to the topographic diagnosis of vocal fold paralysis and its association with the aortic arch aneurysm in the elderly.

**Keywords:** Ornter’s syndrome, vocal fold paralysis, aneurysm

A231. Chronic Otitis Media cholesteatomatous with extratemporal complication: a case report and literature review
Pablo de Oliveira Lima, Caroline Catherine Lacerda Elias, Nicolau Tavares Boechem, Alexandra Torres Cordeiro Lopes de Souza, Vanessa de Araújo Souza, Mariana Azevedo Silva Hospital Federal de Bonsucesso

**Introduction:** Intracranial complications are relatively rare in chronic otitis media, occurring more frequently in cases of cholesteatoma. Complications of suppurative otitis media are classified into temporal and extratemporal. Extratemporal are subdivided into intracranial and extracranial. The most common are meningitis, epidural abscess and lateral sinus thrombophlebitis.

**Objective:** To report a case of complication of chronic otitis media in young patients.

**Resumed report:** Patient 18 years, male, with suppurative otitis during eight years, without improvement with antibiotics. A week ago with ear pain, pain, retroauricular edema, left temporo-frontal. On examination, lucid patients without neurological disorders. Otoscopy observed otorrhea with granulation tissue in the external ear canal, preventing visualization of tympanic membrane. Erythema and edema with temporo-frontal fluctuation and left mastoid. Computed tomography showed opacification of the left mastoid, extensive bone erosion and material with soft parts subperiosteal gas in between. With a clinical diagnosis of otomastoiditis with subperiosteal and extradural abscess was performed percutaneous drainage with collection of material for culture, antibiotic and tympanomastoidectomy with subsequent clinical and radiological control. The patient keeps monitoring, presents no signs of infection or neurological deficit.

**Conclusion:** Although the incidence of complications and mortality rates have declined in the post antibiotic era, the early diagnosis of complications and consequently its treatment to reduce morbidity and mortality rates should always pay attention to aggressive and destructive character of cholesteatoma is important.

A702. Otolaryngological and Phonaudiological Intervention in the Therapeutic Process Pre and Post Surgical Cochlear Implant in the Municipality of Lagarto/SE
Lucileide dos Santos, Alex Carvalho Costa Centro Municipal de Especialidades Médica

**Introduction:** The cochlear implant is a method developed for people with severe or profound hearing loss where the hearing can be partially restored and the individual can perform communication through speech.

**Objectives:** To describe the first case of cochlear implant occurred in the municipality of Lagarto /SE.

**Resumed report:** The otolaryngological intervention was as follows: In the initial consultation, were requested medical examinations, such as otocoustic emissions, immittance essays, brainstem audiometry in order to diagnose the hearing loss with profound degree. With the speech therapist’s assessment, the patient started using the Sound Amplification Device. After audiological training, the patient was referred to cochlear implant. It was observed that after cochlear implant the patient has developed satisfactorily the hearing skills reproducing the conclusions stated by Hippolito and Bento (2012).

**Conclusion:** The cochlear implant have been presented as a satisfactory method in improving the quality of life of patient by improving the speech perception and resulting in good social interaction. The effectiveness of the method was observed in the patient studied in this case, who has used the implant successfully for four years as reports the accomplishment made by the team of the Centro de Especialidades Médica.

**Keywords:** Cochlear Implant, Rehabilitation, Otolaryngological, phonaudiological

A568. Otologic Myiasis
Jose Jarjura Jorge Jr, Heliel Tadeu Ruiz, Guilherme Rocha Netto, Godofredo Campos Borges, Mariana Lombardi Guidi

**Introduction:** Myiasis can be defined as an infestation of the subcutaneous tissue or mucous membrane or body cavities of living human or vertebrate animal, for dipterous larvae (Cochliomya macellaria). Such as an illness that affects mucous membrane or subcutaneous tissue, the ear canal can be a place to development of myiasis, featuring a case of otologic myiasis. The clinical relevance of myiasis leads this pathology to be considered as an emergency in otorhinolaryngology, demanding immediate treatment. Even with the development of knowledge about myiasis in the past few years, there still no protocols clearly defined to treat this condition. One option of treatment involves the use of mechanical removal or pharmacologic treatment with iodoformium and ivermectin.

**Objectives:** The present paper intends to discourse about historical and actual treatments about otologic myiasis, as describe the applied conduct of our service.

**Methods:** Our Conduct in Otologic Myiasis: Due the importance of the rapid treatment to prevent future complications in the affected ear, initially, we perform the mechanical removal of larvae and, after the removal of all visible macroscopic larval bodies, we use topic iodoformium (3 drops, one time at ambulatory) in the ear affected. Because of the recent researches that points out to the association of otologic myiasis and secondary bacterial ear infection mainly due Klebsiella sp, we prescribe ivermectin (posology: 24 mg, orally one time).

**Conclusion:** The use of iodoformium and ivermectin, after the mechanical removal, as used in our Ambulatory of Otorhinolaryngology, shows a very efficient method of treatment of otologic myiasis.

**A1724. Otoneurological Abnormalities In Patients With Friedreich Ataxia**

Juliana Cristina Mesti, Rafaela de Paula Peres, Vinicius Ribas Fonseca, Bianca Simone Zeigelboim, Hélio Afonso Guizoni Teive, Laura Schwartz Maranhão

*Hospital da Cruz Vermelha, Filial do Paraná*

**Introduction:** The Friedreich ataxia is a neurodegenerative disease and progressive by nature, it has autosomal recessive inheritance and early onset in most cases. The affected gene plays the role of encoding mitochondrial protein frataxin that is involved in the iron metabolism. The deficit of this protein compromises mitochondrial respiratory chain.

**Objective:** To examine vestibular disorders in patients with Friedreich ataxia.

**Methods:** A retrospective cross-sectional study was conducted. 30 patients were evaluated ranging from six to 72 years of age (mean age of 38.6 (± 14.7) and underwent the following procedures: case history, ENT and vestibular evaluations.

**Results:** Clinically, the patients commonly had symptoms of incoordination of movement (66.7%), gait disturbances (56.7%) and dizziness (50%). In vestibular testing, alterations were predominantly evident under caloric testing (73.4%), testing for gaze nystagmus (50.1%), rotational chair testing (36.7%) and optokinetic nystagmus (33.4%). The presence of alterations occurred under examination in 90%, with the majority occurring in those with central vestibular dysfunction, 70% of the examinations.

**Conclusion:** The most evident neurotological symptoms were incoordination of movement, gait disturbances and dizziness. Alterations in vestibular examinations occurred in 90% of patients, mostly in the caloric test, with a predominance of deficient central vestibular system dysfunction. This underscores the importance of the contribution of topodiagnostic labyrinthine evaluations for neurodegenerative diseases since, in most cases, the initial symptoms are neurootological, and these evaluations should also be included in the choice of procedures to be performed in clinical and therapeutic monitoring.

**Keywords:** Spinocerebellar Degenerations, Spinocerebellar Ataxias, Ataxia, Vestibular Dysfunction, Nystagmus

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**A18. Our Experience With Hypocrites In Regular Occupational Audiometric Evaluations**

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**Introduction:** The man has suffered the risks of their work. That will affect it slowly not only hearing, AND YES, YOUR QUALITY OF LIFE. The audiometric responses have shown in many cases of masking. Learned in the occupational area being the simulation disclosed as a joint venture. There are workers in the interview reported not having hearing problems and is not always true their “auditory self-perceptions”. There are significant changes that, in general, the worker should feel the loss of his hearing.

**Objectives:** Experience the real audiometric results. Clarify the truth of the cover-up in periodic reviews; guidance to workers about the hazards of such behavior and promote the extinction the most of this concealment or any other ghost behavior.

**Methods:** We evaluated 122 workers, with hearing loss; a weaving, whose sound pressure levels ranging from 62.0dB to 96.2dB. Were performed: anamnesis, otoscopy, audiology, quality of life parameters after the use of azitrhomycin. At physical exam: odynophagia for 7 days with no improvement of clinical alterations were predominantly evident under caloric testing (38oC), fatigue, hypersalivation, cervical enlargement and dysphagia for 7 days with no improvement of clinical problems and is not always true their “auditory self-perceptions”. There are significant changes that, in general, the worker should feel the loss of his hearing.

**Results:** In the 2nd moment of case histories, we found that some workers were aware of their hearing loss, that is, of their deceit. Stealth frame was found more frequently in older workers. (31.25.4%).

**Conclusion:** We believe that workers concealed by requiring his salary to remedy your expenses and that a retirement would reduce their salaries and, in older get another job would not be as easy or even impossible. The present are alcohol and other problems, showing a dissatisfaction(?).

**Keywords:** Occupational hearing loss, dissimulation, audiometry, quality of life

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**A512. Parapharyngeal Abscess: Case Report**

Paloma Simoni Gama Ferreira, Érica Carla Figueiredo de Souza, Camila Lira Holanda de Lima Barros, Samuel Neiva Almino, Maria Carmela Cundari Boccalini, Nicole Martusselli de Almeida

*Hospital do Servidor Público Municipal de São Paulo*

**Introduction:** Parapharyngeal abscesses are pus collection inside the virtual parapharyngeal space which connects to every other fascial neck space. With high morbimortality, it is a challenging diagnosis, specially on pediatrics population as the symptoms and signs are less specific and physical exam is poorly tolerated.

**Objective:** Report a case of parapharyngeal abscess on a child.

**Resumed report:** B.F.F., 13 year old female, presented at the pediatrics emergency room complaining of fever (38oC), fatigue, hypersalivation, cervical enlargement and odynophagia for 7 days with no improvement of clinical parameters after the use of azithromycin. At physical exam: normal oral cavity exam, left anterior cervical mass extending from the mandible angle to cervical level III, trismus and no
signs of respiratory failure. Indirect videolaryngoscopy evi-
denced mass involving both left pterygoid sinus and vallecula. CT scan showed multiloculated mass with post contrast peripheral enhancement measuring $7.9 \times 5.5 \times 4.7$ cm ex-
tending $1.4$ cm superiorly from the cricoid cartilage to the thyroid cartilage dislocating trachea and oropharynx. The patient started on intravenous antibiotics (metronidazole and ceftriaxona) and corticotherapy. She was taken to the operating room and the abscess was drained with an anterior cervical approach. Penrose drain was inserted and removed after 2 days. The patient recovered well and was discharged after the third operation day.

Conclusion: Treatment of suppurative infections from the parapharyngeal space should be initiated as soon as possible in order to avoid its complications, specially the spread to subjacent areas such as the mediastinum.

Keywords: parapharyngeal abscess, odynophagia.

Lorena Cássia de Carvalho Oliveira, Emilio Santana Martins Xavier Nunes, Halina Araujo Souza, Elaine Alves Carneiro, Gustavo Bachega Pinheiro, Thiago Bittencourt Ottoni de Carvalho
Hospital de Base do Distrito Federal

Introduction: Injuries by white weapons on the face are scarcely reported in the national literature. The highest incidence occurs in male individuals between 15 and 35 years old, with prevalence for left facial. In the initial treatment, the recognition of lesions and implementing measures are made to maintain life. Imaging studies are essential for the assessment of damages and surgical planning. Must assess the extent and depth of the injuries, injuries to important structures, need for immediate reconstruction after removal of the object and the time elapsed since the trauma. Treatment involves removal of the object and repair of injuries, trying to preserve the craniofacial function and esthetics.

Objective: To present the rapid and multidisciplinary management of three cases of injury by white weapon (knife) in right hemiface, not removed in the pre-hospital, in male patients, averaging 26 years old who were admitted to the Emergency Room of the Base Hospital of Federal District.

Resumed report: Patients presented with the housed object that affected: the right orbit to hypopharynx; right orbit to right cervical region, with penetration into jugular vein; and right nasal dorsum to spinal canal. With the stabilized phase, the Otolaryngology teams, Head and Neck Surgery and Ophthalmology started treatment together.

Conclusion: This type of trauma can result in multiple injuries of vital structures. The rapid multidisciplinary intervention, coupled with the surgical technique minimizes the risk of complications and sequelae.

Keywords: facial trauma; white weapon; penetrating injury; multidisciplinary management

A470. Pediatric Tympanoplasty: Is The Age A Prognostic Factor?
Amanda Oliveira Benevides, Carolina Affonso solano, Lucas Ferreira Rocha, Patricia Ciminelli Linhares Pinto, Danielle de Araujo Torres, Sarah Cristina Beirith
Hospital Federal da Lagoa

Introduction: Tympanoplasty is a valid treatment modality for tympanic membrane perforation in the pediatric population and the rate of success depends on many factors. Deciding which patients benefit from surgical repair and when is the optimal age to perform it continues to be widely debated.

Objectives: This update reviews the recent as well as the past literature on prognostic factors in pediatric tympanoplasty, focusing on patients’ age.

Data Synthesis: The rate of success of pediatric tympanoplasty is likely not a matter of age, but a matter of patient selection. Careful attention to factors such as technique, eustachian-tube function, and site and size of the perforation will likely increase the rate of an intact tympanic membrane with improvement in hearing. There are several specific that determine the results.

Conclusion: According to the revised articles, there is still no consensus in the best age to indicate tympanoplasty. The success of the surgery is related to proper patient selection and surgical technique used.

Keywords: Tympanoplasty, prognostic factors, children

A275. Pierre Robin Sequence Associated To Eye Abnormalities: Stickler Syndrome
Kariny Zencke da Silva, Letícia Gregory, Gabriela Pereira da Silva, Prícula Slefter, Rafael Fabiano Machado Rosa, Paulo Ricardo Gazzola Zen
Universidade Federal de Ciências da Saúde de Porto Alegre

Introduction: Pierre Robin sequence is a condition that can occur lonely or associated to some syndromes.

Objectives: to describe a patient with Pierre Robin sequence, presenting Stickler syndrome.

Resumed report: the patient came referred for evaluation at 2 months of age due to cleft palate associated to a syndromic aspect. The child was the first son of parents aged 25 (mother) and 28 years (father). There were no similar cases in family. He was born vaginally, premature of 8 months, weighing 2,605 grams, measuring 46 cm, with a head circumference of 30 cm and Apger score of 10 in the first minute. The finding of cleft palate associated to micrognathia and glaucoma associated to posterior staphyloma. Computed tomography scan disclosed increased size of eyeballs. Audiometric evaluation revealed bilateral hearing loss. Radiography disclosed only delayed bone age. His karyotype was normal (46,XY).

Conclusion: The findings of our patient were consistent with the clinical diagnosis of Stickler syndrome. This is considered the genetic and syndromic condition most often seen among patients with Pierre–Robin sequence. Our aim was to emphasize such association.

Keywords: Pierre–Robin sequence; Stickler syndrome; eye abnormalities

A387. Postoperative Pain Management In Children Following Tonsillectomy Surgery
Sarah Cristina Beirith, Carolina Affonso Solano, Flavia Capone, Amanda Oliveira Benevides, Danielle de Araujo Torres, Maria Richelle Rufino Cecilio
Hospital Federal da Lagoa

Introduction: Tonsillectomy is the one of the most frequently surgical procedure in children. It is associated with
A81. Prevalence Of Obstructive Sleep Apnea Syndrome In Patients With Cystic Fibrosis In A Brazilian Northeast Hospital
Bianca da Silva Vinagre Nascimento, Thais Sampaio Silva, Tassia Milena Oliveira de Souza, Clara Monica Figueiredo de Lima, Marcus Miranda Lessa, Edna Lucia Santos de Souza
Federal University Of Bahia

Introduction: Tonsil or adenoid enlargement is an important risk factor of Obstructive Sleep Apnea Syndrome in children without comorbidities (e.g., obesity). There are few data about this prevalence in Cystic Fibrosis patients.

Objective: To determine the prevalence of risk factor for Obstructive Sleep Apnea Syndrome in children with cystic fibrosis.

Methods: Descriptive study, case series. Patients were submitted to otolaryngology evaluation and nasal endoscopy. Inclusion criteria were diagnosis of cystic fibrosis and more than 2 years old. Exclusion criteria were tonsillectomy and/or adenoidectomy and those who didn’t permit the execution of nasal endoscopy or evaluation.

Results: Selection of 36 patients, 36.8% were female. The mean of age was 10 years (± 4.52). There were 80% of snoring at night in 52.6% and mouth breathing in 36.8%. According to Brodsky Grading System, 50% were grade I, 31.6% were grade II and 15.8% were grade III. There was no grade IV. Analysing the nasal endoscopy, there were 13.1% of obstructive adenoid enlargement. On this group, there were 80% of snoring at night and 40% of mouth breathing. Considering the patients with obstructive tonsil grade (III and IV), there were 33.3% of night snoring and 50% of mouth breathing.

Conclusion: The prevalence of snoring and other Obstructive Sleep Apnea Syndrome symptoms on this study was higher than in general pediatric population, according to guidelines of Obstructive Sleep Apnea Syndrome.

Keywords: Cystic Fibrosis, Obstructive Sleep Apnea Syndrome

A419. Prophylactic Antibiotics for Ear Surgery – What Does The Evidence Tells Us
Jacqueline de Mattos Coelho, Carla Abranches Duarte Machado, Thais de Araujo Freitas Gomes, José Arnaldo Cruz Bezerra de Menezes Filho, Flavia Capone, Danielle de Araujo Torres
Hospital Federal da Lagoa

Introduction: The use of prophylactic antibiotics for ear surgery is widely discussed and used to decrease intraoperative and postoperative infection rates. Infection can be of the wound itself, discharge the external auditory canal, failure of grafting or even labyrinthitis. The indiscriminate use of antibiotics is linked to increased bacterial resistance, which may cause toxic reactions and immune deficit, in addition to high costs.

Objectives: The aim of this report is to review the use of antibiotic prophylaxis in ear surgery and its benefit in preventing postoperative complications. To this end, a search of Medline/Pubmed was conducted, from 2008 until 2015.

Data Synthesis: In general, tympanoplasties, stapedectomies, ossicular chain reconstructions and surgery with dry ears are considered clean. Chronic otitis media with or without cholesteatoma are considered clean-contaminated, contaminated or even dirty, depending on the authors and appearance of ear discharge. There was no evidence for a large-scale use of prophylactic antibiotics to clean or clean-
contaminated surgery. However, its use for contaminated or dirty surgery seems to bring benefit in preventing infection. The use of topical antibiotic demonstrated no guarantee of success of tympanoplasty grafts and no significant difference between the use of topical or systemic antibiotics was found.

**Conclusion:** The use of profilactic antibiotics for ear surgery is routine in otorhinolaryngologic services in Brazil, even with no strong evidence of its benefit. Its discussion is essential to change our daily practice, that must be based in scientific evidence.

**Keywords:** antibiotic, prophylactic, ear, surgery

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**A197. Ramsay Hunt Syndrome In Immunocompetent Patient - Case Report**
Fernanda Rodrigues da Cunha, Guilherme Trindade Batistão, Rafael Toledo Enes Nogueira
Serviço de Otorrinolaringologia e Cirurgia Cervico Facial do Hospital Regional de Presidente Prudente - SP

**Introduction:** The Ramsay Hunt syndrome is characterized by paralysis, vertigo, and sensorineural hearing loss, which occurs due to a viral infection of the geniculate ganglion. Recent findings have highlighted the importance of early recognition of these individuals.

**Objective:** To describe a case of Ramsay Hunt syndrome in an immunocompetent male patient attended at Hospital Regional de Presidente Prudente - SP.

**Resumed Report:** LRTS, male, 65 years, attended the Otorhinolaryngology service with vertigo and sensorineural hearing loss. The patient was referred for genetic evaluation due to craniofacial malformations. The clinical features are compatible with a syndrome characterized by craniofacial involvement, where deafness, particularly conductive, is a common feature. The syndrome is treatable with corticosteroids and antiviral agents.

**Conclusion:** The Ramsay Hunt syndrome is a benign condition that occurs due to reactivation of the varicella-zoster virus. Early treatment with acyclovir and corticosteroids can result in a full recovery. The prognosis is good, with a high cure rate.

**Keywords:** Ramsay Hunt syndrome; early recognition; genetic condition

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**A492. Report Of Parathyroid Carcinoma Case In Araújo Jorge Hospital In Goiania**
Paola Morales Salarini Pinto, Taylor Gerhardt, Rommel Vieira, Leticia de Avila Cambraia, Camila Tanigutti
Hospital Araújo Jorge

**Introduction:** Parathyroid carcinoma is a rare condition, comprising less than 1% of the cases of primary hyperparathyroidism. Nonetheless, due to its aggressiveness, and having prognosis dependent on the precocity of diagnosis and radical therapeutic approach.

**Objectives:** Rare Case Report of parathyroid carcinoma in Goiania, Hospital Araújo Jorge.

**Resumed Report:** JRDaS, 56anos, white, natural Goiântuba, Goiás, salesman.. In March 2014 complaining of a “lump in the neck.” Referred to the Head and Neck Surgery Service of Hospital Araújo Jorge in Goiania. In the first complaint of pain in the lower query and result of exams members as desnsitometria with bone loss, thyroid scintigraphy uptake in left parathyroid, thyroid ultrasound with parathyroid nodule measuring 3, 4 × 2.0 cm. Laboratory tests changed calcium12,6 and PTH 534. History of smoking and drinking. Performed surgery lobectomy and left parathyroid. Anatomical Pathology compatible with parathyroid carcinoma. After surgery, patient was clinical and laboratory gradual improvement. No adjuvant therapy performed. In follow-up to the May 2015 without relapses.

**Conclusion:** The clinical features are compatible with a case severe, symptomatic HPP with cervical tumor > 1.5 cm, and may be palpable. Management is surgical and should include ipsilateral thyroidectomy and cervical exploration. The postoperative is compatible with the severity of pre-existing metabolic disorder, is common the tendency to hypocalcemia. The long-term prognosis depends on the diagnosis early, surgical success and control of hypercalcemia.

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**A253. Respiratory Epithelial Adenomatoid Hamartoma: Case Report**
Estefane Costa Loureiro, Roberto Eustáquio Santos Guimarães, Amanda Cristina Ferreira, Paulo Fernando Tormin Borges, Flávia Oliveira Balesteros, David Albuquerque Mourão
Nucleo de Otorino Bh

**Introduction:** Respiratory epithelial adenomatoid hamartoma is a benign tumor of the nasal cavity and paranasal sinuses, characterized by the enlargement of theolfactory pits visualized on computed tomography (CT) of the paranasal sinuses. Complete excision is essentially curative and recurrence is rare.

**Objectives:** Report a rare case of hamartoma of the nasal cavity and paranasal sinuses. Draw attention to this disease. Show the effectiveness of the endoscopic treatment.
**14th Congress of Otorhinolaryngology Foundation—August 13–15, 2015**

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**Resumed Report:** MSS, 73, male, with a history of chronic nasal obstruction, hyposmia and recurrent upper airway infections. He underwent endoscopic sinus surgery in another service due to what it seemed to be polyposis. Then he presented at our service where we made further investigation. The nasal endoscopy showed an abundance of polyps, making impossible the progression of the optical fiber. A CT scan of the paranasal sinuses revealed opacification of the nasal cavities and all paranasal sinus, plus the enlargement of the olfactory pits. We performed a preoperative biopsy that showed bilateral eosinophilic inflammatory polyps. The treatment was performed through the nasal surgery by endoscopic approach, with full sinusotomy. The patient presented symptom improvement postoperatively. The pathology study of the removed lesion from the olfactory pits, showed a respiratory epithelial adenomatoid hamartoma.

**Conclusion:** Although invariably benign, the respiratory epithelial adenomatoid hamartoma can grow into relatively large sizes and are associated with other naso-sinusal diseases, leading to clinical concerns. Therefore, the early diagnosis and the surgical approach are of great importance.

**Keywords:** hamartoma; nasal cavity; paranasal sinuses

**A517. Scalp Angiosarcoma: Case Report**
Jacqueline de Mattos Coelho, Débora Angélica Lopes Reis, Carla Abbranches Duarte Machado, José Eduardo Esposito Almeida, José Arnaldo Cruz Bezerra de Menezes Filho, Ana Carla Wanderley Costa
Hospital Federal da Lagoa

**Introduction:** The angiosarcoma is a rare and aggressive tumor of the head and neck. Corresponds to 0.1% of neoplasms of that site, being more common in scalp. Usually affects older men and is diagnosed at an advanced stage. Its etiology is unknown, but sun exposure and prior radiation are considered risk factors, and its features are red plate, chronic edema, cellulitis or skin ulceration.

**Objectives:** The aim of this case is to inform the clinical presentation of the neoplasm, and its diagnosis and treatment, in order to increase survival.

**Resumed Report:** HFR, 63, male, reports mass emergence scalp of small size, in October, 2013. He was submitted to biopsy of the lesion, significantly increasing in size. The histopathological report diagnosed angiosarcoma. In July 2014 there was a vegetable lesion, infiltrative, in the anterior region of the scalp. The patient underwent surgery.

**Conclusion:** The angiosarcoma is an aggressive malignant tumor that can metastasize to lymph nodes, lungs and liver. The suspected diagnosis is based on clinical features, but can only be confirmed by biopsy histopathology. It should be carried out differential diagnosis with hemangioendothelioma, Kaposi’s sarcoma and inflammatory carcinoma. In immunohistochemistry, markers of poorly differentiated tumors are CD31, CD34 and antigen related to factor VII. Imaging tests should be performed to extension of the analysis, depth and distant metastases. The treatment, when possible, should be surgical, and radiation therapy is reserved for the inoperable cases. The patient underwent neoadjuvant chemotherapy for subsequent surgical resection of the lesion, with good outcome.

**A196. Schwannoma with ear nose and throat atypical manifestations: case report and literature review**
Caroline Catherine Lacerda Elias, Pablo de Oliveira Lima, Mariana Azevedo Silva, Vanessa de Araújo Souza, Nicolau Tavares Boechem, Alexandra Torres Cordeiro Lopes de Souza
Hospital Federal de Bonsucesso

**Introduction:** The schwannoma is the most common benign tumor in the posterior cranial fossa. It grows slowly and can remain asymptomatic until adulthood. The bigger and younger its appearance, the higher the growth rate and various symptoms: hearing loss, tinnitus, dizziness, paresthesia, diplopia, dysphonia, dysphagia or even mastoiditis and subperiosteal abscess as in our case.

**Objectives:** To report a case of a schwannoma with atypical and invasive initial manifestation, making differential diagnosis with infectious lesions of the mastoid.

**Resumed report:** Male patient, 14 years old with major headache history developed inflammatory signs in the left ear. Physical examination: normal otoscopy, normal facial movements. Denies history of otorrhea. Performed a computed tomography of ear and mastoid that showed extensive lesion with soft tissue density occupying the left mastoid with bone destruction and exposure of the tegmen timpani. Audiometry with mild conductive hearing loss in the left ear. He was hospitalized and treated with intravenous antibiotics and drainage of the abscess. After ENT evaluation, underwent emergency mastoidectomy with infiltrative tissue biopsy in mastoid and histopathological diagnosis of schwannoma. Actually asymptomatic, in attendance with conducting nuclear magnetic resonance of cerebellar angle point of control.

**Conclusion:** The schwannoma is a benign tumor that usually presents with symptoms of hearing loss, tinnitus or vertigo according to their growth and compression of adjacent structures. However, the otorhinolaryngologist should be aware of its possible growth towards the mastoid, hindering drainage of secretions and initial presentation with coalescent mastoiditis and subperiosteal abscess secondary to its progression.

**A131. Septal Abscess in Immunocompromised Patient: Case Report**
Mílene Lopes Frota, Gustavo Figueirêdo Nunes Rabelo, Bruno de Castro, Mirian Cabral Moreira de Castro, Natanael Alves de Souza
Santa Casa de Belo Horizonte

**Introduction:** Septal abscess is defined as a collection of pus between the cartilaginous or bony septum and its corresponding mucoperichondrium or mucoperiosteum. Nasal trauma is the most often cause. Other less common causes are sinusopathy, dental infection, furunculosis and surgical procedures. Non-traumatic septal abscess is mainly reported in immunocompromised patients. Nasal obstruction is the most common symptom of septal abscess, but local pain, headache and fever also can occur. The diagnosis is performed by clinical examination, being found uni- or bilateral edema in the septum, narrowing the nasal cavity. Treatment is the immediate abscess drainage followed by antibiotic therapy to prevent orbital and intracranial complications and nasal deformities.

**Objective:** To present a case of spontaneous septal abscess in immunocompromised patient.

**Resumed report:** Male patient, 45, with a history of having undergone the allogeneic bone marrow transplantation because of acute myeloid leukemia, had nasal obstruction with progressive worsening for two months, associated with fever lasting one week. In the anamnesis he denied nasal trauma. On examination we could see important bilateral bulging in the nasal septum, floating and mobile to palpation. Abscess drainage was performed by puncture in the septum...
and it was prescribed Amoxicillin-clavulanate. Patient showed improvement of symptoms, but evolved with a saddle-nose deformity. **Conclusion:** Septal abscess is a condition requiring immediate treatment in order to avoid severe complications. Drainage is the gold standard treatment, followed by septal reconstruction in cases of deformities.

**A349. Septal Abscess Intranasal Foreign Body**
Alessandra de Oliveira Brandão Pinheiro, Manayra Lourenço Cunha Carvalho, Paula Lourençato, Gustavo Pegos Rodrigues Coy, José Eduardo Faria Martins, Silvio Antonio Monteiro Marone
Hospital e Maternidade Celso Pierro - Pucampinas

**Introduction:** Intranasal foreign body is a common finding in pediatric emergency, with highest incidence between 0 to 4 years of age, mainly in males, its complications are rare, the most common are epistaxis, followed by nasal vestibulitis and tissue necrosis. Reports of nasal septum abscess as a complication of foreign body are rare.

**Objectives:** Report a rare case of nasal septum abscess as a complication of intranasal foreign body.

**Resumed Report:** GASX, 8 years old, male, 25 days with mass in both nasal passages, purulent rhinorrhea, epistaxis, face’s swelling and pain. Rhinoscopy: pink mass, softened and bulged in the septum, obstructing both nasal cavities, impossibilitating nasal endoscopy. The nasal dorsum palpation evidenced absence of septal cartilage, saddle nose. CT sacan of paranasal sinuses: limited damage of nasal septum, with hypodense central area and peripheral enhancement. Probable diagnosis: nasoangiofibroma. During the excision purulent secretion and foreign bodies (beans) came out of the lesion. Nasal reconstruction was programmed in another surgical time.

**Conclusion:** Intranasal foreign body starts with purulent rhinorrhea and unilateral smell, sometimes unilateral nasal obstruction and epistaxis, however it can be asymptomatic with higher risk of complications and difficulty in diagnosis, even with rhinoscopy, nasal endoscopy and radiological exams help, and it can be misdiagnosed as nasal tumors, as ih has happened in our report.

**Keywords:** foreign; body; nasal; abscess; septum

**A71. Septic Thrombosis of the Sigmoid Sinus: A Case Report**
Alinne Santos Teixeira, Lorena Firmino da Silva, Ronaldo Carvalho Santos Júnior, Arlete Cristina Granizo Santos, Valéria Maria Prado Barreto
Universidade Federal de Sergipe

**Introduction:** Septic thrombosis of the sigmoid sinus is an intracranial complication of chronic otitis media that still has a high mortality. **Objective:** Report a case of sigmoid sinus thrombosis secondary to chronic otitis media with cholesteatoma.

**Resumed report:** GFS 31anos, presented otorrhea right from childhood with numerous treatments without success. 2 years ago evolved with oppressive pain in her right hemic face accompanied by paresthesia. No signs of facial paralysis. Otoscopy reddish lesion on (polypoid?) In the external auditory canal and otorrhea. Requested temporal bone CT scan with contrast showed erosion of ossicular chain and spur Chausset as well as obliteration of epitympanic lateral recess right. Erosion of the inner wall of the process after mastoid determining continuity with the adjacent sigmoid sinus thrombosis and the jugular bulb and the right will sigmoid sinus. Requested intracranial magnetic resonance angiography with findings consistent with thrombosis of the sigmoid sinus mainly jugular bulb and small distal segment of the right internal jugular vein by otomastoiditis with meningial dural involvement in the posterior fossa and temporal lobe rights. Underwent radical mastoectomy right with removal of the lesion. Started anticoagulant therapy after 30 days of surgery with clinical improvement. Control Angiorresonância showed thrombosis with partial recanalization signals in the proximal portion of the internal jugular vein, jugular bulb and sigmoid sinus.

**Conclusion:** The average chronic otitis cholesteatomatos require early treatment because of the potential for serious complications.

**Keywords:** complications, mastoiditis, otitis media, intracranial sinus thrombosis

**A124. Wallenberg Syndrome: Case Report**
Pablo de Oliveira Lima, Caroline Catherine Lacerda Elias, Alexandra Torres Cordeiro Lopes de Souza, Nicolau Tavares Boehem, Vanessa de Araújo Souza, Mariana Azevedo Silva
Hospital Federal de Bonsucesso

**Introduction:** Vertigo spells are classified as peripheral when the labyrinthine origin and VIII cranial nerve, and central. The basilar stroke is a difficult entity to be recognized by semiological data. The lateral infarction bulb produces Wallenberg’s syndrome, which is the dorsolateral region of ischemia of the spinal cord, and is most often due to occlusion of the proximal vertebral artery.

**Objective:** To describe the importance of semiotic examination in patients with vertigo frame.

**Resumed report:** JGS, 46, valued at emergency room with rotational vertigo, nausea and vomiting, and abrupt onset of dysphonia diagnosed with “labyrinthitis” less than 24 hours and was discharged after medication and referred to the ENT specialist. It is treated in this service after a month of onset with improvement of nausea and vomiting, dizziness and keeping dysphonia. ENT examination showed paralysis of the right vocal fold, horizontal-rotational spontaneous nystagmus, ataxic gait, medium-fixed pupils and little photo-reactive. Raised Stroke as diagnosis, the CT scan showed a little obvius right vertebral artery, and the MRI lesion on the right side and rear of the bulb, indicative of vascular insult sequel. At the time with little improvement of dysphonia and dizziness.

**Conclusion:** Differentiation in the peripheral frames of plants is essential in the treatment and prognosis, it is important for the general practitioner and the specialist have a high index of suspicion and the expertise to diagnose Wallenberg syndrome and its variants.

**A587. Squamous Cell Carcinoma Of The External Auditory Meatus: A Report Case**
Maria Eugenia Pedruzzi Dalmashio, Júlia da Silva Almeida, Flavia Vieira Dias, Edna Patricia Charry Ramirez, Larissa Maria Alencar Xerez
Hospital Universitário Antonio Pedro - Universidade Federal Fluminense

**Introduction:** External auditory meatus cancers are extremely rare, representing less than 0,2% of head and neck tumors. Squamous cell carcinoma is the most common type to affect the region. It occurs between the 5th and 6th decades, often in women.

**Objective:** The objective of this study is to describe a case of squamous cell carcinoma of the external auditory meatus in a male with a story of right otorrhea without clinical improvement.
Resumed report: A 59 year-old male reports long-standing right ear otorrhea, worse for a few months, associated with otalgia and itching. No associated diseases. Smoker of 40 pack-years. Presents swelling of the external auditory meatus and purulent otorrhea with enlarged and painful retroauricular lymph nodes. Treated with amoxicilline-clavulanate for 14 days, with no improvement. Skin biopsy of the meatus revealed moderately differentiated squamous cell carcinoma. Mastoid tomography and magnetic resonance showed thickening of the external auditory meatus and expressive reduction of its air space. The tumor was removed, as well as the parotid gland and neck levels 2 and 3, followed by 10 days of endovenous amoxicilline-clavulanate. The patient presented with grade III House-Brackmann facial paralysis. The operatory wound has healed well and the patient is undergoing radiotherapy.

Conclusion: Squamous cell carcinoma of the external auditory meatus is a rare condition of difficult diagnosis. The treatment is surgical removal of the tumor with assessment of nearby structures. In certain cases, radiotherapy is indicated as an adjuvant, eliminating areas of remaining cancer cells, thus lowering the risk of recurrence.

A630. Subjective Sleep Assessment Of Truck Drivers In Pará, Brazil
Hospital Universitário Bettina Ferro de Souza / Universidade Federal do Pará

Introduction: In Brazil, professional truck drivers have irregular working hours and often reverse the sleep-wake cycle, leading to partial sleep deprivation chronically. This situation predisposes to higher levels of daytime sleepiness and increase the risk of accidents.

Objective: Subjective sleep assessment of truck drivers in Pará, Brazil.


Results: The average daily sleep time was 7.83 ± 1.59 [3-12]. 65.5% considered the optimal sleep: 30.75%, reasonable; and 3.75% bad. The average of Epworth Sleepiness Scale was 4.51 ± 3.17 [0-16] and its evaluation revealed that 79.75% had normal patterns of daytime sleepiness [0-6], 12% had borderline values [7-9] and 8.25% had some degree of daytime sleepiness [10-16]. There was no significant statistical relationship between subjective sleep assessment and the Epworth Sleepiness Scale (X² / p = 0.1157). The average of working hours per day was 10.8 ± 2.90 [2-24]. 22% reported involvement in traffic accidents. 16.5% were carrying dangerous goods.

Conclusion: When asked about the quality of sleep, 65.5% considered it as great, despite the Epworth Sleepiness Scale reveal 12% of borderline score and 8.25% some degree of daytime sleepiness. Therefore, the subjective assessment of sleep quality shown not effective in the diagnosis of sleep disorders in this population and should be complemented by targeted protocols and clinical evaluation.

A175. Sudden Deafness
Camila Nogueira Merlo, Eron Mosciati, Igor Guerra Guimarães, Tácito Elias Sgorlon
Nucleo de Otorrinolaringologia de Ribeirao Preto

Introduction: Sudden deafness is defined as a hearing loss of at least 30dB in three contiguous frequencies and installed within 72 hours. It affects between 5 to 20 cases per 100,000 inhabitants per year, mostly among the over-45s. It is usually unilateral, associated with aural fullness, tinnitus, sensation of hearing and vestibular complaints distortion.

Objectives: More than 80% of cases does not have defined etiology, signed between the causes are circulatory / hematological, autoimmune and viral infection.

Resumed Report: Patient 42, female, has been presented there 85 hours hearing loss, tinnitus and aural fullness left, confirmed by audiometry.

Conclusion: Although 25-50% of patients have spontaneous recovery of hearing thresholds, there is clinical evidence that sudden deafness should be treated early.

A174. Superior Semicircular Canal Dehiscence
Camila Nogueira Merlo, Eron Mosciati, Igor Guerra Guimarães, Marcela Estrela Tavares
Nucleo de Otorrinolaringologia de Ribeirao Preto

Introduction: The superior semicircular canal dehiscence syndrome is a rare disease and was first described in 1998 by Minor. It is characterized by a failure in the bone covering on the upper portion of the canal, initiating vestibular symptoms induced by sound stimulations.

Objectives: The pathogenesis of this anatomical alteration is still unknown although it is likely to be a genetic mutation, which brings up symptoms in adulthood. It is estimated a prevalence of 0.7 to 1.3% in the general population. The diagnosis is confirmed by a high resolution computed tomography of the temporal bone. The surgical or conservative treatment is conditioned by the intensity of symptoms.

Resumed Report: Patient JLS, 50 years old, male, presenting some dizziness and ear fullness when exposed to loud sounds. The audiometry was done under conductive hearing loss, up to 2kHz from the left side. He was diagnosed with superior semicircular canal dehiscence by a digital ear tomography.

Conclusion: Despite of being considered a rare alteration with several aspects still unknown, the syndrome of the superior semicircular canal dehiscence must be included among the several causes of dizziness. It is considered a treatable dehiscence and in the case of a clinical suspicion, it has the advantage of at least avoiding inappropriate diagnostic or therapeutic approaches.

A10. Supernumerary Tooth in Nasal Fossa
Ivana de Rezende Bastos, Maria Luiza Coelho Pinto Torres
Doctor’s Office

Resumed report: Patient, female, 24 years with crusts removal report and epistaxis 2 months of intermittent character. Clinical examination of anterior rhinoscopy
A190. Surgical Treatment of Cholesteatoma of External Auditory Canal - Case Report
Núcleo de Otorrino Belo Horizonte

Introduction: Cholesteatoma of External Auditory Canal (CEAC) is uncommon, affecting especially elderly people. Its evolution is slow and little symptomatic, these may result in a delayed diagnosis, with progressive bone destruction and involvement of adjacent structures.

Objectives: To report a case of CEAC showing one of its complications and to describe the surgical technique used for resolution.

Resumed report: MAMF, 60, male, complaining discomfort in right ear for 50 days associated with autophony and hearing loss. Topical and systemic antibiotics showed no improvement. Otoscopy revealed crust stuck in the posterior region of the right External Auditory Canals (EAC). Pure Tone Audiometry revealed mild conductive hearing loss on the right and Computed Tomography (CT) showed posterior wall erosion of EAC with involvement of mastoid cells in the neighborhood and mastoid antrum. Performed conservative right mastoidectomy with removal in block of cortical bone, drilling, complete removal and proper cleaning of the border previously eroded by the disease. The removed cortical bone was remodeled sealing the erosion area in the wall of the EAC and covered with superficial temporal fascia graft.

Conclusion: CEAC should be regarded in cases of chronic ear complaints without tympanic membrane changes. Patients should undergo CT of Mastoid to assess the extent of the injury and the involvement of adjacent structures. Surgical treatment should aim to eradicate the disease and to seal the bone erosion and prevent recurrence with epithelial invagination. The reconstruction of the bone wall of the EAC allows treatment with hearing preservation.

Keywords: cholesteatoma; auditory; canal

A594. The Association Of Laryngoceles With Squamous Cell Carcinoma Of The Larynx: A Case report
Flavia Vieira Dias, Júlia da Silva Almeida, Edna Patricia Charry Ramirez, Maria Eugenia Pedruzzi Dalmachio, Larissa Maria Alencar Xerez
Hospital Universitário Antonio Pedro - Universidade Federal Fluminense

Introduction: Laryngocele is an unusual disease defined as an anomalous dilation of the laryngeal ventricles. It can be internal or external and usually occurs in white men in the 5th or 6th decade. Most cases are unilateral. Its cause is unknown, but the disease is associated with chronic cough, woodwinds and laryngeal carcinoma. Common symptoms are dysphonia, foreign body sensation, sore throat and cough, and in some cases cause obstruction of the upper airways. The diagnosis is made by laryngoscopy and computerized tomography. Treatment can be surgical or expectant.

Objective: To present a case of laryngocele secondary to squamous cell carcinoma.

Resumed report: 57-year-old white man, admitted to Hospital Universitário Antonio Pedro for facial cellulitis. He was evaluated by the Otorhinolaryngology department, due to intermittent dysphonia and dry cough. Former alcoholic and former smoker (80 pack-years). Videolaryngoscopy: pedunculated tumor in the right ventricle of Morgagni. Computerized tomography of the neck showed an infiltrative lesion in the paraglottic region, vocal and vestibular folds to the right. After excision of the tumor, the right vocal fold presented with an infiltrative lesion, being submitted to biopsy. The report showed “squamous cell carcinoma predominantly in situ with minimal focus of invasion.” Specific treatment was made.

Conclusion: Laryngocele is a benign disease, but can be caused by a malignant tumor such as squamous cell carcinoma which is the main subtype of laryngeal cancer and requires early treatment, demonstrating the need for thorough investigation, especially when there are risk factors such as alcoholism and smoking.

Keywords: laryngocele; squamous cell carcinoma; external auditory canal

A24. The Key To An Effective Approach In The Treatment Of ‘Vestibular Rehabilitation’ Promoting Genuine Rehabilitation Of Vestibular Diseases Of The Frame
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Faculdade de Medicina de Petrópolis

Introduction: Dizziness are signs of change body balance, which is maintained by the functional interaction between the brain, eyes, skin receptors, muscles, joints and central nervous system. The conflict in the integration of information from these bodies promote dizziness and other symptoms. The causes can be many: peripheral, central and mixed. In our research we are working with a group of complaining of dizziness. Our differential to achieve success are ESM - systematic exercises and monitoring.

Objectives: Provide an effective treatment from diagnosis, recovery of confidence...improve your vertigo individually. Focusing on the achievement corretado year; providing effective rehabilitation.

Methods: The group was evaluated and diagnosed as vestibular, with cervical spine changes. Are seamstresses (adopt erroneous systematic positions). The process of rehabilitation monitoring of the group is being carried out individually and systematically. Their ages vary between 19 and 30 years.

Results: Of the 32 women who underwent the Vestibular rehabilitation for ESM with cervical abnormalities showed significant improvements without recurrence. These exercises conducted in accordance with the guidance and now after 10 months continue with the exercises (smoother), no complaints as initials. Three people in this group show improvements and relapses and continue with the medication.

Keywords: vestibular, dizziness, vestibular rehabilitation, changes of the cervical spine

A674. The Role Of The Otorhinolaryngologist In The Management Of Subcutaneous Emphysema Secondary To Dental Procedure
Renata Cristina Cordeiro Diniz Oliveira, Helena Cunha Sarubi, Danielly Solar Andrade Oliveira, Emídio Oliveira Teixeira, Sânzio Tupinambá Valle
Hospital Socor
**Introduction:** Subcutaneous emphysema as a complication of a dental procedure is uncommon. Even though such complications are more commonly seen by dental and oro-maxillofacial surgeons, otolaryngologists should be aware of this condition since we are often asked to consult in these cases. Management in most cases involves close observation while awaiting spontaneous resolution. However, in some cases the emphysema can progress to serious complications and even death.

**Objectives:** Our aim is to describe a case of an extensive subcutaneous emphysema secondary to a dental procedure and review the clinical presentation, diagnostic workup, and management of this complication.

**Resumed Report:** We report the case of a 61-year-old man who presented to the emergency department of our institution with an unusually dramatic acute-onset cervicofacial swelling after he had undergone a dental procedure earlier in the day. Physical examination and computed tomography revealed extensive left cervicofacial subcutaneous emphysema, extending to maxillary, parapharyngeal and danger spaces. The patient was admitted to the hospital for close observation, analgesia and antibiotic prophylaxis. Within 48 hours his condition had improved significantly.

**Conclusion:** Early recognition of this condition may be of extreme importance in initiating treatment and to prevent possible secondary infections and cardiopulmonary complications.

**Keywords:** Subcutaneous emphysema, cervicofacial emphysema, dental treatment, complications

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**A16. Tinnitus Therapy Through Telemedicine (T4)**
**Ricardo Ferreira Bento, Silvio Pires Penteado**

**Faculty Of Medicine University Of Sao Paulo**

**Introduction:** The idea behind Telemedicine in the ENT and Audiology fields combined is to supply to underserved areas the ability to promote screening (remote audiology and video-otoscopy), diagnosis (intraoperative monitoring and auditory balance response), intervention (hearing aids and cochlear implants fitting), and patients perceptions (questionnaires, forums). Tinnitus-sufferers have few choices but Cognitive Behavior Therapy (CBT) and Acceptance and Commitment Therapy (ACT) as described researchers in Sweden. While the former relies exclusively on text-based material, the latter makes use of more experimental exercises (mindfulness exercises), and more picture-based material. Both treatments are in the form of guided internet-delivered self-help, also with use of manuals and supportive on-line health professional.

**Objective:** Introduce a tinnitus therapy through internet based on sound therapy with or without sound amplification delivered through BTE hearing aids (aids).

**Materials and Methods:** Backed by Fundação Otorrinolaringologia researchers designed aids with sound therapy built in, so it can deliver amplification (hearing rehab), sound therapy (tinnitus), or both. Through the Internet with free apps one can support tinnitus-sufferer with online audio and video streaming counselling, also can adjust aids themselves to promote relieve and comfort.

**Results:** The novelty relies on adjusting theirs sound generators through the internet when tinnitus-sufferers need to. It was not ever done before.

**Conclusion:** Aids with sound generator built in adjusted through the Internet promises to deliver a new therapy no matter where the tinnitus-sufferer dwell.

**Keywords:** Hearing aids, patient satisfaction, telemicine, tinnitus, technological development and innovation projects

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**A88. Tomographical Findings In Adult Patients Undergoing Revision Endoscopic Sinus Surgery**
**Jonas Mello, Barbara Batista Baltha, Jan Alessandro Socher**

**Universidade Regional de Blumenau**

**Introduction:** Many patients undergoing functional endoscopic sinus surgery still have uncontrolled clinical disease in the late post-operative period. Studies show that up to 11.4% of the patients will require a revision surgery.

**Objectives:** To describe the tomographical findings of adult patients undergoing revision endoscopic sinus surgery.

**Method:** Data were collected from medical records and computed tomography reports of 28 patients undergoing revision sinus surgery on a private service in Blumenau-SC between 2007 and 2014. The score of Lund-Mackay was used to verify mucosal thickening level.

**Results:** Among the 28 patients, 23 were re-operated once, 3 were re-operated twice, and 2 were re-operated three times. The most relevant findings were mucosal thickening of the maxillary sinus (89.28%), deviated septum (75%), thickening of the ethmoid (50%) and esfenoidal sinus (39.28%) pneumatization of the middle turbinate (39.28%), frontal sinus thickening (28.57%), lateralization of the middle turbinate (10,71%), residual uncinated process (7,14%) and Haller cells (7,14%). The average obtained in Lund-Mackay score was 5.71, with most patients classified in the lower range of punctuation.

**Conclusion:** The analysis of computed tomography scan showed persistent structures that may be responsible for primary surgery failure. Computed tomography is a useful tool to plan the surgery and to quantify the post-operative success.

**Keywords:** Revision endoscopic sinus surgery, Functional endoscopic sinus surgery, Chronic rhinosinusitis, Tomographical findings, Lund-Mackay score

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**A191. Traumatic Cerebral Spinal Fluid Otorrhea: A Case Report**
**Samantha Fernandez de Castro, Tainã Crestani Mistura, Luciele Stockero, Joel Lavinsky, Rodrigo André Soccol, Rafaela Santim Reginatto**

**Santa Casa de Misericórdia de Porto Alegre**

**Introduction:** Ear and nose leakage can be identified by the presence of cerebrospinal fluid inside the ear canal and the nasal cavity. This condition is associated with a higher risk of developing meningitis. The otorhinolaringologist is crucial in diagnosis and treatment of this life threatening condition in order to prevent meningeal infection and its complication.

**Objective:** To present a case of CSF (cerebral spinal fluid) leakage resulting in otorrhea and rhinorrhea.

**Resumed report:** A 52 year man with a history of traumatic head injury 2 years-ago presented with headache, rhinorrhea, hipoacusia and sense of fullness in left ear. At otoscopy left ear effusion could be noted and a deviated septum, nasal polyps and clear rhinorrhea could be seen at rinoscopy. Facial sinus CT evidenced polyposis and deviated septum. The patient was submitted to septoplasty and tympanotomy with myringotomy tube insertion in left eardrum.
He developed persistent clear otorrhea and headache later in that admission. Cisternotomy showed communication between endocraneum and epitympanum. The patient developed signs of meningoradicular irritation and an infected CSF at lumbar puncture. The patient was treated with antibiotics systemic and topic, without complete recovery. It was performed a combined approach (transmastoid and middle fossa) to close the defect using fascia, glue and bone wax.

**Conclusion:** CSF otorrhea is an uncommon complication of head injuries (surgical or traumatic). Its most dreaded complication is central nervous system infection. Persistent cerebral spinal fluid must be evaluated to discard a possible fistula and decide for surgical treatment.

### A597. Tuberculosis of the Middle Ear: A Case Report
Vanessa de Araujo Souza, Eliana Freitas Cardoso, Alexandra Torres Cordeiro Lopes de Souza, Caroline Catherine Lacerda Elias, Pablo de Oliveira Lima, Mariana Azevedo Silva
Hospital Federal de Bonsucesso

**Introduction:** Tuberculosis is one of the major infectious diseases with predominant involvement of lung and lymph nodes, but tuberculosis of the middle ear is uncommon.

**Objectives:** This case report aims to emphasize this important cause of chronic otitis media refractory to usual medical treatment. The diagnosis can often become a challenge because there are no specific clinical features that indicate tuberculosis as the etiological nature of the middle ear disease.

**Resumed Report:** The patient is a 64 year-old, female, with a history of intermittent otorrhoea from her left ear and bilateral hearing loss, worse on the left side, for about nine months. She referred the use of quinolone antibiotics administered topically and orally, with no improvement. She had medical history of pulmonary tuberculosis. Otoscopy revealed left tympanic membrane with a large perforation, and thick otorrhoea; the right side did not show significant changes. After evaluation of hearing loss with audiometry, a temporal bone CT scan showed anatomic impairment of middle ear and mastoid cells secondary to chronic inflammation, and bacteriological studies were negative for bacterial growth. The diagnosis of middle ear tuberculosis was confirmed with the prompt clinical response to the usual therapeutic scheme for tuberculosis with cessation of otorrhea and partial improvement of left sided hearing loss.

**Conclusion:** Middle ear tuberculosis should always be considered in differential diagnosis of chronic middle ear inflammatory disease that does not respond to usual treatment.

### A303. Turbinate Bone And Ear Reconstruction, Is It Possible?
Adriano Sergio Freire Meira, Christiane Kulzer Birck, Yuri Ferreira Maia, Junior Alvaro Vittorino de Pontes, Nelson Jose Barboza Quintino, Thais Eugénio Gomes
Sos Otorrino

**Introduction:** Many techniques have been used in reconstruction of the ossicular chain, prostheses, use of the middle ear bones with variable results in gap resolution.

**Objectives:** The Aim of this summary is to describe a new material that can be used under surgery by a different approach, endoscopic.

**Resumed Report:** Female patient of 19 years with conductive hearing loss presenting gap greater than 30dB, had secondary loss by slap received from her boyfriend, has perforated tympanic membrane with around 70% of area, she had nose obstruction and turbinectomy was done. The surgery was done by endoscopic tympanoplasty approach and the use of turbinate bone, and biological glue as material for disjunction reconstruction were performed under the same endoscopic approach. Turbinate bone was treated and assembled to fit in articulation with the placement of biological glue and then repairing the ossicular movement.

**Conclusion:** Two months after surgery the patient, had full reparations of the tympanic membrane and audiometry examination was performed and revealed the complete closure of the gap and normal hearing. We believe that this cheap and secure way can be used as a new way to do it.

### A105. Tympanic Glomus - Case Report
Pilar Campos Saavedra, Lucas Sieburger Zarro, Aline Araujo Saraiva, Paulo Tinoco, Marina Bandoli de Oliveira Tinoco, Saulo Bandoli de Oliveira Tinoco
Hospital São José do Aai

**Introduction:** Glomus tumors are the most common benign tumor of the middle ear. They are highly vascularized and originate from glomus bodies located in the temporal bone. May occur elsewhere in the head and neck, getting the site name that occurs. Glomus tumors rarely suffer malignant, however, can cause bone erosion. The most frequently associated symptoms are pulsating tinnitus and hearing loss, and others may arise from the site of involvement and or expansion. Diagnosis is made by imaging studies such as CT and MRI. How are bleeding tumors, preoperative angiography and embolization may be required. The tumor is treatable by surgery. Radiotherapy is only a adjuvant treatment.

**Objectives:** Report a case of glomus tympanic occurred at our hospital.

**Resumed report:** GMP; 43 years. Complains of pulsatile tinnitus in my left ear for 01 years. Denies hearing loss and / or other symptoms. Otoscopy: retro tympanic reddish mass. TC: small nodule measuring 3 x 2mm with soft tissue density adjacent to the left cochlear promontory in mesotympanum compatible with glomus tympanic.

**Conclusion:** Patient is currently awaiting surgical approach.

### A82. Upper Respiratory Infections in patients with Cystic Fibrosis – Case Series
Bianca da Silva Vinagre Nascimento, Thais Sampaio Silva, Tassia Milenna Oliveira de Souza, Clara Monica Figueiredo de Lima, Edna Lucia Santos de Souza, Marcus Miranda Lessa
Federal University Of Bahia

**Introduction:** Physiologic conditions of the respiratory tract are modified in patients with cystic fibrosis and it contributes to recurrent upper respiratory infections.

**Objective:** To determine the incidence of upper respiratory infection during 2014 in patients with cystic fibrosis from a reference center in Brazilian northeast

**Methods:** Descriptive study of a case series, with records collection about frequency of upper respiratory infections during 2014 and the period of dornase alfa. Inclusion criteria were the previous diagnosis of cystic fibrosis.

**Results:** It was collected data of 21 patients, 52,4% female. Mean age was 11 years (± 4,62). The mean frequency of upper respiratory infections was 1,09 ± 1,04 per year. Among these patients, 61,9% were using dornase alfa. It wasn’t found data about this drug using in 5 patients records. And among those who were not using (3), 2 patients (66,7%) presented 1 upper respiratory infection episode.
Conclusion: Frequency of Upper Respiratory Infection in children is 6 to 8 per year, according to Brazilian studies. The advances on cystic fibrosis treatment can be a possibility to explain the similar frequency of upper respiratory infection among these patients and the general pediatric population.

Keywords: Cystic fibrosis, Upper Respiratory infections

A462. Vagal Paraganglioma - Case Report And Literature Review
Laura Schwartz Maranho, Vinicius Ribas Fonseca, Gustavo Ferreira Bernardi
Hospital da Cruz Vermelha - Filial do Paraná

Introduction: paragangliomas (PG) are rare tumors, highly vascularized, which originate in derived neural crest cells associated with the autonomic nervous system. The vagal PG are neoplasms that account for less than 2.5% of all PG head and neck.

Objectives: to report a case of vagal paraganglioma with preoperative embolization, followed by surgical excision. Having a complication dysphonia due to paralysis of the left vocal fold, and subsequent medicalization through thyroplasty type 1 Isshiki.

Resumed report: 54, male, sought Oncology service because of the left cervical tumor on the medial side of the sternocleidomastoid muscle, no other complaints. On physical examination, tumor of soft and elastic consistency, painless, measuring about 05 cm. The first hypothesis was vagal paraganglioma. Preoperative embolization was performed. Anatomic control showed deleting almost the entire lesion. The pathology confirmed the diagnosis of vagal paraganglioma. After 20 days of surgery, presented dysphonia complaints, choking, hoarse voice/breathy moderate to severe. Videolaryngoscopy diagnosed left vocal fold paralysis. After speech therapy right vocal fold has reached the limit in terms of coaptation, decided to have thyroplasty type 1 Isshiki. After one month, the patients presents clear and satisfactory voice.

Conclusion: in paraganglioma, the treatment is surgical and may needed preoperative embolization. Among the surgical complications, nerve injuries are the most common (40% of cases). If there is a complication unilateral vocal fold paralysis, type I thyroplasty become the procedure of choice.

A585. Vestibular Evoked Myogenic Potential, Video Head Impulse Test and Nystagmography: Diagnosis, Prognosis and Evolution of the Superior Vestibular Neuritis - Case Study
Pedro Luis Coser, Valdete Alves Valentins dos Santos Filha, Luciele da Silva Prates, Thalisson Francisco Finamor da Silva
Universidade Federal de Santa Maria

Introduction: The diagnosis of Vestibular Neuritis (NV) Acute requires objective findings, indicating complete or partial unilateral loss of vestibular function2 and, usually, affects the Superior Vestibular Nerve (SVN) more severely than inferior fibers branch 1.

Objectives: To present the NV progress during 45 days through Nystagmography, Video Head Impulse Test (vHIT) and Ocular and Cervical Vestibular Evoked Myogenic Potentials (oVEMP and cVEMP).

Resumed Report: Female, 32 years old, with sudden dizziness, constant nausea and imbalance, evaluated by the tests mentioned above, at the first few hours, 4th Day, 8th day and 45th day after the onset of symptoms. The first evaluation: Nystagmography with presence of spontaneous nystagmus to left (eyes closed), Rotatory Chair Test (RCT) with directional predominance (100%) to right and right Labyrinthine Predominance (LP) of 60% in caloric test, normal vHIT and VEMPs. 4th Day: vHIT Lateral and LeftAnterior Semicircular Canal (CSC) dysfunction, oVEMP absent to the left and normal cVEMP. 8th Day: normal vHIT and oVEMP present with increased latency. 45th Day: no symptoms, tests normalized except caloric test, with Left Hyporeflexia and right LP (60%).

Conclusion: vHIT and VEMPs allow the differential diagnosis between Neuritis of SNV, Inferior or both. The nystagmography detected acute peripheral vestibular dysfunction early, in few hours of symptoms, while vHIT and VEMPs were normal. The vHIT and oVEMP normalized with the reduction of vestibular symptoms and caloric test persisted changed with complete remission of symptoms and RCT normalization.

Keywords: Vertigo, Vestibular Neuritis, Video Head Impulse Test, Vestibular Evoked Myogenic Potential, Electronystagmography

A1721. Vestibular Rehabilitation With Virtual Reality In Spinocerebellar Ataxia
Laura Schwartz Maranho, Juliana Cristina Mesti, Vinicius Ribas Fonseca, Bianca Simone Zeigelboim, Helio Afonso Guizoni Teive
Hospital da Cruz Vermelha

Introduction: The spinocerebellar ataxias (SCA) are a heterogeneous group of neurodegenerative diseases that are characterized by progressive cerebellar ataxia and their first clinical manifestations are balance and coordination deterioration besides eye disorders.

Objective: To verify the benefits of the vestibular rehabilitation (VR) with virtual reality through the assessment before and after the application of the Berg Balance Scale (BBS) in four cases of spinocerebellar ataxia (SCA).

Methods: The cases were underwent the following procedures: anamnesis, ear inspection, vestibular assessment and application of the BBS before and after VR with virtual reality using games from Wii Fit device. The cases describes four patients that were diagnosed with genetically inherited, three of them were female and one was male, with ages ranging from 30 to 62 years.

Results: the patients presented otoneurological symptoms and the vestibular test showed the presence of spontaneous nystagmus, absence of post-rotational nystagmus, hyporeflexia, and asymmetric directional preponderance of the nystagmus in the caloric test. Patients from cases 1 and 2 have showed an improvement in motor coordination and in body balance, even though the score presented by the BBS had demonstrated medium risk for falling before and after the exercises. In case 3, the patient’s loss of balance and BBS score have improved, presenting low risk of falling; whereas the patient in case 4 did not show any improvement in the assessment after the exercises.

Conclusions: This case study shows the applicability of VR exercises with virtual stimuli in SCA with improved motor coordination and postural balance.

A444. Video Head Impulse Test in Pilots of Brazilian Aeronautical: Preliminary Results
Natalia Martinez Fernandes, Thalisson Francisco Finamor da Silva, Pedro Luis Coser, Valdete Alves Valentins dos Santos Filha
Universidade Federal de Santa Maria

Introduction: Integrity of the Vestibulo-ocular Reflex (VOR) is essential for Pilots, as their career requires a functional vestibular system. Pressure changes during flight can
initiate disturbances within the human body, therefore physiological dysfunction prevention is essential for labor activities. The Video Head Impulse Test (vHIT) aims to assess the VOR via eye movement responses to head impulses, in turn detecting possible malfunctions of the six Semicircular Canals, independently.

**Objective:** Determine the parameters of vHIT responses in Pilots from the Brazilian Aeronautical, located in Santa Maria - RS.

**Methods:** Eleven male pilots, aged 28-56 years were evaluated. All underwent vHIT, computerized ICS Impulse, using goggle with high resolution and speed camera that obtains eye movement response to head impulses in the lateral planes, RightAnterior-LeftPosterior (RALP) and Left-Anterior-RightPosterior (LARP). It was used as values of speed: 100-250°/sec for lateral impulses and 50-200°/sec for vertical impulses.

**Results:** The mean values of gain for right and left lateral CSC, right anterior, left posterior, left anterior and right posterior were: 1, 0.95, 0.98, 0.94, 0.97, 0.92, respectively, with a standard deviation: 0.07, 0.05, 0.07, 0.09, 0.12, 0.096. The symmetry was 2% compared to the synergistic pairs (CSC laterals, RALP and LARP) of left and right ears, with a standard deviation of 0.018, 0.028 and 0.035, respectively.

**Conclusion:** The vHIT contributes to technological upgrading, by the assessment of horizontal and vertical CSC. Evaluation of specific populations is necessary for early detection of vestibular disorders.

**Keywords:** Neurotology, Vestibular Function Tests, Aerospace Medicine, Video Head Impulse Test
Speech, Language and Hearing Sciences

A106. Accessibility of the Dangerous Decibels® Educational Program for Low-Vision And Blind Adolescents: Initial Assess
Letícia Maria Malandrin da Silva, Kella Alessandra Baraldi Knobel
Universidade Estadual de Campinas

Introduction: Hearing is considered to be the main sensory input for vision impaired persons when it relates to communication and to danger signs awareness. Nonetheless, to the best of our knowledge, there are no conservation programs accessible for this population.

Objectives: To develop and to evaluate adjustments on the Brazilian version of the Dangerous Decibels® that could provide accessibility for low-vision and blind adolescents.

Methods: Literature review and exploratory research. The only part of the Dangerous Decibels educational program that needed adjustments were the “how do we hear” part. For the ear anatomy authors used a detailed 3x life size representation of the ear (commercially available). Authors developed and constructed two different materials to explain the organ of Corti, considering tactile and visual approaches that include the use of texture and color contrast: (i) a 3D model made basically with felt, polyester filling, false eyelashes and glue; and (ii) a high relief draw made with colored glue. Five adolescents (13 to 19 years old) with visual impairment attended to an accessible Dangerous Decibels educational program and were asked to judge the degree of accessibility of the presented materials.

Results: All participants considered that they could understand all the components of the Dangerous Decibels educational program. Low-vision participants preferred visual resources other than the tactile ones.

Conclusion: Though minor, the adjustments related to the presentation of the hearing system promoted the accessibility to vision impaired adolescents.

A683. Acoustic and Tactile-Kinaesthetic Analysis before and After Continues Speech Test in Healthy Elderly
Yara Helena Rodrigues, Gleidy Vannesa Espitia Rojas, Lilian Neto Aguiar Ricz
Faculdade de Medicina de Ribeirão Preto

Introduction: The process of aging of larynx, related to continuous use of voice, generate many questions, as this can trigger vocal fatigue, or if there is or not changes on self-perception auditory and tactile-kinaesthetic, and in the acoustic measurement of voice individual signal.

Objective: Analysis and compare vocal acoustic measure and self-perception tactile-kinaesthetic on elderly women without vocal modification before and after the continuous speech test.

Method: There were twenty-one women with an average age of 70 years. An analysis was performed of vocal acoustic measure pre and after the continuous speech during one hour, using MDVP-Adv KayPentax® software and self-evaluation perceptual-auditory and tactile-kinaesthetic measure. The statistic analysis of data was realized according t-Student Test to quantitative paired data.

Results: On the self-evaluation perceptual-auditory and tactile-kinaesthetic it showed significant differences after prolonged use on the voice symptoms as hoarseness, dry throat feeling, breaks in the voice, difficulty speaking, high voice, greater effort to speak, pain when swallowing saliva, more weakly voice, tired to talk and need to cough or clear her throat. Related to analysis of fundamental frequency of vocal acoustic measure (F0/Hz), phonation range F0 semitones (PFR), average relative perturbation (RAP (%), pitch perturbation quotient (PPQ /%), shimmer (%), of disturbance amplitude (APQ %), and harmonic-noise ratio (NHR /db) did not have significant differences pre and after the test.

Conclusion: The increase of significance perception of symptoms concludes that, perhaps, acts as protective laryngeal acts, informing that the realized test is requiring more work of laryngeal intrinsic muscles.

A270. Acoustic Impedance Measurements Using Different Tones Tests: Correlation with the Findings of Electroacoustic Exams
Gabriela Roberta Coan, Maria Sarah Tristão Ferraz, Mabel Gonçalves Almeida, Aline Neves Pessoa-Almeida
Universidade Federal do Espírito Santo

Introduction: The early diagnosis of hearing loss involves the use of procedures which, when combined, can provide an accurate diagnosis. Among these procedures, the acoustic impedance is a widely used tool in clinical practice in assessing middle ear abnormalities that can be used for different frequency tones. However, in many cases, tympanometry alone does not provide sufficient information for a differential diagnosis, it is used in conjunction with other procedures, such as otoacoustic emissions.

Objective: To describe results of immittance with test tones of 226 Hz, 678 Hz and 1000 Hz and compare the findings of Transient Evoked Otoacoustic Emissions in adults.

Method: Adults of both genres were evaluated, aged from 19 to 58 years old and with normal hearing. All participants were submitted to the following procedures: audiometry, immittance with test tones of 226 Hz, 678 Hz and 1000 Hz and Transient Otoacoustic Evoked Emissions. Descriptive analysis was compared according to the type of test tone, genre and ear. The results of the acoustic immittance for admittance measurement were compared with the Transient Otoacoustic Evoked Emissions outcomes. The results of Tympanometry and Transient Otoacoustic Evoked Emissions they were compared, being established specific measures, negative predictive value and accuracy.

Results: higher absolute values for admittance were found for the 678 Hz curve. The admittance in 226 Hz was more specific and accurate.

Conclusion: the 226 Hz probe tone test showed higher specificity and accuracy for the population studied, however, these results cannot be generalized.

Keywords: Hearing; Audiometry; Acoustic Impedance Tests

A553. Acquisition of Initially Stabilized Phonemes in the Phonological System Compared to Phonological Disorder of Medium Degree of Speech Intelligibility and Auditory Processing Altered in a Case Report
Kariny Zencke da Silva, Laura dos Santos Abon Zahr, Bruna Santos Sant’Anna, Rayane Abreu do Nascimento, Juliane Wagner, Leticia Pacheco Ribas
Universidade Federal de Ciências da Saúde de Porto Alegre

Introduction: Many studies try to associate the Phonological Disorder with Auditory Processing. It is known that alterations of certain phonemes may be associated with altered skills in evaluating this in the typical acquisition of phonological system.
Objective: To report a case of a child with Phonological Disorder with medium degree of speech intelligibility and Auditory Processing difficulties. Resumed Report: Quantitative-descriptive study approved by the CEP 995 344. From a Database with speech therapy evaluations of children diagnosed with Phonological Disorder. It was used the following inclusion criteria: having medium degree of speech intelligibility, have not been stabilized at least one of the first phonemes to be acquired by children / p, b, t, d / and nasal, and have all Auditory Processing tests of the complete database: SSI (Synthetic Sentence Identification), Digits Dichotic (DD), SSW (Staggered Spondiac Word), PPS (Pitch Pattern Sequence), MLD (Masking Level Difference), RGDT (Random Gap Detection Test) and GIN (Gaps In Noise). The only child with these criteria were male, 9 years old, having stabilized the dorsal nasal in their phonological system and still not having much of onset complex. Auditory Processing tests that were altered are: MLD, DD, SSW and PPS. Conclusion: Even children with Phonological Disorder of medium degree of speech intelligibility may have initially acquired phonemes not stabilized. In the case reported, according to Auditory Processing, the child shows alterations in interaction skills and binaural integration, directed attention, recognition / identification and temporal sequencing. Keywords: Phonological Disorder; Acquisition Language; Auditory Processing

A256. Analysis of Auditory Perception of Vocational College Students
Luciele da Silva Prates, Isabela Schroer Neis, Valdeate Alves Valentins dos Santos Filha, Gicélia Barreto Nascimento, Marília Tresivan Sonego
Universidade Federal de Santa Maria

Introduction: Normal hearing, acoustic comfort in the classrooms and in the laboratories are primary factors for sustained attention, storage of information, and therefore the learning of students, which are exposed to noise in several fields generators. Objectives: To analyze the self-perception of students that are in vocational college about the hearing itself, the environment they're exposed to noise and the bothering caused about noise also the auditory symptoms and extra-auditory. Methods: It's a descriptive study. The sample is about 32 students, that are 56.25% women and 43.75% men, the mean age is 26 years. The sample answered a questionnaire about the auditory perception and issues related to noise. Results: In relation to the auditory perception, 23 (71.88%) of the sample reported that they have good hearing and nine (28.12%) a reasonable hearing. All pointed to work environment with some degree of noise, with 45.71% referring not to be bothered with noise exposure; 44.42% mentioned a nuisance bothering an 9.87% are bothered by noise. About complaints reported, 31.24% have tinnitus; 37.5% migraine; 43.75% stress; 37.5% lack of attention; 21.88% fatigue; 12.4% anxiety and 6.25% dizziness, which are isolates or concomitant. In addition to this, 84.38% of the students reported they have knowledge about auditory and extra-auditory effects induced by exposure to noise. Conclusion: The data from the self-perception of the vocational college students showed up significant to the understanding for the auditory characteristics, and the importance of the auditory and extra-auditory effects caused by the noise.

A57. Analysis of Otoacoustic Emissions Responses and Abr Latencies in Infants with Asphyxia
Georgea Espindola Ribeiro, Daniela Polo Camargo da Silva, Jair Cortez Montovani
Faculdade de Medicina de Botucatu

Introduction: The newborn hearing screening allows to detect the hearing loss early in newborns, especially in those with risk factors. Objective: To investigate the effect of "low Apgar score" (Apgar 0-4 in the first minute and / or less than 6 in the fifth minute of life) and of the perinatal asphyxia in the transient evoked otoacoustic emissions (TEOAE) and auditory brainstem response (ABR) performance. Method: The study was conducted in a public hospital. The sample was consisted of 181 infants who had result "pass" in TEOAE and with all ABR parameters. They were divided into 3 groups: G1 with 20 infants who had perinatal asphyxia, G2 with 111 infants with only "low Apgar score" at birth and G3 with 50 infants who had Apgar score 1 and 5 minutes. Results: The TEOAE amplitude in G3 showed higher values when compared to G1 and G2 especially in the frequency of 4 kHz for males. No differences were found in female infants. Also in male infants was observed increased latency of waves I and III bilaterally in the G1 group. Conclusion: The TEOAE was reduced in infants who suffered asphyxia or low Apgar and differences in ABR latencies show that these infants may have injuries not only in cochlear outer hair cells but also as in the auditory pathway.

A317. Analysis of Outcome Indicator of Speech Therapy in Tracheostomized Patients: Time Until Decannulation
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Universidade Federal do Rio de Janeiro

Introduction: Studies show that prolonged tracheostomy may favor several late complications, so the decannulaton process is of great importance in the rehabilitation of critically ill patients. Objectives: To analyze the outcome indicator of speech therapy - time until decannulation and the correlation between it and the clinical conditions of tracheostomy patients in a university hospital. Methods: Retrospective analysis of medical records of hospitalized patients who underwent speech therapy between March 2012 and October 2014. The variables analyzed were: age, sex, underlying disease, number of speech therapy sessions, speech therapy time, length of stay, time of tracheal tube, tracheostomy time, respiratory support, nutritional support, functional oral intake scale, severity of dysphagia, speech and language disorders and clinical complications. Results: 34 patients were decannulated (18 women and 16 men). The decannulation rate was 65.4%. The median time until decannulation was 20 days (interquartile range: 10-31). Significant association was observed between the time until decannulation and the variables: length of stay (r = 0.6), tracheostomy time (r = 0.6), number of speech therapy sessions (p = 0.05) and time of speech therapy (p = 0.05). There were significant differences between time of decannulation and respiratory disease (p = 0.009) and degree of dysphagia (p = 0.05). Conclusion: The mean time of decannulation in the patients was 25 days. The conditions related to the time until decannulation were: respiratory disease, dysphagia, number of speech therapy sessions and speech therapy time. Keywords: Qualify indicator; health care; Deglutition disorders; Speech Therapy; Tracheostomy
A442. Analysis of Temporal Resolution in Elderly Patients With Sensorineural Hearing Loss
Vânia Carolina Devitte Ruiz, Monique Rolim Sequeira, Andressa Ortiz Birck, Maria Inês Dornelles da Costa Ferreira, Thais de Sena Teixeira
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Introduction: The auditory temporal processing involves the ability to process aspects of the changing temporal characteristics. The elderly suffer with the decrease of this ability and are commonly affected by hearing loss, signed by the difficulties of discrimination.

Objectives: To assess the temporal auditory processing in patients with sensorineural hearing loss.

Methods: The sample included the participation of 52 elderly, over 60 years with sensorineural, bilateral, symmetrical and mild to moderately severe hearing loss, users of the Unified Health System, referred to the hearing aid sector of Centre health Clélia Manfró - Hearing Unit. Patients were assessed through the test Random Gap Detection Test (RGDT).

Results: The mean frequency of the pure tone air conduction audiometry - 500Hz, 1000Hz and 2000Hz - held in both ears, was compared with the result of RGDT. The comparative analysis showed no statistical significance for the right ear ($p = 0.164$) and a trend of correlation for the left ear ($p = 0.056$).

Conclusion: There was no significant relation between the temporal resolution of measurement and the degree of hearing loss, revealing that this ability is not directly influenced by the degree of hearing loss.

A4706. Analysis of the Main Characteristics of Patients with Vestibular Hypерreflexia
Midiane de Oliveira Soares, Carolina Kalil, Bárbara Niega Garcia de Goulart, Edson Ibrahim Mitre
Universidade Federal do Rio Grande do Sul

Introduction: Hypereflexia can be associated to a central or peripheral vestibular diseases and refers to the caloric induced nystagmus that exceeds the bounds of normality. Purpose: To analyze the main characteristics of patients with vestibular hyperreflexia.

Methods: We analyzed the records of history from 2010 to 2011 for patients diagnosed with vestibular hyperreflexia two clinics in Porto Alegre (RS). All information provided during the interview were transcribed to a database and transcribed to the Statistical Package for Social Sciences (SPSS), version 19, where the analyzes were performed. Collected the data of individuals regarding age, gender, dizziness and/or vertigo, associated symptoms, health history in general and diagnosis of the vestibular hyperreflexia bilateral or unilateral.

Results: The sample consisted of 264 individuals of both genders and aged between 17 and 76 years. We observed a higher frequency of dizziness (53.8%) and nausea (51.5%), increased frequency of symptoms in the group with bilateral vestibular hyperreflexia. The action of moving the head is the most reported as a cause of symptoms of dizziness and/or vertigo (75 people). The unilateral vestibular hyperreflexia was present in 99 subjects and bilateral hyperreflexia in 164 individuals. Observed a higher frequency of symptoms reported in the group of individuals diagnosed with bilateral vestibular hyperreflexia.

Conclusion: The main characteristics analyzed were the presence of symptoms such as dizziness, nausea, vertigo, tinnitus, headache, vomiting and imbalance. The symptoms were more frequent in patients with bilateral vestibular hyperreflexia, aged 45 to 59 years.

Keywords: Electrophysiology, Vestibular diseases, Dizziness, Vertigo, Labyrinth Diseases

A32. Analysis of the Relationship Between the Time of the Tinnitus Perception and Scoring in Tinnitus Handicap Inventory
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Introduction: Tinnitus can be caused by otologic and extra-otologic factors. In the assessment of a patient, extremely useful rating scales may be applied. The rating scales allow professionals to analyze the impact of symptoms on daily activities undertaken by affected individuals. One of the world’s most used is the Tinnitus Handicap Inventory (THI).

Objective: The objective of this study is to analyze the relationship between the time of the tinnitus perception and the THI score. Methodology: Individuals of both genders were included in the sample of this study. All subjects suffered from tinnitus and responded to an interview where relevant data was investigated, including the time of the perception of the symptom and THI scale. The results were statistically analyzed using Spearman’s correlation test. The project was approved by the Institutional Ethics Committee.

Results: The sample consisted of 688 subjects, 62.5% males and 37.5% females, aged between nine and 89 years (mean 59.24 ± 12.73 years). The tinnitus symptom time varied between three months to 61 years (mean 6.29 ± 6.61 years). The THI score ranged between zero and 100 points (average 43.14 ± 25.65 points). Statistical analysis showed no significant correlation between the time of the perception of tinnitus and the THI score ($p = 0.167$).

Conclusion: The data analysis showed that the time of tinnitus perception does not influence the impact caused by it.

Keywords: Tinnitus, Questionnaires, Audiology

A712. Association between chronic obstructive pulmonary disease and dysphagia: A Systematic Review
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Introduction: Chronic Obstructive Pulmonary Disease (COPD) is associated with limiting airflow that is progressive and irreversible, with consequent impact on breathing. Oropharyngeal dysphagia is a symptom related to any change in the act of swallowing. The coordination of swallowing and breathing events prevents pulmonary aspiration.

Objective: To determine the association between COPD and oropharyngeal dysphagia.

Data Synthesis: Systematic review was conducted in the databases MEDLINE / PubMed, SciELO and LILACS, using the keywords chronic obstructive pulmonary disease and dysphagia. Published articles were selected from 2000 to 2015. Four articles met the inclusion criteria: Kobayashi, Kubo and Yanai (2007) evaluated patients with chronic obstructive pulmonary disease and demonstrated impairment of the swallowing reflex. O’Kane and Grocher (2009), concluded that patients with exacerbated disease had oropharyngeal dysphagia. Chaves et.al. (2011) found that patients with Chronic Obstructive Pulmonary Disease showed significance complaints for swallowing difficulties, however, in another study (Chaves et.al., 2014), showed that videofluoroscopy
findings did not evidenced aspiration and penetration in any of the tested consistency.

**Conclusion:** Despite the relevance of dysphagia symptom in patients with chronic obstructive pulmonary disease, only a few studies investigate this association. The available studies support the conclusion that patients with chronic obstructive pulmonary disease have dysphagia complaints, however videofluoroscopic evaluation showed no direct commitment in the stages of oropharyngeal and pharyngeal swallowing. Therefore, studies about this association should be expanded.

**Keywords:** Dysphagia; Chronic Obstructive Pulmonary Disease, Speech therapy

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**A432. Association Between Clinical Picture of Cerebellar Mutism and Dysphagia in Children: Case Report**

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**Introduction:** The mutism is facing extreme dysarthria, aphasia or anarthria Broca type. Its etiology is manifold, including head trauma, vascular processes, psychosis and tumor resection surgeries. The mutism can occur by injury of structures adjacent to the inner worm injury.

**Objectives:** Report an association of clinical case cerebellar mutism and dysphagia in children.

**Resumed Report:** Girl, 4.5 years, with posterior fossa tumor relapse - pilocytic astrocytoma grade 1 in the cerebellum, with cerebellar lesion and psychomotor agitation, initial dysarthria and dysphagia, requiring sedation. The persistence of symptoms triggered cerebellar mutism framework and evolution of severe dysphagia, requiring feeding alternative route. The speech therapy intervention at the bedside accompanied worsening and evolution of the framework for full recovery in 57 days. The patient was X therapeutic sessions during this period, being held sensory stimulation and reintroduction of oral feeding, and guidance to families. Study approved by CEP:467.673.

**Conclusion:** Speech difficulties, mutism, dysphagia and intense emotional lability signs are described in the literature after resection of cerebellar vermis tumors in children. The silence of the installation time varies and may be observed soon after the surgical process, hours or days after surgery, disappearing between 4 days and 4 months after its inception. The case report shows the commitment to recurrence and subsequent resection of the tumor, with severe degree, and the importance of speech therapists in action at the bedside.

**Keywords:** Deglutition Disorders; Dysarthria; Mutism

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**A296. Association Between Neurological Injury and Impaired Swallowing in Patients After Stroke**

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**Introduction:** Oropharyngeal dysphagia (OPD) is a difficulty swallowing that may hinder one's ability to ingest food. The OPD has a high incidence after stroke, the leading cause of mortality related to respiratory complications and malnutrition.

**Objective:** To verify impairment of the swallowing process after stroke, associating the degree of impairment with the severity, type of stroke, and localization of the neurological injury.

**Methods:** Cross-sectional descriptive study of 42 patients diagnosed with stroke hospitalized in the Neurologic Department of the Irmandade Santa Casa de Misericórdia de Porto Alegre (ISCMPA â€“ Brazil / RS) during the period of January to August 2013. The Research Ethics Comittee of the ISCMPA approved the study, under protocol number 41354/12. All individuals underwent a neurological clinical evaluation and application of the National Institute of Health Stroke Scale (NIHSS), chart review and clinical Speech Language Pathologist (SLP) evaluation â€“ application of the Functional Oral Intake Scale (FOIS) and Investigation of Oropharyngeal Dysphagia in Adults Protocol.

**Results:** 52.4% of the patients were women, with an average age of 65.7 years; 92.9% presented ischemic stroke; 59.5% presented impairment of the anterior cerebral circulation. There was a statistically significant association between the neurological scale (NIHSS) scores and the swallowing impairment scale (p = 0.016).

**Conclusion:** There is an association between the stroke severity and the swallowing disorder. There were a high proportion of patients with severe oropharyngeal dysphagia who presented ischemic stroke with impairment of the anterior cerebral circulation as location area of neurological injury.

**Keywords:** Stroke; Deglutition Disorders; Neurologic Examination

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**A638. Association of Hearing and Extra-Auditory Complaints to the Use of Headphones in Adolescents**

Karla Anacleto de Vasconcelos, Jonathan Grassi Rodrigues

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**Introduction:** In the last ten years, everyone has had access to portable audio equipment and verify if after speech therapist guidance the participants associate those complaints to the use of headphones.

**Objectives:** To verify complaints of hearing and extra-hearing in teenagers users of portable audio equipment and verify if after speech therapist guidance the participants associate those complaints to the use of headphones.

**Methods:** Cross-sectional study, approved by the CEP / UFES (n°237.295). 182 teenagers users of portable audio equipment participated. They answered a questionnaire specifically developed for this study, at two different times: 1 time (M1) and time 2 (M2), before and after the speech therapist guidance.

**Results:** Participants had an average age of 14 years and 55.5% were female. In M1 and M2, respectively, the following signs have been identified: hearing damage caused by volume and, although they recognize the hearing damage resulting therefrom, do not know how to identify the signs and symptoms of these losses.

**Objective:** Investigate the frequency of reports of hearing and extra-hearing complaints in teenagers users of portable audio equipment and verify if after speech therapist guidance the participants associate those complaints to the use of headphones.

**Methods:** We conducted an intervention study, approved by the CEP / UFES (n°237.295). 182 teenagers users of headphones participated. They answered a questionnaire specifically developed for this study, at two different times: 2 times (M1) and time 2 (M2), before and after the speech therapist guidance.

**Results:** Participants had an average age of 14 years and 55.5% were female. In M1 and M2, respectively, the following signs have been identified: listening to TV at higher volume than the other family members (21.4% - 29.9%); frequent difficulty of understanding speech (34.1% - 29.9%) and clearly better hearing in one ear (13.7% - 21.9%). The symptoms reported were: ear fullness (18.1% - 22.4%); tinnitus (22.0% - 28.8%); headache (22.0% - 24.0%) and frequent irritation or nervousness (18.7% - 19.3%). Participants that did not report any sign or symptom (29.9% - 45.5%). Regarding the association of complaints to the use of headphones, the number of participants who recognize this association remained the same in the two moments (47.6%), but the percentage of participants who did not recognize the symptoms reduced to the value (14.2% - 8.2%).

**Conclusion:** Teenagers have limited knowledge about the signs and symptoms related to inappropriate use of headphones.
A439. Association of Tinnitus, Dizziness and Audiometric Findings in Adult Subjects
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Introduction: Many times what leads the individual to seek an evaluation with an otolaryngologist or audiologist is the existence of some symptoms related to the auditory system (such as tinnitus and dizziness) that may or may not be related to hearing loss. The study of the audiological profile, relating it to the auditory complaints, becomes an important epidemiological tool for searching and defining new health policies, as well as assisting in medical diagnosis and, consequently, the development of new techniques for auditory rehabilitation.

Objective: To associate the prevalence of tinnitus and/or dizziness complaints to audiometric findings of subjects assisted in a philanthropic hospital. Methods A retrospective study, through analysis of medical records of 554 individuals, assisted at the audiology department of a philanthropic hospital in Porto Alegre/RS.

Results: Significant associations were found between complaining of tinnitus and complaining of dizziness (p < 0.001). Relating to gender, women reported having more dizziness than men (p = 0.002). Significant associations were found between the absence of tinnitus and normal hearing, as well as between mild hearing loss and the presence of tinnitus (p = 0.006). Regarding the type of hearing loss, the association was significant between the conductive hearing loss and unilateral ipsilateral tinnitus, hearing loss neurosensorial with bilateral tinnitus and no loss and no complaint (p = 0.001).

Conclusion: It was found significant association between hearing complaints - dizziness and tinnitus - to the audiometric findings, allowing a more accurate diagnosis to establish the best therapeutic approach.

Keywords: Tinnitus; Dizziness; Audiometry, Pure Tone

A96. Audiologic Findings in Patients with Richieri-Costa-Pereira Syndrome
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Introduction: Richieri-Costa-Pereira Syndrome is an acrofacial dysostosis characterized by microstomia, micrognathia, cleft palate, Robin sequence, absence of lower central incisors, minor ear anomalies, limb defects, laryngeal anomalies and learning disability. In Brazil, 32 cases of this syndrome were described and one study focused on hearing status was performed. The authors reported conductive hearing loss in 5 of 9 studied patients, probably related to the cleft palate. Literature is sparse regarding hearing disorders in this syndrome.

Objective: To describe audiological findings of 10 patients diagnosed with Richieri-Costa-Pereira syndrome.

Methods: Medical records of 10 individuals with Richieri-Costa-Pereira Syndrome, enrolled at the Hospital for Rehabilitation of Craniofacial Anomalies (HRAC-USP), previously submitted to audiological assessment, were reviewed. Tonal and vocal audiometry and tympanometry were performed and hearing antecedents obtained by experienced audiologists of the Speech and Hearing Division of HRAC-USP.

Results: Normal results in all tests was found in only 20% of patients. Hearing and/or otological complaint was present in 70%. Audiometric evaluation showed that 40% of patients had normal thresholds in both ears. Considering the patients with abnormal audiometry, 50% had unilateral conductive hearing loss, 33% unilateral mixed hearing loss and 17% bilateral conductive hearing loss. Tympanometry was performed in 9 patients and 2 of them presented the normal type A curve in both ears. Type B curve was the most common (44%).

Conclusion: Patients with Richieri-Costa-Pereira syndrome have a high prevalence of hearing disorders and an appropriate hearing screening protocol for these patients should be part of a multidisciplinary treatment protocol.

A700. Audiological and Psychological Considerations on Diabetes Mellitus Type I: A Case Report
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Introduction: Diabetes mellitus 1 (DM1) is a disorder of metabolic, vascular and neuropathic complications, in which associated hearing loss may occur, compromising peripheral and/or central hearing areas. It changes the individual’s daily activities and is influenced by emotional factors, becoming a risk factor for the development of psychological disorders.

Objective: To describe the case of a patient with DM1 and hearing impairment, emphasizing the importance of audiological and psychological attendance.

Resumed Report: Patient [M.S.J], 23-year-old male diagnosed with insulin-dependent DM1 at the age of 2, complains of vertigo, comprehension difficulty, anxiety and slowness in information processing. Audiological evaluations revealed mild to moderate sensorineural hearing loss. Inconsistencies on several electrophysiological exams and audiometry were observed, showing variations in the presence of transient and distortion-product otoacoustic emissions bilaterally and with Auditory Brainstem Response indicative of retrocochlear alteration. A CT scan was performed, showing normal results. The vectorelectronystagmography indicated vestibular dysfunction, and the possibility of associated central impairment was raised due to constant rotational oculomotor eye movements. The auditory handicap evaluation questionnaire revealed severe self-perception of participation restriction. Psychological evaluation identified vulnerability, low self-esteem, insecurity, fear of abandonment, anxiety, emotional lability and irritability, indicating psychological and/or psychiatric disorders associated with the disease and its confrontation, confirmed in verbal reports of the patient.

Conclusion: Early diagnosis of diabetes is essential to prevent the development of complications and possible associated hearing loss. It highlights the importance of audiological and psychological attendance on improving the quality of life of these patients.

Keywords: Hearing Loss; Diabetes Mellitus; Psychology

A123. Audiological Assessment in Young Users of Personal Stereos with Tinnitus
Moniane Aparecida Sumera, Vitor Della Rovere Binhardi, Isabella Bonamigo da Silva, Ariane Barros Oliveira, Ana Claudia Vieira Cardoso
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Introduction: Young adults hearing has been a constant source of concern to health professionals considering the
habits of these young people, who in their leisure time, attends noisy environments and use personal stereos.

**Objectives:** To characterize and compare the audiological profile of individual users or not of personal stereos, with and without tinnitus.

**Methods:** Descriptive, comparative and cross-sectional study, conducted in a public university clinic. The sample consisted of 60 individuals of both genders, aged between 18 and 30 who were divided into four groups according to the use or not of personal stereos and the presence or absence of tinnitus. The evaluation consisted of the following procedures: interview, visual inspection of the external auditory canal, pure tone audiometry, tympanometry and distortion product otoacoustic emissions.

**Results:** The analysis showed that on the four groups studied the audiometric thresholds were within normal limits but showed a worsening in the frequency of 6000 Hz bilaterally and distortion product otoacoustic emissions were absent in the frequency of 1000 Hz bilaterally. Statistical analysis showed no difference between the results of these two tests in the groups evaluated.

**Conclusion:** Although this population have harmful hearing habits, there was no change in hearing of these young people due to the use of personal stereos and tinnitus.

**Keywords:** Tinnitus, Young Adult, Habits, Hearing.

A417. **Audiological Findings in Individuals with 22q11.2 Deletion Syndrome: A Systematic Review**

**Bibiana Fuzer da Silva, Rafael Fabiano Machado Rosa, Paulo Ricardo Gazzola Zen, Pricila Sleifer**

*Universidade Federal do Rio Grande do Sul*

**Introduction:** 22q11.2 deletion syndrome, also known as DiGeorge, velocardiofacial syndrome or CATCH22, was identified in the beginning of the 1990 decade and currently is one of the most common human genetic microdeletion syndromes.

**Objective:** Conduct a systematic review of the literature trying to identify studies that report audiological findings in patients with 22q11DS. Data sources: MEDLINE, LILACS, BIREME (SciELO e BBO) databases, were searched for the last five years, with the following descriptors “hearing loss”, “hearing”, “22q11.2”, “velocardiofacial syndrome” and “CATCH22”. For this review, we excluded: theoretical review, letter to the editor and case study. After analysis of the articles, we considered the following: objective of the study, year of publication, study design, characteristics of the sample (number, gender and age of the participants), hearing evaluation type used, results and conclusions.

**Data Synthesis:** Of the eighteen studies found, six met the inclusion criteria. Most of them were published in the last five years. Audiological findings often described in these study included middle ear disorders with hearing loss predominant of conductive or mixed. Hearing losses were attributed mainly to inflammation of the middle ear.

**Conclusions:** Although we found studies that report audiological findings in patients with SD22q11, still are scarce studies that present assessments of the central level hearing, thus highlighting the importance of developing more work in this area.

A639. **Audiological Findings in Two Children with Williams Syndrome: A Case Report**

**Bibiana Fuzer da Silva, Paulo Ricardo Gazzola Zen, Rafael Fabiano Machado Rosa, Pricila Sleifer**

*Universidade Federal do Rio Grande do Sul*

**Introduction:** The Williams Syndrome syndrome (WS) is a relatively rare disease characterized by being a neurodevelopmental disorder in association with facial abnormalities, cardiovascular, and behavioral deficits. Individuals with the SW have some specific audiological characteristics, like as abnormal sensitivity to sounds. Previous studies have reported cases of sensorineural or mixed hearing loss, predominantly in high frequencies.

**Objective:** describe the audiological findings in two children with Williams syndrome.

**Methodology:** Two children, one male, 10 years old and a female, 11 years old were evaluated. Patients underwent audiological assessment. They performed tonal threshold audiometry, acoustic immittance audiometry, speech audiometry, acoustic impedance and research of the Latency Auditory Evoked Potential (LAEP).

**Results:** In both cases it was found in both ears: ipsilateral and contralateral acoustic reflexes absent; speech audiometry with percentage index of speech recognition (SRI) and speech recognition threshold (SRT) changed; OAE transient absent; LAEP changed (increased latency of waves and decreased amplitudes). School learning difficulties and written language learning.

**Conclusion:** In both cases, the subjects had significant hearing disorders. In the case of children at the learning process, suggest the need to include in the battery of tests carriers children SW, a more complete hearing evaluation to detect and intervene early if possible changes.

**Keywords:** williams syndrome; hearing loss; hearing
A637. Audiological Signs and Symptoms In Subjects Diagnosed with Temporomandibular Disorder
Maria Renata José, Camila de Castro Corrêa, Maria Fernanda Capoani Mondelli, Mariza Ribeiro Feniman
Fob/USP

Introduction: Temporomandibular Disorder (TMD) could be characterized as an association of alterations involving temporomandibular joint, masticatory muscles and associated structures. Studies report that symptoms of TMD is varied and include association between TMD and presence of audiological signs and symptoms.

Objective: To investigate the audiological signs and symptoms found in subjects diagnosed with TMD, in order to investigate the temporomandibular dysfunction may be related to disorders in the auditory system.

Methods: A systematic review was performed with the research of articles available in national and international journals, using the descriptors “Temporomandibular Joint” AND “Hearing” (databases Pubmed and Lilacs). The inclusion criteria was about studies contained subjects diagnosed with TMD presenting auditory disorders. The exclusion criteria were: presence of other disorders, beyond DTM and related to auditory system; review articles; articles repeated in different databases; language different of Portuguese, English or Spanish; unavailability of article in full access.

Results: Were found 221 articles and only 17 studies followed the inclusion criteria. The audiological signs and symptoms were: complaints of hearing loss (even in subjects with normal hearing); hearing loss at low and medium frequencies; tinnitus; aural fullness; vertigo; dizziness; ear-ache and increased middle-ear stiffness.

Conclusion: Were observed the existence of audiological signs and symptoms in subjects with TMD, which can be related mainly to the middle ear, and in some studies to the inner ear. By the high variability of audiological signs and symptoms in TMD, more studies are needed, for better understanding of this clinical condition and improve the intervention.

Karla Anacleto de Vasconcelos, Jonathan Grassi Rodrigues
Universidade Federal do Rio de Janeiro

Introduction: The explosion of access to portable audio equipment increases the number of reports of hearing loss induced by extreme volumes in young people.

Objective: Investigate the routine of use of headphones and verify changes in this routine after speech therapy guidance in adolescents.

Method: An intervention study was conducted in two schools, a high school in Espírito Santo and another elementary school in Rio de Janeiro. The study was approved by the CEP/UFES (n°237.295) and students participated voluntarily. The study was conducted in two moments: moment 1 (M1) in which students answered a questionnaire about habits related to the use of headphones, and then attended a lecture of 30 minutes of a professional audiologist, who addressed the damage caused by extreme volumes. Moment 2 (M2) was performed after 30 days and the same participants answered the same questionnaire.

Results: The study included 188 students. Among all surveyed items, those with significant changes are: a) the reports of places where headphones are used decreased, except the use in buses, for which the percentage was maintained, and at home, for which the percentage of answers increased: during physical activities (56.9%-40.4%), in buses (54.2%-54.2%), in leisure activities (42.5%-35.1%), school (28%-19.6%) and at home (14.3%-20.7%); b) number of hours per day: 1-2 hours (57.9%-63.2%), 3-4 hours (22.3%-19.6%), 5-6 hours (7.4%-5.8%) and 6 hours (10.1%-4.2%) and c) sound volume used: low (11.5%-15.3%), medium (57.6%-49.4%), high (36.8%-7.3%).

Conclusion: general campaigns could raise awareness and benefit the young users of headphones.

A434. Audiometric Profile, Auditory and Extra-Auditory Symptoms in Operators and Supervisors of a Call Center
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Universidade Federal de Ciências da Saúde de Porto Alegre

Introduction: The exposure to high sound pressure levels can cause auditory and extra-auditory symptoms. Telephone operators are one of the professionals that are exposed to these high levels through different sound sources found in the workplace with tele service. The main source of high sound pressure is the headset, a device which combines a handset dial with headphones that conduct the sound directly to the operator's auditory system.

Objective: To evaluate the audiometric profile and auditory and extra-auditory symptoms in operators and supervisors of a call center.

Methods: Cross-sectional study with 25 operators and eight supervisors of both sexes aged over 18 years old, regardless the time working in the area. These operators underwent to an audiometric examination and questionnaire to obtain data on occupational history and auditory habits and symptoms.

Results: Extra-auditory symptoms were present in 81.8% of subjects. Of these, 51.9% reported headache and difficulty to concentrate, 37% felt pressure in the head and 33.3% had difficulty to sleep. The auditory symptoms were reported by 45.5% of subjects, of which 86.5% had tinnitus and 79.8% had ear fullness. All of them had audiometric hearing thresholds within normal limits, but 48.6% had an audiometry with an audiometric notch configuration.

Conclusion: Telephone operators are at high risk of developing hearing problems, thus it is necessary to create intervention plans in order to promote occupational hearing health.

Keywords: Audiology, Answering Services, Noise, Occupational, Signs and Symptoms

A551. Auditory Ability of Figure-Ground (Binaural Integration) of Students in Early Literacy
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Introduction: Figure-ground ability involves discrimination of verbal sounds of high predictability presented to both ears (dichotic listening). Disorders in this skill can cause academic and language comprehension difficulties, due to the change in auditory analysis and synthesis.

Objective: To describe the performance of students in auditory ability of figure-ground (binaural integration).

Method: descriptive, cross-sectional study conducted in small town public school in São Paulo state. On the composition of the sample, were included students who had audiometric thresholds within normal ranges from 250 to 8000 Hz and type A tympanograms. Thus, were assessed 46 students divided into two subgroups, according to age group: G1: six years old students (n = 22); G2: seven years old...
students ($n=24$). The procedure used to assess this ability was the Dichotic Digit (DD) test.

**Results:** Analyzing the performance of students in both groups, it was observed that the DD test was abnormal in 90% of G1 students and 83% of G2. The scores of the right ear ranged from 27.5% to 97.5% (mean 72.5) in G1, and from 42.5% to 95% (mean 77.5) in G2; the left ear scores ranged from 12.5% to 90% (mean 60) in G1, and from 7.5% to 97.5% (mean 67) in G2.

**Conclusion:** Students of both group presented a high rate of disorder in figure-ground ability.

**Keywords:** Hearing, Hearing tests, Child

**Introduction:** Traumatic brain injury occurs basically due to beatings on the skull and its contents, injuries can be caused by the impact and the movement acceleration / deceleration of the brain inside the skull. There may be expressive and/or receptive language abnormalities (expressive and/or receptive) and deficits in the peripheral and/or central auditory system.

**Objective:** To investigate the auditory and language skills in a child after severe traumatic brain injury.

**Resumed Report:** ENG, 10, male, suffered severe head injuries with increased intracranial pressure and underwent decompressive craniectomy bifrontal. Language and auditory evaluation included basic audiological evaluation and central auditory evaluation including short and long latency auditory evoked potentials and behavioral testing, and the language assessment. Language evaluation revealed deficits in oral reception, syntactic system deficit, in phonological and semantic access the mental lexicon, short-term and operational memories and in phonological awareness. Basic audiological tests and electrophysiological evaluation showed results within normal criteria bilaterally. Behavioral central auditory tests revealed severe abnormal results involving auditory skills of auditory closure, figure to ground for verbal and nonverbal sounds and temporal ordering.

**Conclusion:** Language and auditory disorders were observed in this child. It is very important to quantify and qualify these difficulties in order to design a proper rehabilitation treatment planning aiming at minimizing these deficits.

**A397. Auditory Brainstem Response (ABR) in Adolescents 12-17 Years Old with Normal Hearing**
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*Núcleo de Estudos da Saúde do Adolescente - Universidade do Estado do Rio de Janeiro (Nesa/URJ)*

**Introduction:** Auditory brainstem response (ABR) are potential auditory short latency used to evaluate the integrity of the functioning of central auditory pathways. There are few studies on this exam in teens.

**Objectives:** To determine the profile of ABR responses in adolescents aged 12 to 17 years comparing it with current references.

**Method:** The study (CEP / HUPE No. 13,224) was conducted by the speech therapy team Studies Center of Adolescent Health at the State University of Rio de Janeiro (NESA / UERJ) and evaluated 22 adolescents with normal hearing, in the period from 02/10 / 2012 to 03/07/2014. The examination was made 80dB SPL, alternating polarity, 13.1 clicks / s 2000 stimulus.

**Results:** Absolute values of wave one (I): 1.34ms in right ear (RE) and 1.32 in left ear (LE); wave three (III): 3.48ms in RE and 3.5ms in LE; Wave five (V): 5.16ms in RE and 5.23ms in LE. Interpeak interval values I-III: 2.14ms in RE and 2.16ms in LE; III-V: 1.67ms in RE and 1.73ms in LE; and I-V: 3.82ms in RE and 3.89ms in LE. Inter-aural difference: 0.12ms in girls and in boys 0.11ms. Male values are greater than the female (statistically significant p-value) in the analysis of the absolute values of wave V in both ears and waves I and III of LE; and interpeak intervals III-V and I-V in the RE.

**Conclusion:** It defined the profile of this review and found that the results are consistent with the normal described the current references.

**A336. Auditory Evoked Potential for Screening In Porto Alegre According to Datasus**
Jade Zaccarias Bello, Isadora de Oliveira Lemos, Leticia Kurtz
*UFCSPA*

**Introduction:** Hearing has key role in children's development, and the hearing screening, first performed through the otoacoustic emissions (OAEs), has great importance in the hearing impairment’s early diagnosis. The screening test through auditory evoked potential (ABER) is performed when there is failure in the test and retest of the OAEs. The prevalence of neonatal hearing loss, has a range from 3: 800 to 3: 1000 births.
Objective: To quantify the number of ABER examinations in relation with the number of births in the city of Porto Alegre.

Methods: DATASUS platform data number of brainstem auditory evoked potential procedures was used, along with IBGE data of births at the city of Porto Alegre in the years 2010 to 2012.

Results: According to 2010 IBGE data, there were 18,321 births in the city of Porto Alegre. In the same year, there were 718 records ABER procedures, so 3.9% of infants were screened. The following year, there were 18,919 births in the city of Porto Alegre. In the same year, there were 718 records ABER procedures, so 3.9% of infants were screened. The growth of 28.27% in comparison with the previous year. Lastly, in 2012, the number of births was 19,470 and 6.3% were screened, and the growth was 34.52% in comparison to the previous year.

Conclusion: The trials using ABER have great importance upon high risk newborns and also among those who fail at OAEs test and retest. In the studied population, the ABER allows a better conduct of clinical decisions to be taken.

Keywords: audiology, diagnosis, deafness

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**A212. Auditory Pathways' Maturation in Children: A Longitudinal Study**

Stella Medianeira Soares Quinto, Lidieli Dalla Costa, Simone Nicolini de Simoni, Andreia de Melo, Eliara Pinto Vieira Biaggio, Inaê Costa Rechia

**Introduction:** The Long Latency Auditory Evoked Potential can assist on objective measurement of the maturation of central auditory pathways, by analyzing the latency of exogenous components.

**Objectives:** To compare the change in latency of exogenous components of children, past two and a half years, enabling an investigation of this maturation.

**Methods:** This is a longitudinal study, analyzed descriptively. The sample included five children born full term who carried out the search procedure of Long Latency Auditory Evoked Potential on two moments: before 30 days of life at the first assessment and with two and a half years old at revaluation. The potentials were surveyed with frequent speech stimuli /ba/ and rare /ga/, the intensity of 70 dBHL.

**Results:** It was observed the potential P1 and N1 in two moments. The average latencies at the first assessment in the left ear were: P1 = 271.6 ms and N1 = 399.2 ms. On revaluation the averages were: P1 = 100.4 ms and N1 = 172.4 ms. The right ear were observed the averages of latency, respectively: P1 = 266 ms, N1 = 399.6 ms and on revaluation were observed P1 = 90.8 ms and N1 = 174 ms. Difference was observed for the latencies of P1 and N1 components between the first and second assessment, showing an adequate maturation of the auditory pathway in the period studied.

**Conclusion:** It was observed a decrease in amplitude of the potential exogenous P1 and N1 Past Two and a half years, which allows infer the adequate development of central auditory skills during this period.

**Keywords:** Evoked Potentials Auditory; Auditory Disorders Central; Auditory Perception; Children

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**A236. Auditory Rehabilitation Program: The Self-Perception of Restrictions Participation in Elderly People**

Lidieli Dalla Costa, Ayra Renata D’Agostini, Bianca Bertuol, Sheila Jacques Oppitz, Michelle Cargnelutti, Eliara Pinto Vieira Biaggio

**Introduction:** Auditory sensory deprivation in elderly population affects directly in the situations that needs communication, depriving to family and social life, which leads to isolation and compromises their quality of life.

**Objective:** Present and Auditory Rehabilitation program aimed to elderly that are users of hearing aids, characterizing the population assisted in this program, and evaluate the self-perception about the restrictions in participation.

**Methods:** This is a descriptive and qualitative research. To characterize the population was held an anamnesis investigating the followings aspects: type and level of hearing loss, age at the beginning of therapy, time of prothetization and level of education. The self-perception of participation restriction was evaluated by Hearing Handicap Inventory for the Elderly â€” Screening.

**Results:** This program includes 12 individual sessions of speech and audiology therapy with different specific goals. Regarding characterization of the population, was observed that most of them have low level of education (71.43%) averaging 78% years old and prothetization average of 3.7 years. In carrying out the questionnaire, 71.5% had significant participation restriction and 28.6% mild to moderate restriction. Is worth noting that no difference was observed in participation restriction related to level of hearing loss, prothetization time and age.

**Conclusion:** The study found that the elderly population treated at the hearing rehabilitation program are of a low education level with mean age of 78 years and users of hearing loss.
A23. Auditory Training in Auditory Processing Disorders: A Case Study
Susan Renata Stroiek, Lenita da Silva Quevedo, Carla Hernandez Kieling, Ana Carolina Lago Battezini
Universidade de Passo Fundo

The aim of this study is to verify the effectiveness of an Auditory Training program comparing the initial performance in the tests of auditory processing evaluation, with the performance after the auditory training. For this case study, developed at the Speech Therapy clinic in the University of Passo Fundo, a subject was selected that presented language alterations, complaints compatible with auditory processing disorders, basic hearing evaluation with normal results and altered results in the auditory processing evaluation. For this, the tests Pediatric Speech Intelligibility, Staggered Spondaic Word, Dichotic Digits, Random Gap Detection Test, Masking Level Difference, and Pitch Pattern Sequence were used. Auditory Processing tests reevaluation after 8 sessions of the auditory training showed improvements in the abilities that were previously altered, persisting a mild difficulty in organization. The progression from severe to mild degree of the subject proves the effectiveness of the Auditory Training.

A355. Auditory Training with Dichotic Listening and Their Relation to Skills Untrained
Aline Priscila Cibian, Liliane Desgualdo Pereira
Universidade Federal de São Paulo

Introduction: The auditory training with dichotic listening increases the possibility of speech therapy in individuals with auditory processing disorder.

Objective: Check whether this improvement generated by this specific training can be generalized to other untrained listening skills.

Methods: 6 subjects, aged 12-15 years with alteration in the physiological mechanisms of selective attention and temporal processing, checked through the speech with noise test, Staggered Spondaic Word test, Random Gap Detection test and duration pattern test. These individuals were submitted individually to an Auditory Training based on Dichotic Interaural Intensity Difference, proposed by Frank Musiek, organized in eight sessions, lasting 50 minutes each. They performed the behavioral auditory processing evaluation of the clinical routine in three stages: pre-intervention and post-intervention in the middle of training and at the end of the training.

Results: The trained ability to figure-ground evaluated by Staggered Spondaic Word, subjects showed significant improvement, reaching the normal parameters at the end of the auditory training. All subjects showed significant improvement in ability closure through speech with noise reaching the normal parameters. All subjects showed significant improvement in the ability of temporal resolution through the Random Gap Detection, but 66.6% achieved normal standards. All subjects showed significant improvement in the ability of temporal ordering through the duration pattern, but 16.7% achieved normal standards.

Conclusion: The auditory training was effective for the trained ability figure-ground and to the untrained ability closure. The skills untrained of temporal resolution and temporal ordering improved in some individuals, but not reach the expected normal.

A571. Benefit from the Use of Sound Amplification in Musical Hallucinations: Case Report
Marina de Marchi dos Santos, Andressa Vital Rocha, Rudmila Pereira Carvalho, Maria Fernanda Capoani Mondelli
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Introduction: Although there is little scientific evidence on the musical hallucination today, it is known that mostly encompasses the manifestation as psychopathological. It has been described in patients without a history of psychosis and ear symptoms. The musical hallucination has been approached as a possible impact of hearing loss, as well as tinnitus. Usually manifest after cochlear lesions that are predisposing factors for these demonstrations.

Objectives: Evaluate the effect of individual hearing aid use for three months in patients with musical hallucination.

Resumed Report: HADB, 67 years old, female, diagnosed with bilateral sensorineural hearing loss severe. Held hearing aid fitting protocol Speech Therapy Clinic of FOB-USP, reaching the target within the limits 10 dB to plus or minus at all intensities and frequencies evaluated. In the functional gain were the following results without hearing aid: 250Hz - 70dB, 500Hz - 75dB, 1000Hz - 70Hz, 2000Hz - 75dB, 3000Hz - 75dB, 4000Hz - 80dB, 6000Hz - 80dB and with hearing aids: 250Hz - 50dB 500 Hz - 50 dB, 1000 Hz - 35 Hz, 2000 Hz - 30dB, 3000Hz - 35dB, 4000Hz - 55dB, 6000Hz - 55dB. The numeric scale used to evaluate the musical hallucination pointed 9 before the adaptation and 4, after the effective use of hearing aids for three months.

Conclusion: The use of hearing aids in patients with musical hallucination is effective in the short term, considering the acclimatization period.

A665. Benefit of Open Fitting in Reducing Tinnitus Between the Sexes
Marina de Marchi dos Santos, Andressa Vital Rocha, Maria Fernanda Capoani Mondelli
Faculdade de Odontologia de Bauru - Universidade de São Paulo

Introduction: Adaptation of hearing aids only in order to improve hearing does not usually promote satisfactory tinnitus in patients with both complaints. Since there is occlusion of the ear canal. The open fit system not occlude the channel, providing gain preferably at high frequencies.

Objective: Evaluate tinnitus handicap with use of open fit system to decrease the discomfort caused by tinnitus between the sexes.

Methods: One clinical trial for a period of 10 months in patients participating in a private clinic has been developed. 30 individuals of both sexes, 17 women with a mean age 69.6 and 13 men with a mean age of 63.3 years, tinnitus and sensorineural bilateral hearing loss with medical indication for fitting a hearing aid. For assessing tinnitus handicap, it used the Tinnitus Handicap Inventory.

Results: For males the average scores before the intervention were 37.2 points to total score, 15.2 points for functional score, 13.6 points for emotional score and 8.30 points for catastrophic score. Since the average scores after the intervention were: 7.5; 4.6; 2.3 and 0.6, respectively. For females the initial average scores were 40.7 points to total score, 18 points for functional score, 14 points for emotional score and 8.7 points for catastrophic score. Finally, the mean scores were: 7.7; 4.1; 2.2 and 1.4, respectively.
**Conclusion:** It concludes that the system of open fit hearing aid was effective in reducing tinnitus handicap no differences between the sexes.

**A272. Body Balance and Impact of Dizziness on Quality of Life for Active Elderly People**

Isabela Schroer Neis, Álìan Rodrigo Vieira da Silva, Luciele da Silva Prates, Isabela de Moraes Fattore, Valdete Alves Valentins dos Santos Filha

**Introduction:** Dizziness is a common symptom in elderly population, as result of this; falls are frequent and determine complications, impacting negatively on their quality of life.

**Objectives:** Assess body balance and impact of dizziness on quality of life on active elderly.

**Methods:** The sample is 32 active elderly, participants on action developed in a university, 75% women and 25% men, mean age of 65,72 years. All submitted to anamnesis, to the Dizziness’s Handicap Inventory protocol and assessment of balance - static and dynamic tests.

**Results:** 43,74% had dizziness complaint, 28,13% imbalance and 28,13% imbalance associated with falls. In its entirety, the elderly showed impairment in quality of life, with functional aspects (65%) most affected, followed by physical (22%) and emotional (13%). In static test, Romberg-Barré with opened eyes, 18,75% of the elderly had alterations, 62,5% with closed eyes and 18,75% in both. In the dynamic tests with opened eyes, 18,75% of the elderly had alterations, 62,5% with closed eyes, 37,5% presented alteration in Unterberg test, 28,13% in Babinski-Weil, these with falls or deviations. Regarding to functions aspects, 47% of the elderly had alteration in the static test, 9,5% in the dynamic test and 34% in both.

**Conclusion:** The functional aspect was significant in the impact of dizziness on the quality of life for elderly active ones, identifying alteration in balance in evidence on Romberg-Barré, Unterberg and march-proof. It appears that, regardless of the categorization of the elderly, active or inactive, the dizziness deserves attention so it’s possible to provide quality of life for this population.

**A445. Body Balance Assessment in Young Women with Vestibular or Neurovegetative Symptoms to Motion**

Amanda Steyer Bacellar, Márcia Salgado Machado, Cristina Loureiro Chaves Soldera

**Introduction:** Vestibular and/or neurovegetative symptoms to movement are clinically referred as motion sickness. This condition occurs basically due to the conflict in sensory responses of visual, vestibular and somatosensory systems. The diagnosis of motion sickness is generally clinical. However, the predisposition to this condition may be assessed through complementary exams, searching other factors that could compromise the systems involved in body balance maintenance. The Sensory Organization Test allows determine which body balance maintenance system is more involved in postural control and hence in cases of motion sickness.

**Objective:** To assess the body balance maintenance systems in young women with vestibular and/or neurovegetative symptoms to movement.

**Methods:** This is a case-control study consisting of 40 female university students aged between 18 and 30 years of age, of which 20 constituted the study group and 20 the control group.

**Results:** The study group had a significant difference in relation to complaints of imbalance in daily activities compared with the control group (p = 0.022), and had worst performances in all conditions of the Sensory Organization Test with statistical significance in the conditions III (p = 0.004), V (p = 0.033) and VI (p = 0.040). The most frequent symptom reported by the study group was nausea (95%). Furthermore, most subjects reported not seeking medical help (90%) and no use of medication during the crisis of symptoms (65%).

**Conclusion:** Subjects who reported motion sickness had poorer performance on the Sensory Organization Test. Results suggest an association between motion sickness and performance in maintaining body balance.

**Keywords:** Motion Sickness; Dizziness; Postural Balance


Thays Vaiano, Felipe Moretti, Fabiana Copelli Zambon, Ana Claudia Guerrieri, Sophia Mota Constancio, Clara Rocha da Silva, Mila Cruz do Valle, Gisele Gotardi de Oliveira, Mara Behlau Cev - Centro de Estudos da Voz

**Introduction:** The association between body pain and voice disorder symptoms has been clinically observed but not properly investigated. Intense voice use in which there is an overloading of the vocal mechanism, with strained and effortful phonation may cause discomfort or even pain while speaking.

**Objectives:** The purpose of this research was to identify, categorize and compare body pains among different professional voice users, their vocal self-assessment, their voice complaints and their sick leave history.

**Methods:** A total of 840 individuals, 591 women and 249 men (150 non-professional voice users, 100 popular singers, 50 classical choir singers, 150 telemarketers, 150 speech-language pathologists, 90 actors and 150 teachers) volunteered to participate in this study. They answered a self-assessment questionnaire that investigated voice usage, voice complaints and presence of 13 different body pains.

**Results:** Teachers presented the highest mean number of body pains (7.41) and the group of classical singers presented the lowest mean number (2.46). Those with voice complaints presented higher means of body pains (5.68) when compared to those without voice complaints (3.76). In addition, subjects that reported sick leave had higher means of body pains.

**Conclusion:** Specific voice training may play a positive role in the management, development and perception of body pain in trained professionals, such as classical singer.

**Keywords:** Voice; Dysphonia; Pain; Protocols

**A72. Breastfeeding as Speech Pathology Prevention: Literature Review of Systematic**

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**Introduction:** The exclusive breastfeeding for the first six months of life consists of a practice recommended by the World Health Organization, however factors such as the mothers’ return to work and difficulty breastfeeding, have contributed to early weaning. The speech therapy can develop strategies that encourage breastfeeding promoting the prevention of later alterations of the stomatognathic system.
Objectives: To conduct a systematic review of articles that address breastfeeding as the stomatognathic system changes.

Data Synthesis: This research has a descriptive, retrospective, transverse and quantitative character. The SciELO and PubMed databases were consulted from March to April 2015. The following Keywords have been used: “breastfeeding” AND “Speech” and “breastfeeding” AND “primary health care”. The following inclusion criteria were defined: articles published in the last 05 years and items available. Articles that did not address the established theme were excluded from the study.

Results: The PubMed database were found 367 articles, but after the application of exclusion and inclusion criteria, totaling 28 articles. When queried, the Scielo database, found 24 articles, where only 08 met the proposed criteria. Therefore, 36 articles were analyzed in this study.

Conclusion: The practice of exclusive breastfeeding in the first six months of life is low, despite the existence of programs that promote. Literature has large collection on the intervention of health professionals to encourage and guide about breastfeeding, however the inclusion of the speech therapist is still little mentioned.

A604. Care of Dysphonic Patient: Phonotherapy after Laryngeal Microsurgery
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Universidade Federal da Bahia

Introduction: Laryngeal microsurgery is the approach of choice in many cases of dysphonia by benign laryngeal lesions. Speech therapy association on the immediate postoperative period may contribute in the following ways: assistance in healing; balance in phonatory system and adequacy of vocal use.

Objective: This work aims to characterize the speech therapy care in cases of laryngeal microsurgery treated at Ambulatório Magalhães Neto (HUPES/Salvador) voice clinic. Methodology: The data was collected from inspection of medical records of patients seen from 2011 to 2014. The information analyzed were: gender, age, origin, laryngeal diagnosis, postoperative time, number and consecutiveness of phonotherapy call; abandonment and number of calls to complete the case.

Results: On total of 35 cases were analyzed, 31.4% of men and 68.6% women, the majority adults (70.4%). Half percent of patients were from the countryside and half from capital. The most frequent laryngeal diagnoses were: 31.4% polyp; cyst 31.4%; 20% Reinke's edema. Most of patients begins phonotherapy within 15 days of postoperative (65%), 14.2% begins between 16” and 30” day and 11.4% after 30 days. Half of the cases accomplished 4 to 6 calls (51.4%). Most of the cases accomplished consecutives calls (62%). A great number of patients abandoned treatment before ending phonotherapy 48.60% and only 31.4% of patients complete the treatment. Apparently there is no relationship between abandonment and live in countryside.

Conclusion: Patients who arrived until 15 days at phonotherapy tend to be successful in a short period of time.

Keywords: phonotherapy, laryngeal microsurgery; dysphonia

A73. Case Report - Specific Language Impairment in the Family
Marta Gonçalves Gimenez Baptista, Beatriz Cavalcanti de Albuquerque Cauby Novaes, Sulene Pirana, Ana Clelia de Oliveira Rocha
PucSP

Introduction: Clinical cases of Specific Language Impairment (SLI) are frequently reported with similar symptoms occurring in other family members. It can be suggestive of familiar predisposition when, as found in the literature, there are more than one case in the same family. With technological and research progress in image techniques, there will probably answer many questions raised in the process of diagnosis. In addition, increasing access to information on genetic factors shed light on how hereditary factors can interfere in some SLI cases. Objectives: To describe cases of siblings and cousins with diagnosis of SLI that have been in therapy and are followed by speech pathologists and phoniatry MD. It is our intent to describe difficulties occurring during treatment and clinical history, emphasizing family issues.

Resumed Report: Siblings and cousins in speech-language therapy with language delay and severe praxic difficulties, presenting childish speech.

Conclusion: SLI children within the same family are not rare. It can be suggested that for favorable results, treatment main steps are: speech disorders interference in family dynamics; phoniatric assessment as a baseline for treatment; demystify guilt issues related to transmission of speech disorders and therapy proposal focusing on speech symptoms.

Keywords: speech disorders, case studies, language
**Introduction:** Psychogenic Dysphonia is characterized as loss of voice or changes of different acoustic characteristics due to a process of psychological inhibition with absence on presenting changes on the vocal folds structure or neurological alterations.

**Objective:** Report a case of Psychogenic Dysphonia in a Hospital with Speech Pathology Service through public health system.

**Resumed report:** It was approved by the Research Ethics Committee of Santa Casa under protocol n.1.009.545. C. L.A.S, 55 years old, female, indicated to the service with historical of dysphonia during 4 months, and no results to the use of corticosteroids and anti-allergic. During the first evaluation, the patient presents sudden breaking voice as a principal complaint. After application of Voice Handicap Index (VHI), it was observed predominant organic emotional score. In the Hospital Anxiety and Depression Scale (HADS) scored higher for anxiety (8 points) than depression (4 points). The auditory-perceptual analysis showed change in the vocal patterns, from no alterations to breathiness and roughness during the sustained vowel sample and connected speech. In a masking situation, it was observed normal parameters of voice, different from the first assessment. Subsequently, the results after therapeutic proof confirmed the Psychogenic Dysphonia.

**Conclusion:** In the assessment of voice is important a careful analysis of the vocal patterns during spontaneous talking comparing to the voice recorded, excluding the presence of changes on the vocal folds structure. Fluctuations in vocal emissions lead to the diagnostic of Psychogenic Dysphonia. The Masking Situation is the major contribution to the diagnostic.

**Keywords:** Psychogenic; Voice; Masking

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**A298. Case Study: Auditory Training in Hearing Aid User**

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**Introduction:** Sensorineural hearing loss decreases the proper perception of acoustic parameters of sounds (frequency, intensity, duration) and therefore can compromise auditory skills. In such cases, the audiologist intervention should include both the sound amplification as the improvement of auditory skills (through Auditory Training - AT), targeting the full auditory rehabilitation which should reflect in an effective improvement of communication and quality of life.

**Objectives:** Training auditory skills of a hearing aid (HA) user’s with auditory processing disorder.

**Methods:** Female, 36, bilateral and moderate sensorineural hearing loss. She was bilaterally adapted with a receptor in channel HA by 2 years and had a persistent complaining of speech understanding in noise. In the initial auditory processing assessment was detected poor performance in hearing in noise, dichotic listening and temporal resolution. Ten AT sessions were held weekly, with an average duration of 50 min in a soundproof booth. It were also used specific softwares, as well as guidelines of activities to be performed at home and communication strategies. Besides the evaluation of the auditory skills, before and after AT it was applied a self-assessment questionnaire Abbreviated Profile of Hearing Aid Benefit (APHAB).

**Results:** After the TA was observed an improvement of all trained auditory skills and decrease of hearing complaints (verified by a better score in all APHAB scales).

**Conclusion:** The AT proposed was able to optimize communication of the individual in difficult listening situations, such as in the presence of competitive speech, resulting in real-life benefits for everyday communication.

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**A382. Central Auditory Processing: Implications for Translation Process from Portuguese to Brazilian Sign Language**

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**Introduction:** Auditory Processing consists of detect, store and retrieve linguistics and non-linguistics sounds, in other words, it accounts the relation between central and peripheral auditory functions. Indeed, there is a possibility to consider a connection between functional system quality and visogestual translation competence. Interpreters of Brazilian Sign Language (BSL) / Portuguese must have aptitude for realize simultaneous and consecutive interpreting with proficiency between different linguistic modalities, visogestual and auditory modalities. This flux between linguistics modalities incites reflections about the role of auditory processing in translation process.

**Objective:** To evaluate influences of auditory processing tests’ results from a group of sign language interpreters over the visogestual speech translated.

**Method:** The sample consisted of 14 interpreters of BSL who where submitted by 11 auditory processing tests and evaluation of filmed visogestual speech. The subjects were divided in G1 – satisfactory level of translation proficiency – and G2 – unsatisfactory level of translation proficiency. For the statistical analyses, Mann-Whitney test and two proportion equality test were used.

**Results:** Significant statistical differences were observed between the groups for the Duration Pattern Test and Non-Verbal Dicotic test, the difference was caused by worst performing from G2.

**Conclusion:** The level of proficiency in translation and interpreting from G2 were influenced by non-verbal gnosia deficit, which were detected by Duration Pattern Test and Non-Verbal Dicotic test. Findings seem to reveal non-verbal gnosia deficit is a conditional item to realize effective paralinguistics aspects comprehension in the oral speech which will be interpreting.

**Keywords:** Auditory Processing, Translation Process, Bilingualism

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**A453. Cervical Vestibular Evoked Myogenic Potentials in Normal Listeners without Vestibular Complaints**

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Universidade Federal do Rio Grande do Sul

**Introduction:** Cervical Vestibular Evoked Myogenic Potentials are composed by myogenic responses activated by sound stimulation registered by surface electromyography, which assesses the saccule, the vestibular inferior nerve, the pathways related to the vestibulospinal descending nerve and the motoneurons of the sternocleidomastoid muscle. Because it is a complement in the otoneurological assessment, it is necessary to know this exam’s patterns of normality.

**Objectives:** To compare the latencies and amplitudes of the Cervical Vestibular Evoked Myogenic Potential waves between ears and genders.

**Methods:** Were assessed 20 normal listener adults with no vestibular complaints, 10 men and 10 women. The equipment used was the Eclipse-Otoacess, from Interacoustic. We performed 200 tone burst incentives, with 500Hz frequency and an intensity of 100dBHL, band-pass filter
from 20Hz to 2000Hz. The obtained tracings were analyzed over the first biphasic potential.

**Results:** There was no statistically significant difference between the amplitudes and latencies between the stimulated ears ($p = 0.098$), as well as gender ($p = 0.128$). It was found that the median latency of the positive peak was 15.67ms and the median of the negative peak was 26.67ms.

**Conclusion:** Was verified that there was no statistical difference in the latencies and amplitudes of waves between genders and ears. Cervical Vestibular Evoked Myogenic Potential proved to be a reliable exam in order to support the topodiagnosis of otoneurological pathologies.

**Keywords:** Vestibular Evoked Myogenic Potentials; Evoked Potentials; Vestibular Function Tests

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**A242. Changes in Hearing Thresholds in Cancer Treatment**

Priscila Feliciano de Oliveira, Erica Crislane Omema de Lima, Aline Cabral de Oliveira Barreto, Nuala Catalina Santos Habib, Vanessa Menezes de Jesus, Cris Magna
Unividade Federal de Sergipe

**Introduction:** Chemotherapy and radiotherapy has enhanced the survival of patients with neoplasia, but these treatments have ototoxic effects. Irreversible hearing loss during the treatment is reported by the literature that shows a great variability in the incidence of ototoxicity. Follow up hearing thresholds until the end of the medical procedure is essential to have an early diagnosis. AIM: Assess changes in hearing thresholds in patients undergoing cancer treatment.

**Method:** Prospective clinical study carried out at Oncology in a Public Hospital of Sergipe. Audiological evaluation (Pure Tone Audiometry) and speech audiometry were performed in 27 patients. It had been approved by the Ethics in Research Committee, under protocol # 0066.0.107.000-11.

**Results:** Females and breast cancer exhibited the highest incidence (68% and 44%, respectively). Almost 35% had sensorineural hearing loss in the first and second test. The analysis of hearing thresholds, there was a slight worsening for all test frequencies in sequential test, but there was significant difference only for the frequency of 4 kHz ($p = 0.004$). Of these, 16% showed emergence and 18% aggravation of hearing loss. Tinnitus was the most complain (81.3%) of all, but there was no statist correlation between hearing loss ($p = 0.89$).

**Conclusion:** Cancer treatment lead to a sensorineural hearing loss and the frequency of 4 kHz had a significant worsening during the treatment. Hearing monitoring revealed that there are cases of triggering and worsening hearing loss.

**Keywords:** ototoxic effects, hearing loss, cancer

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**A688. Characteristics of Literary Works on Cochlear Implants in the Last Ten Years**

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**Introduction:** The studies on the social aspects are of utmost importance to better serve the implanted patients and their families.

**Objectives:** Characterize the literary works produced on the Cochlear Implant in the past decade in Brazil.

**Data Synthesis:** To obtain data, held compilation of works available in the Library Virtual Health, in Medline, Lilacs and Central databases using the keywords cochlear implant, full texts in Portuguese and English. The texts that referred to other repeated themes were raised or not found 78 texts and after reading and analysis were discarded. The remaining 65 full text papers were classified according to originality, interference in the study, type of unit, follow-up period, directionality, study type, number of subjects and the issues addressed.

Preliminary results revealed that most jobs were primary (77%), interventional (40%) of longitudinal segment (28.95%), clinical research (87%) and prospective (68%). As for the themes, found papers on the performance of Cochlear Implant (43%), surgery (20%), anatomical descriptions and syndromes (13%) and social aspects involving implanted (18%). Regarding the number of subjects analyzed, the theme Cochlear Implant performance involved, according to data presented, 1,670 subjects, in aspects related to surgery were involved 1648 subject in anatomical studies and syndromic 408 pieces or made subject of the research and the social aspects involving implanted with the participation of 199 subjects.

**Conclusion:** These findings suggest the need for further studies in areas related to social, since we observed are less addressed issues if we compare his scientific production with the other themes.

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**A305. Characterization of Swallowing Patients with Head and Neck Cancer Undergoing Radiationtherapy**

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**Introduction:** The radiotherapy in head and neck cancers can taking a different disorders, as it's a complex and unfavorable aspects of breastfeeding. In addition, data were collected from medical records of the mother and the baby and applied a questionnaire with the mothers.

**Results:** all the mother/baby pairs evaluated presented at least one unfavorable aspect of breastfeeding, with emphasis on those related to the signs of maternal/newborn and for the positioning of the mother/baby during breastfeeding (50%). The rooting reflex was presented the best index of favorable behavior (91.66%). There was a statistically significant association ($p < 0.05$) between the finalization of the feed and the transition time to probe for oral diet full. There were no other significant differences between the aspects of breastfeeding and the variables related to the profile of mothers, conditions of labor and puerperium.

**Conclusion:** difficulties with breastfeeding of mother/baby pairs most observed were the anatomy changes from the breast, pain while breastfeeding, little standalone standard of preterm, inadequate way of holding the breast and presence of signs of discomfort.

**Keywords:** Suction, preterm, fonouddiology
region and composite for not similar structures that respond differently to radiation. Among these disorders, mechanical dysphagia may be present, due to fibrosis of the muscles and soft tissues of the larynx and pharynx.

**Objectives:** This study aimed to characterize the deglutition of subjects with head and neck cancer undergoing radiotherapy.

**Methods:** Consultation was conducted to the deglutition conditions on database of patients seen by the Speech Therapy Blood- Oncology Service at a university hospital in the period from March 2012 to September 2014. The speech-language diagnosis, obtained through the Risk Assessment Speech Therapy Protocol for Dysphagia, and the level of oral intake, assessed by the Functional Oral Intake Scale, was collected.

**Results:** the sample consisted of 30 subjects with a mean age of 58.86 years, 26 males and four females. Normal deglutition was more frequent and among the swallowing disorders, to moderate dysphagia had a higher incidence. Regarding the level of oral intake for the majority of patients was suggested total orally without restrictions.

**Conclusion:** concluded from this study that although radiotherapy is associated with deglutition dysfunction, the sample evaluated showed higher incidence of normal swallowing and unrestricted oral route.

**A460. Children’s Auditory Performance Scale (C.H.A.P.S) Questionnaire: Cross-Cultural Adaptation to Brazilian Portuguese**

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Unicamp

**Introduction:** The language develops a main role in the perceptual organization, reception and structuring of informations and also in learning process. This way, it is necessary a health auditory system. One of the ways to detect and identify a person with auditory disorder is through auditory screening. It can be accomplished with questionnaires. Between these questionnaires, we highlighted the Children’s Auditory Performance Scale (CHAPS).

**Objectives:** To translate and adapt culturally the CHAPS questionnaire to brazilian portuguese and apply it to verify its effectiveness.

**Methods:** A cross sectional study. A new translation and cultural adaptation process of the questionnaire was realize following the guidelines: initial translation stages; synthesis of the translation; retro translation; experts committee and final version. The individuals (7 to 14 years old), without hearing and/or school complaints, underwent to basic audiologic evaluation and dichotic digit test. The translated and adapted version of the questionnaire CHAPS was applied in 20 parents of these individuals.

**Results:** During the translation and cultural adaptation process of the questionnaire to brazilian portuguese, semantic and idiomatic modifications were realized. The committee members agreed in 84% with the cultural adaptation of the questionnaire. It was verified that in the noise and memory auditory tasks, 10% of the individuals presented results “risk zoneâ€” for possible school difficulties.

**Conclusion:** The Brazilian version of the CHAPS was submitted for all steps of the cultural adaptation process, it was obtained substantial support for its content validation according to semantic-idiomatic, cultural and experimental equivalences criteria.

**A360. Clinical and Speech Therapy Features in Goltz Syndrome: A Case Report**

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**Introduction:** Goltz syndrome is a rare genetic disease characterized by skin, eye, dental abnormalities, affecting the urinary, cardiovascular, gastrointestinal, skeletal and nervous systems as well. Its etiology is believed to derive from 24 different genetic mutations in the PORCN gene located in the X chromosome.

**Objective:** To describe the clinical and speech therapy characteristic of a child presented with Goltz syndrome.

**Resumed Report:** This 12-year-old female patient, diagnosed with Goltz syndrome and seen by the professional staff of the Craniofacial Anomalies Rehabilitation Hospital â€“ University of São Paulo, presented the following features on the right side: alopecia in the frontal area, microphthalmia, blindness, narrow ear canal, notched nasal alae, scaly skin, hypoplastic nipple, ectopic kidney, foot ectodactyly, as well as toe ungueral dysplasia. She presented facial asymmetry, large prominent ears, scoliosis and dental malocclusion, undergoing surgery due to omphalocele and syndactyly. Delay in the neuro-psychomotor development of speech and language was observed. The audiology assessment showed severe unilateral mixed right hearing loss, tympanometric type A curve in both ears, as well as the absence of contra-lateral stapedial acoustic reflex and ipsilateral bilaterally.

**Conclusion:** Few studies were found in the literature, highlighting hearing impairment in Goltz syndrome. Hearing loss can occur as a result of this syndrome, thus, the diagnosis and monitoring by a multidisciplinary team is paramount, in order to avoid or minimize the consequences of auditory deprivation and provide patients with a better quality of life.

**Keywords:** Focal dermal hypoplasia, Hearing loss, Child

**A564. Clinical Evaluation of Swallowing in Institutionalized Bedridden Patients**

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**Introduction:** Elderly people go through several anatomical and functional changes that may affect the stomatognathic system - their structures and functions. Among these, swallowing disorders are common and significant, and can have serious implications for the elderly, as for example, malnutrition, dehydration, tracheal aspiration and, consequently, aspiration pneumonia.

**Objective:** To correlate the structural alterations of the stomatognathic system with swallowing and dysphagia alterations in bedridden institutionalized elderly patients.

**Methods:** It was conducted phonaudiological evaluation of swallowing through the Protocol for bedside clinical evaluation (Carrara-de Angelis, 2010), in bedridden elderly, of both genders, from August to November 2012. The data analysis was performed by SPPS 18.0 for Windows, the significance level established was 5%.

**Results:** The sample was composed of 46 elderly, 56.5% female, with an average age of 83.3 years (± 10.9) and 43.5% dental prosthesis users. It was observed that 30.4% of patients had swallowing alteration and 13% dysphagia. It was realized the crossing between the evaluation items of stomatognathic structures with the alteration of
swallowing and dysphagia. There was a significant association between the diadochokinesia changes in the palate (p-value = 0.04) and mandible (p-value = 0.005) with swallowing alteration. A significant association between lip sensitivity alterations (p-value = 0.007), tongue (p-value = 0.012) and diadochokiniesia of the jaw (p-value = 0.034) with dysphagia.

**Conclusion:** It is observed that structural alterations of the stomatognathic system are directly related to swallowing and dysphagia changes, although the structures involved are not the same.

**A565. College Student’s Perception of Esophageal and Tracheoesophageal Voice**
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**Introduction:** Total laryngectomy is an effective treatment for patients diagnosed with laryngeal cancer. After the surgery, the patient should be referred to the speech therapy in order to develop a new form of communication, whether by esophageal voice, electronic larynx or tracheoesophageal voice.

**Objective:** Verify college students’ perception of esophageal and tracheoesophageal voice.

**Methods:** The sample consisted of 100 college students who were asked to evaluate, using the Vocal Quality Rating Scale, the pleasantness level of the voices of patients undergoing total laryngectomy whose use esophageal or tracheoesophageal voice to communicate. The assessment of voice quality occurred in two moments: before and after being informed about the historical disease reports.

**Results:** 90% of the students rated the esophageal voice as unpleasant and 10% as acceptable. After knowing the patients disease stories, 29% of the students rated the voices as unpleasant, 64% as acceptable and 7% as pleasant; 72% of the students rated the tracheoesophageal voice as unpleasant and 28% as acceptable. After knowing the disease stories, 22% rated the voices as unpleasant, 65% as acceptable and 13% as pleasant.

**Conclusion:** In the first moment the students rated the voices, both esophageal or tracheoesophageal, as unpleasant. Once they were informed about the patients disease stories they rated both voices as acceptable.

**Keywords:** Communicate; Empathy; Laryngectomy; Speech Perception; Voice Quality

**A290. Comparison of Clinical and Videofluoroscopic Evaluation of Swallowing in Children with Suspected Dysphagia**
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**Introduction:** Studies which verify the accuracy of clinical evaluation of swallowing in children are few.

**Objectives:** To verify the accuracy of clinical evaluation compared with videofluoroscopic swallowing studies in the detection of isolated laryngeal penetration and laryngeal aspiration in children with suspected dysphagia; to identify clinical signs and symptoms associated with isolated laryngeal penetration and laryngeal aspiration; and to determine the sensitivity and specificity of the clinical signs and symptoms identified.

**Methods:** Retrospective analysis of data from clinical and videofluoroscopic evaluations carried out in 55 children from 1 month to 7 years and 11 months old. To clinical evaluation, the “Protocol for Clinical Assessment of Pediatric Dysphagia” was used. Sensitivity and specificity of clinical evaluation were analyzed. To statistical analysis, Chi-square and Fishe’s Exact Tests were used.

**Results:** Clinical evaluation showed, in general, sensitivity of 86% (95% CI:78-94) and specificity of 32% (95% CI:15-47). For isolated laryngeal penetration, clinical evaluation showed sensitivity of 88% (95% CI:69-98). For laryngeal aspiration, clinical evaluation showed sensitivity of 86% (95% CI:70-96). However, specificity values were low for both alterations. There was no association between clinical evaluation and videofluoroscopic findings (p = 0.119). Choking was associated with isolated laryngeal penetration thin fluid (p = 0.044) and showed sensitivity of 53% (95% CI:31-73) and specificity of 77% (95% CI:65-87%)

**Conclusion:** Clinical evaluation was sensible to detect isolated laryngeal penetration and laryngeal aspiration in children with suspected dysphagia, however, showed low specificity. Choking was the only clinical sign associated with isolated laryngeal penetration thin fluid and showed specificity higher than sensitivity.

**A555. Contribution of the Standard Uncertainties of Types A and B in the Measurement Uncertainty of the Pure Tone Audiometry for Air and Bone Conduction**
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**Introduction:** All measurement results can only be considered complete when coupled uncertainty statement. To express the measurement uncertainty of pure tone audiometry the ISO 8253-1:2010 proposes a functional model that takes into account types A and B standard uncertainties.

**Objective:** To analyze the contribution of type A and B standard uncertainty to the uncertainty measurement of pure tone audiometry.

**Methodology:** Accuracy tests were performed under conditions of repeatability (same measurement procedure, operator, measurement system, operating conditions and same site, in a short period of time). Each of the five participants was submitted to two experiments with five repetitions of audiometry by air (250Hz to 8kHz) and bone (500 Hz to 4 kHz) conduction. To calculate the combined and expanded uncertainties type A uncertainty (repeatability), and Type B (audiometer calibration certificate, resolution of the audiometer, and conditions of the test environment) uncertainties were considered.

**Results:** There were no statistically significant differences within and between participants in different time intervals. Type A uncertainty ranged from 0dB to 2,7dB by air conduction and 0dB to 2,2dB by bone conduction. Type B uncertainties were 0,4dB (calibration certificate), 1,4dB (resolution), and 5dB (test environment). For a 95% confidence interval expanded uncertainty ranged from 10dB to 12dB for air conduction, and 10dB to 11dB for bone conduction.

**Conclusion:** The contribution of type B uncertainties was predominant, indicating the need to control these variables, aiming at the reliability of the audiometric results in view of its wide use in the health, labor and social security areas.

**A300. Critical Analysis on Artificial Mastoid Calibration Certificates**
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Introduction: Patient safety is the objective of Resolution 36/2013 of the Brazilian Health Surveillance Agency. Health professionals who use medical equipment must be careful with the calibration of these. For calibration of the audiometer is required different measurement instruments including artificial mastoid. It must be calibrated annually in the Inmetro, to be the reference standard for calibration of bone conduction audiometers.

Objective: This paper presents a national perspective of the quality of results in the calibration on artificial mastoid used in the calibration of audiometers.

Methods: Documental analysis of calibration certificates of artificial mastoid that were calibrated over a period of 4 years in Eletroacoustics Laboratory of Inmetro.

Results: Were analyzed 105 artificial mastoid calibration certificates of 28 laboratories service provider audiometer calibration service in Brazil. 78% of the evaluated mastoid showed non-compliance with IEC 60318-6. Another result is that a lot of artificial mastoid returning for annual calibration repeats the same non-compliance.

Conclusion: Some service providers in the audiometer calibration area are not careful about taking corrective actions to treat non-compliance of the artificial mastoid and continue offering the calibration service. Artificial mastoid that do not meet the requirements compliance of the IEC 60318-6 may compromise the calibration of bone conduction and consequently to change the results of audiometric test may cause a false air-bone gap.

A331. Current Overview of Brazilian Scientific Publications in the Field of Hearing Aids
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Introduction: The constant improvement of hearing aids technology has contributed for this process (from the selection to the effectiveness of treatment) to become a permanent challenge for hearing rehabilitation professionals. Alongside this progress, there is the growth of scientific research in the area, which proposes new horizons, exploring the necessary paths to improve quality of life and contribute to the excellence of Brazilian Audiology.

Objective: To analyze the current state of Brazilian scientific publications in the field of hearing aids.

Data Synthesis: Searches were performed (in the electronic databases Scielo, Lilacs and Medline) to find Brazilian scientific publications in the year 2014. The keyword used was “hearing aids”. 25 articles were found, but three were deleted after reading the abstract, because despite using the said keyword, these articles approached different subjects. Of the 22 studies analyzed, there was predominance (68%) of research conducted in the Southeast region of Brazil, and the elderly were the most studied population (63%). Regarding the objectives of these studies, we can highlight the measurement of success with sound amplification and its relationship to quality of life (23%), issues of translation, adaptation and verification of the reliability of questionnaires aimed at the child population, investigation of technical failures of hearing aids and speech and language aspects of hearing impaired people (36%).

Conclusion: Recent studies have shown the interest of researchers in two areas: treatment effectiveness and public policy, as the replacement of hearing aids is increasing and is costly to the public health system.

A635. Detection, Time of Deprivation and Main Complaints Reported by Subjects Diagnosed with Unilateral Hearing Loss
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Introduction: Unilateral hearing loss is characterized by decreased hearing in one ear affecting mainly the sound localization and subjects find more difficulties than their normal hearing counterparts to understand speech in the background noise.

Objective: Relate the unilateral hearing loss with ear predominance, age detection of deprivation and main complaints related to hearing loss.

Methods: Ethical approval: process n°168/2011 (FOB-USP). Were assessed 279 medical records of subjects enrolled in the Clinic of Speech Pathology and Audiology (FOB/USP) and Auditory Health Division (HRAC/USP). The study inclusion criteria were: diagnosis of unilateral hearing loss of any type (conductive, mixed or sensorineural) and degree (mild, moderate, severe and profound).

Results: Were analyzed 718 medical records in both services, and 279 followed the inclusion criteria. The subjects aged between 4 to 88 and the average age of detection of hearing loss varied between 1 to 81 years. It was observed no predominance on the right (46,88%) or left ear (47,84%), in other words, there was no statistically significant difference between the sides of sensory deprivation. Isolated tinnitus, or accompanied by vertigo, as well as exposure to noise, were the main complaints related to hearing loss, reported by 97.71 % of the sample.

Conclusion: The subjects aged between 4 to 88 and the average age of detection of hearing loss varied between 1 to 81 years. There was no predominance of laterality of hearing loss and the main complaints of subjects in this sample were tinnitus, vertigo and exposure to noise.

A376. Development of a Self-Perception Questionnaire: The Performance of Using Hearing Aids
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Introduction: Procedures to measure user perception of hearing aids with different settings make valuable tools to assist in choosing its best programming.

Objectives: Develop a questionnaire easy to apply, to investigate the perception of performance with different schedules hearing aids and verify its adequacy and reproducibility.

Methods: To provide the perception of different settings of hearing aids (directional microphone activation or not and noise reduction) in different situations of daily life, with and without noise, six questions were prepared to measure different spatial perceptions of sounds and different noise levels. A pilot study was conducted with fifteen new hearing aid users. From this study, it was made adjustments to facilitate understanding and the way answers should be scored as well as its reproducibility.

Results: The questions comprehend communication situations in familiar environment in silence and noise; speech perception for television or radio; in noisy internal, external and reverberant environments. Each question had five options of closed answers, which were converted into numerical scales. The minimum score was six, and the maximum 30; the higher score indicates better communication perception in each environment. The issues were analyzed
and compared, and it was not found statistically significant difference.

**Conclusion:** It was developed a self-perception questionnaire with six questions that is adequate and capable to be reproduced in target population.

**Keywords:** Questionnaires, hearing aids, speech discrimination

**A169. Dichotic Sentence Identification Test in Elderly**

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**Introduction:** The Dichotic Sentence Identification Test (DSI) enables to evaluate the central hearing abilities as a figure-background via binaural separation and integration using synthetic sentences.

**Objective:** Describe the reference values for the DSI Test in Elderly.

**Materials and Methodology:** A group of 36 subjects were evaluated, being 6 excluded because they presented asymmetry between the ears. Thus, the sample was composed by 30 elderly (22 female and 8 male), mean of 66.5 years-old, presenting from normal to moderate bilateral sensorineural hearing loss. The whole sample was subjected to Anamnesis, Acoustic Meatus Inspection, Pure-Tone Threshold Audiometry, Logaudiometry, Acoustic Imittance and DSI.

**Results:** The following results are preliminary of a study in progress. Regarding the hearing, 63.3% of elderly presented normality, mean of 17.29 dB for the right ear (RE) and 16.08 dB for the left ear (LE); and 36.6% presented mild to moderate symmetric bilateral hearing loss, mean of 41.76 dB for the RE and 40.45 for the LE. Among the subjects, 24 (80%) realized the exam and 6 (20%) were unable to realize it, because they presented ophthalmological disorders or had lower scholar levels. The founded values were around 67.5% for RE and 58.3% for LE in the training track, 71.66% for RE and 80% for LE in the binaural integration track and 85.41% in both ears in the directed hearing.

**Conclusion:** It was possible to realize the DSI test in most elderly evaluated and the founded values can be used as a reference for this population.

**A34. Distress Suffered by Tinnitus Clinic Outpatients**

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**Introduction:** The Tinnitus Handicap Inventory is a questionnaire for assessing the impact of tinnitus by quantifying psychoemotional and functional problems it causes. Objectives: The objective of the study was to analyze answers to the THI in a group of subjects treated at a tinnitus outpatient clinic in a tertiary hospital.

**Methods:** quantitative, cross-sectional, descriptive and observational study. Chronic tinnitus patients treated in an outpatient clinic took part. This study was approved by the Research Ethics Committee.

**Results:** 683 subjects with a mean age of 59.3 ± 5.7 years participated. In the overall score, a mean of 37 ± 29.7 points, with a minimum value of 0 and a maximum value of 100 was found. With respect to the level classification of distress caused by tinnitus, 18% had negligible distress, 26.8% mild, 24% moderate, 18.9% and 12.3% severe catastrophic distress. The score analysis according to the age showed significant negative correlation, suggesting that the younger the individual, the higher the THI score, namely, the greater the distress degree (r = -0.168, p < 0.001). The score analysis considering gender showed no statistical difference between the average score obtained by men and women (p = 0.97).

**Conclusions:** Data analysis showed that the majority of evaluated patients had tinnitus distress from mild to moderate, and the distress level was influenced by age, but not by gender.

**Keywords:** tinnitus; questionnaires; age groups; distribution by age and sex

**A337. Distortion Product Otoacoustic Emissions of College Musicians**

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**Introduction:** Young people playing in college bands are exposed to high sound pressure levels and this exposure can cause damage to the hearing system.

**Objective:** To analyze distortion product otoacoustic emissions of musicians.

**Method:** Cross-sectional, descriptive and prospective study, developed with members of college battery. The sample consisted of 19 musicians of both sexes, aged between 19 and 26 years (mean age of 21.4 years) with an average of exposure time of 1.9 years. Hearing assessment consisted of distortion product otoacoustic emission (DPOAE). Otoacoustic emissions were performed using Biologic equipment and were captured by presenting stimuli in two intensity levels (L1 and L2), 65 and 55 dB respectively, evaluating the frequencies between 2000 and 8000 Hz. The emissions were analyzed considering signal / noise ratio and classified as “present or absent”.

**Results:** DPOAE analysis showed that 10 (52.6%) battery members had presence of response at all frequencies tested, on both ears. The frequency with the highest rate of responses (92.1%) was 2000 Hz and, with the lowest rate (78.9%), 4000Hz and 6000 Hz.

**Conclusion:** Despite the short period of exposure to high sound pressure levels, it was observed that college musicians exhibited changes in cochlear function.

**Keywords:** Otoacoustic emission; Noise; Hearing

**A663. Distribution of Hearing Aids for Elderly in the Service the Sergipe State**

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**Introduction:** According data the OMS, more than 15 million Brazilians have hearing loss. In the last years public service expanded access to audiological care through the deployment of networks of patient care with hearing loss, contemplating from the promotion of hearing health to speech therapy.

**Objective:** To present a mapping of elderly patients users of hearing prosthesis who are attended at public auditory health services in Aracaju.

**Method:** Transverse and retrospective observational type of study through individual records attended from January to March of 2014, with 60 or more years of age attended at the high complexity Services at the Health Hearing São José Hospital in the city of Aracaju.
Results: The data shows that 58% of treated cases are in the state interior, 35% the state capital, followed by patients Nossa Senhora do Socorro city, with 5% the cases and Itabianha with 2% of the total sample.

Conclusion: We realized the organization of three large groups. The first to most of patients living in municipalities further the interior Sergipe state, followed by the resident population in the capital and after to the cities with larger population and development located closer to the capital. It concludes that despite the proximity geographic the capital the largest distribution focuses on population resident in the interior state making more proportionate and allowing all state access to assistive technology in the listening area.

A669. Drives Vocals: Diverted Voices / Changed? Or Schemes Vocals Compounds?
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Introduction: The vocals drives constitute an intriguing phenomenon for the voice sciences, for their aesthetic, mechanical and performance technique challenge some of the rules considered as basic, along the lines of "well sing" dominant in Western society. It was only with the progress of Sciences voice and vocal pedagogy itself - carried out mainly in the last four decades - is that the vocals drives were treated as a legitimate object of scientific research and won, to so speak, “citizenship status” “technical and vocal.

Objective: To unveil the sound-vocal universe of popular singing, presenting an updated framework of research on the phenomenon and its applicability; establishing, moreover, its physiological correlates.

Data Synthesis Despite the many "comings and goings" among scholars of the subject, the most immediate result of studies on the vocal drives is that they are grouped according to the laryngeal structures directly involved in the breakdown of the fundamental frequency of the voice and / break in the continuous flow of air: Glottic Drives, supraglottic and Mixed.

Conclusions: The anatomical and functional demystification laryngeal enabled the didactic and pedagogical development of a “vocal type”: crystal voice, Gregorian voice, clamp voice, in addition to vocal effects such as vibrato techniques and the drives themselves. But decoding / physiological precise description of adjustments made during the execution of the drives, as well as general issues involved vocal health, is still a controversial subject among the authors.

Keywords: singing voice, vocal drives, diverted voices, vocal compounds schemes

A602. Dysphagia in Patients with Neurotoxoplasmosis and AIDS
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Introduction: Toxoplasmosis is the most common cause of focal neurological lesions in HIV-positive patients with CD4+ cell count less than 200 cells/mm².

Objective: Verify the presence of dysphagia pre and post therapy in patients with AIDS and neurotoxoplasmosis.

METHODOLOGY: The presence, degree of dysphagia and level of intake by mouth were analyzed through the Dysphagia Outcome and Severity Scale (O’Neil) and the Functional Oral Intake Scale (FOIS) in 24 patients with a mean age of 41 years.

Results: Eight patients (33%) presented normal swallowing, with FOIS level 7. Five patients (21.5%) presented mild oropharyngeal dysphagia, with initial FOIS level 6. Three patients (12.5%) had a moderate degree of oropharyngeal dysphagia, with initial FOIS level 3. Three patients (33%) had severe oropharyngeal degree, with initial FOIS level 1. The patients with mild dysphagia were rehabilitated and their FOIS went to 6. Two (66%) of the patients with moderate dysphagia developed mild dysphagia with FOIS 6 and one patient (34%) progressed to normal swallowing with FOIS 7. Only one patient (12.5%) with severe dysphagia was rehabilitated to normal swallowing with FOIS 7.

Discussion: For patients with AIDS and neurotoxoplasmosis, the greater the number and extent of neurologic damage and lower counts of CD4+ cells, the worse the degree of dysphagia.

Conclusion: Dysphagia was present in over 50% of cases. Patients with mild and moderate dysphagia were rehabilitated. Patients with severe dysphagia had their rehabilitation limited by probable aggravation of the illness.

Keywords: Dysphagia, Toxoplasmosis Cerebral, Acquired Immunodeficiency Syndrome

A45. Effectiveness of Speech, Language and Hearing Therapy in Systemic Sclerosis
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Introduction: Systemic sclerosis rheumatic autoimmune disease, progressive, infrequent, of unknown etiology. Reaches vital organs and perioral tissues, causing limitation of mouth opening, difficulty in chewing and swallowing disorder.

Objective: Compare results before and after myofunctional rehabilitation.

Methods: Descriptive exploratory clinical study in Rheumatology sector of the University Hospital and Speech-Language Pathology School-Clinic the Federal University of Sergipe from July / 2012 to December / 2013. Participated five subjects, both genders, aged between 23 and 60 years, mean age of 44.6 years and 80% were female and 20% male. All with systemic sclerosis medical diagnosis and presenting speech-language disorder proven in review. The myofunctional speech therapy aimed the muscle modification and restoration of oral functions, and the myocarepica sought modification of the muscle behavior by performing exercises (MARCHESAN, 2005). Were performed 36 weekly sessions and in the end was performed comparing the clinical indicators worked.

Results: The previous test to speech therapy revealed restriction of mouth opening in all subjects, the current results revealed increase ranging from 5mm to 14mm. Regarding the tone, mobility of phonoarticulatory organs and orofacial numbness, improvement was observed and, in most cases, occurred adequacy of stomatognathic functions.

Conclusion: The speech rehabilitation promoted results considered significant in the clinical of these individuals. Therefore, it is evident the importance and need for further studies because of the shortage in the literature, as well as the inclusion of the speech therapist in an interdisciplinary team care to these patients.

Keywords: Speech, Language and Hearing Sciences; Scleroderma, Systemic; Speech Therapy

A440. Effect of Lip after Lip Repair Digital Manipulation: A Case Report
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Introduction: Each type cleft lip needs approach and differentiated study on the surgical procedure and techniques to provide functionality and aesthetic repair to patients. A strategy to reduce scarring sequelae of lip repair is the application of lip massages.

Objective: To report the effects of digital manipulations lip after lip repair.

Resumed report: Case report, approved by the CEP No. 39/12. Boy, 2.7 years with unilateral right complete cleft lip and palate, lip repair performed at 6 months and palatoplasty with 1.6 years, featuring in speech orofacial scar sequel evaluation, lip retraction right nose wing lowering right contraction mentalis and orbicularis oris, open lips at rest, with anthropometric measurement for caliper of upper lip (UL) held the subnasal point to gnathion 1 cm. Started fortnightly speech therapy with mother for guidance perform digital manipulations lip 3 times a day. After 3 months the revaluation showed qualitative improvements of lower lip retraction and perioral muscles with proper tone; and quantitatively measured UL 1.4 cm. After 6 months of early stimulation, observed, decreased scar sequel, tone adequacy of the perioral muscles, improved lip movement, lips parted at rest and measured UL 1.6 cm.

Conclusion: There was a qualitative and quantitative improvements in orofacial evaluation of the patient in the 6 month follow-up, suggesting effective use of lip digital manipulations. The technique was an important tool to reduce scar sequel of lip repair, beyond the aesthetic benefits, providing greater functionality of muscles.

Keywords: Cleft Lip; Cleft palate Musculoskeletal Manipulations

A526. Effects of Different Stimulation Modes on Ocular Vestibular Evoked Myogenic Potential Records
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Introduction: The ocular vestibular evoked myogenic potential (oVEMP) records vestibulo-ocular responses, caused by sound stimulus mono or simultaneous binaural issued. Binaural record presents more reliability, because, unlike monaural, there is simultaneous binaural capture of responses for the same contraction of the inferior oblique muscle.

Objectives: To verify the efficiency of binaural simultaneous stimulation on oVEMP records compared to monaural acoustic stimulus.

Methods: 53 adults were evaluated, aged 18 to 35 years, paired by gender and age, with normal hearing sensitivity and absence of hearing and/or vestibular disorders history. oVEMP records were performed monaurally, contralateral to the stimulus and, then, with binaural stimulation and capture. 100 tone-bursts stimulus were evoked (5Hz rate), pitch of 500Hz (Rise/Fall = 1 e Plateau 2), loudness of 100 dbNA, using bandpass filter from 05 to 300Hz, with 50ms latency. Data were processed by SPSS 17.0 software. Values were considered significant when p ≤ 0.05 and alpha value was 0.1.

Results: There were no significant differences between genders when oVEMP was performed unilaterally. There was significant difference only to amplitude parameter with binaural stimulus (p = 0.003). In the analysis between monaural and binaural records of oVEMP, p1 and n1 wave amplitudes were higher for the responses with binaurally stimulus.

Conclusion: Binaural acoustic stimulus provides p1 and n1 waves of the oVEMP with higher amplitudes (wider) than monaural; however no differences were observed with latency parameter, between both stimulation types.

Keywords: Sacule and Utricle, Ear, Vestibular evoked myogenic potential

A54. Effectiveness of Myofunctional Exercises Associated with Vocal Exercises in the Rehabilitation of Neurogenic Oropharyngeal Dysphagia: A Randomized Double Blind Clinical Trial
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Introduction: in dysphagia, there are changes in the laryngeal and stomatognathic structures, however, the use of vocal exercises is poorly described.

Objective: to determine if therapy myofunctional exercises associated with vocal exercises is more effective to rehabilitate swallowing in patients with stroke.

Methodology: it is a pilot clinical trial, randomized, double blind, made up the control group, which held myofunctional exercises, and experimental group, who performed vocals and myofunctional exercises. The evaluators and patients were blinded to the intervention and randomization took place through the list of randomized numbers. In the evaluations, we used the GRBASI Scale and the Functional Oral Intake Scale. In the statistical analysis, we use the Wilcoxon test for intragroup analysis and the Mann-Whitney test for intergroup analysis.

Results: The experimental group showed statistically difference (p = 0.039) between evaluations before and after therapy (median of 4 to 7) indicating that the combination of myofunctional exercises with vocal exercises is effective providing greater increased levels of intake orally than in the control group (median of 5 to 6). In the vocal quality markers, breathiness tended to be statistically significant (p = 0.059) in the experimental group, indicating that the vocal exercises were able to improve glottal closure.

Conclusion: The association of myofunctional and vocal exercises in the rehabilitation of neurogenic oropharyngeal dysphagia was more effective in improving intake levels orally.

Keywords: voice training; deglutition disorders; stroke
procedure was promotion of vocal health, by therapeutic workshop, containing informations about anatomy and physiology of vocal production, awareness of the importance of vocal care. These activities were carried out through storytelling and conversations at the end of the activity, lasting an hour. One day after the activity, students were asked to answer a questionnaire containing questions about caring voice.

**Results:** 14 (73.68%) of participants were male. 16 (87.5%) knew retell the story heard, narrating the main guidelines passed by professional in the activity, such as "I learned about not to scream", "we learn to speak down", "I take care of my voice", "we have to drink eight glasses of water a day".

**Conclusion:** This study has achieved the proposed objectives, verifying the student's opinion about vocal health promotion in school environment. It was identified that preventive activities in the educational speech therapist's intervention can promote benefits on student learning and awareness of the importance of taking care of voice. It's suggested studies in schools, aiming at positive strategies to promote vocal health.

**A279. Efficacy of Auditory Training Computerized in Auditory Skills of Temporal Duration Pattern in Children**

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**Universidade Federal de Santa Maria - Ufsm**

**Introduction:** In identifying auditory processing disorder, the computerized auditory training is an interesting therapeutic indication to rehab altered temporal auditory skills in children, as it is dynamic and motivating.

**Objective:** The aim of this work is to verify the effectiveness of the computerized auditory training in children with auditory processing disorders in school age, by comparing the auditory skills of temporal duration patterns before and after training.

**Methods:** The study is a quantitative cross prospectively and was conducted in a public speech therapy service. Participated in this study five children of school age. Among other behavioral assessment procedures, was realized to assess the auditory skills of temporal pattern, Duration Pattern Test. From the identification of the auditory skills altered, it was proposed the computerized auditory training with the software "Pedro na casa mal-assombrada" (Pedro in the haunted house) in six sessions of 40 minutes. After this intervention, was carried out the revaluation of this temporal skill and compared the performances obtained with the assessment before the training in a descriptive way.

**Results:** There was a satisfactory improvement in the children's that underwent the computerized auditory training. Of the five children, three of them reached the normal range expected for its skill, and two improved 20% taking into account the result of the Duration Pattern Test.

**Conclusion:** Observed and improvement in the temporal pattern skill in all children who have followed the training with the software. Therefore, the efficacy of this type of auditory training was identified in this sample.

**A188. Efficiency and Cutoff Values of the Brazilian Version of Voice Activity and Participation Profile VAPP for Non-teachers and Teachers**

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**Introduction:** The Voice Activity and Participation Profile â€“ VAPP is an interesting tool to assess how a voice problem restricts and limits the social and professional vocal activities. Teachers, compared with non-teachers, report higher frequency of vocal and physical vocal complaints in their professional activity.

**Objectives:** To identify characteristics of efficiency and cutoff values of the dimensions of the Brazilian version of VAPP protocol that discriminate dysphonic and vocally healthy subjects; to verify if the cutoff values remain the same for a sample of teachers.

**Methods:** Features of efficiency and cutoff values of VAPP data of 171 subjects were analyzed by Receiver Operating Characteristic â€“ ROC curve: 90 teachers (60 dysphonic and 30 vocally healthy, with similar mean age, \(p = 0.418\)) and 81 non-teachers (48 dysphonic and 33 vocally healthy, with similar mean age, \(p = 0.934\)).

**Results:** The area under the ROC curve â€“ AUC and the cutoff values of the total score of VAPP for discriminating individuals with and without dysphonia are different for non-teachers and teachers. Non-teachers had AUC = 0.986 (\(p < 0.001\)) and 4.5 points in the total score of VAPP (sensitivity = 95.8%, specificity = 90.3%); teachers had AUC = 0.872 (\(p < 0.001\)) and 14.6 points of cutoff of the total score (sensitivity = 91.7%, specificity = 75.5%).

**Conclusion:** The cutoff values of VAPP are different for non-teachers and teachers, higher for teachers, however, with greater sensitivity and specificity for non-teachers individuals and can be used for screening of large populations at risk for voice disorders.

**Keywords:** Voice; Dysphonia; Self-Assessment

**A263. Electroacoustic Evaluation of Workers attending a Workers Health Reference Center**


**Universidade Federal de Santa Maria**

**Introduction:** Exposure to high levels of sound pressure on workers may result hearing impairment, such as Hearing Loss induced by noise. The electroacoustic evaluation has been important for early detection of occupational hearing disorders.

**Objective:** Detect minimal cochlear alteration in individuals of a Workers Health Reference Center.

**Methods:** Sample of 96 workers, with 58.3% men and 41.6% women, mean age of 46.13 years, treated at the Workers Health Reference Center. Was held clinical-occupational anamnesis, pure tone audiometry, immittance measures and Transient Otoacoustic Emissions.

**Results:** In the right ear, 53.47% of the individuals had normal hearing, 27.43% with normal hearing notch on the high frequencies, 19.77% hearing loss with otoacoustic emissions present in 73.08%, 41.67% and 26.32% respectively. For type and level of hearing loss, it was identified 1.04% mild mixed, 2.08% mild conductive, 11.45% mild sensorineural, 3.12% moderate sensorineural and 2.08% moderately-severe sensorineural. In left ear 46.88% of the individuals had normal hearing, 34.37% with normal hearing notch on the high
frequencies, 18.75% with otoacoustic emissions present in 77.78%, 33.33% and 27.78% respectively, not being held at 5.55%. For type and level of hearing loss, was identified 1.04% moderate mixed, 1.04% moderately-severe mixed, 11.46% mild sensorineural, 2.08% moderate sensorineural and 3.12% moderately-severe sensorineural. 

**Conclusion:** The population evaluated was characterized with normal hearing with notch in the high frequencies, indicating minimum cochlear lesions occupational, through transient otoacoustic emissions, excellent in early detection of hearing loss induced by noise.

**A448. Electrophysiology as a Monitoring Tool of a Training Program Hearing in Children Underwent Bilateral Myringotomy**

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Children with recurrent otitis media history often have problems in processing the sounds and the auditory training can improve hearing performance due a reorganization of the auditory neural substrate. The electrophysiologic assessments have shown good applicability and efficiency when you want to monitor and track, objectively, the changes in the auditory training programs. To analyze the performance efficiency of an auditory training program through electrophysiological assessment. We evaluated a total of 3 subjects (2 females and 1 male) at the age of 11 years, with a recurrent otitis media history and underwent bilateral myringotomy. Subjects were assessed by complete basic hearing evaluation, auditory processing and electrophysiological assessment with verbal and non-verbal stimuli. After this, individuals went through an acoustically controlled auditory training program (8 sessions) in a soundproof booth and at the end of this, a complete reassessment was performed with the same initial procedures. All subjects had an improvement in electrophysiological assessments after auditory training program. Decreased latency values were observed in the following waves: speech ABR [E, F and O – OD; D, E and F – OE], tone burst P300 [P300 – OE] speech P300 [P200, N200 – OD; P300 – OE] and increasing the amplitude of these waves: speech ABR [C, O – OD; C – OE], tone burst P300 [P300 – OD; N100 – OE], speech P300 [N100, N200, P300 – OD; P300 – OE]. The analysis has shown that the auditory training program was effective, which can be evidenced by improvements in electrophysiological responses.

**A1723. Endogenous and Exogenous Potentials in Children with Phonological Disorders**

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UFRGS

**Introduction:** The phonological disorder is characterized by changes that occur in the child’s speech. Difficulties in oral language may be closely related to auditory processing disorders. Auditory processing disorders can be identified by endogenous and exogenous potentials.

**Objectives:** To analyze and compare the electrophysiological findings obtained in evaluations of endogenous and exogenous potentials in children with and without phonological disorders.

**Methods:** 36 children were evaluated, 22 with phonological disorder and 14 without phonological disorder, aged between 5 and 12 years. All the children were evaluated by electrophysiological assessment of potential exogenous (N1, P2, and N2) and endogenous (P3).

**Results:** From the 22 children with phonological disorders, 7 of them did not respond at all assessed components; 15 (51.7%) children with speech disorders were evaluated, between them 66.7% were male, with an mean age of 8.4 years for the study group and 8.0 years for the control group. The mean latencies were significantly higher in the children of study group when compared to the children of the control group ($p < 0.05$), and the latency wave N2 was the latest of them. The mean amplitudes of N1, P2 e P3 were higher for the control group.

**Conclusion:** It can be seen that there are significant differences in the results of latency and amplitude in the potential endogenous and exogenous in children with phonological disorder compared with children without phonological disorder.

**Keywords:** evoked potentials, auditory; electrophysiology; event-related potentials; speech disorders

**A566. Evaluation of auditory handicap of elderly users of hearing aid assisted in a Government Program Hearing Aid Fitting**

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**Introduction:** Evaluation of the degree of benefit or success of a hearing aid has traditionally involved measurement of speech reception. Self-report questionnaires provide an attractive alternative to clinical speech tests.

**Objective:** to analyze the auditory handicap of elderly hearing aid users of a health unit of the unified health system (SUS) in the city of Belém, Pará.

**Method:** a telephone call to 205 elderly people that received hearing aids from a Government program of hearing aid fitting in the city of Belém, Pará to schedule a follow up at the Health Unit. All answered to the Hearing Handicap Inventory for Elderly â€“ screening version (HHIE-S) besides they received orientations about hearing aid use, care, handling and maintenance of them.

**Results:** 99 people assisted at Health Unit. 61 males and 38 female. Out of them 73 answered to HHIE-S. Related to handicap perception, results showed that 24.6% (n = 18) did not present a significative handicap perception; 36.5% (n = 27) showed a light/moderate handicap and 38.3% (28) a significative perception. In 47% of sample questions related to Social aspects were the most influent on the handicap followed by the emotional aspects (30%). Just for 21% of people these aspects did not showed any difference.

**Conclusion:** Data showed that a significative perception was present in majority of individuals. Hearing loss compromises the participation of elderly on daily activities affecting their social life.

**A699. Evaluation of Standard Swallowing Indicators in Institutionalized Patients with Cerebral Palsy with Multiprofessional Intervention**

Carla Maffei, Paul Joseph Jakobi, Vinicius Ribas Fonseca, Edmary Coutinho de Godoy, Marcal Motta de Mello, Yara Alves de Moraes do Amaral Mannes

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**Introduction:** Spastic tetra parietal cerebral palsy (CP) mode is a severe pathology diagnosed by clinical and videodeglutogram.
**A627. Evaluation of the Hearing Frequency Perception with Musical Stimulus on a Teenager User of AASI**

**Scheila Farias de Paiva, Layna Santos Siqueira**

**Universidade Federal de Sergipe**

**Introduction:** Hearing deficiency is the total or partial loss of capacity of perception sounds and difficulty in understanding words and can be classified according to the time it occurs, site and the degree of injury. The Individual Sound Amplification Device (AASI) is an electronic device that allows sound amplification providing the ald disabled to understand the speech and to realize environmental sounds. Auditory training Musical is a program with musical activities for auditory development in order to promote music appreciation through music learning using musical stimulus.

**Objective:** To evaluate the auditory performance of teenagers users of AASI for auditory discrimination tasks for musical sounds with different timbres.

**Methodology:** It used the tonal frequency pattern test (TFP) with sequences of three four stimuli of different sounds (keyboard and flute contralto), with the use of AASI.

**Results:** For the keyboard sound, the patient obtained three hits total of 10 sequences presented for activity with three stimulus and a hit to activity with four stimulus. As for the alto flute, obtained one hits for sequences of three stimulus and five for the sequence of four stimulus.

**Conclusion:** The patient performed better with the use of hearing AASI to musical perception with the keyboard timbre.

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**A29. Evoked Potentials, Auditory of Late Latency and Cognitive in Teenagers Down’s Syndrome**

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**Universidade Federal do Rio Grande do Sul**

**Introduction:** The realization of Late Latency Auditory Evoked Potential (LLEAP) in individuals with Down syndrome (DS) can provide important data from brain processing of hearing and their associations necessary for a good language development.

**Objectives:** To evaluate latencies and amplitudes obtained from exogenous and endogenous components of LLEAP in teenagers with DS and correlate the findings between genders.

**Methods:** This study included 11 teenagers with DS, without hearing loss, seven females and four males with minimum age 13 and maximum 17 years. Hearing evaluation and research of the LLEAP were performed, including cognitive potential (P3).

**Results:** The averages found for the latencies of exogenous components P1, N1, P2, N2 were respectively 110.2ms; 180.3ms; 322.2ms and 492.5ms to right ear and 100.2ms; 168.3ms; 323.1ms and 497.5ms to left ear. The averages found for the amplitudes P1N1 and N1P2 were respectively 15.0µV and 16.0µV to right ear and 16.9µV and 18.7µV to left ear. The mean found for the latency of the P3 wave was 651.7ms and mean amplitude 10.0µV. There was a significant difference between genders for N1 latency in the right ear (p = 0.020).

**Conclusion:** Analyzing P1, N1, P2, N2 and P3 waves, it was observed increased latencies and amplitudes within the normal range. Significant correlation was observed between genders only for N1 latencies for the right ear, females had higher latencies. It is suggested conducting studies that use the procedures of LLEAP to evaluate and objectively monitor the interventions and therapeutics evolutions in DS.

**Keywords:** Hearing; Electrophysiology; Down Syndrome
A545. Experience of an Amateur Singing Group as Care Device in Primary Health Care
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Introduction: the Unified National Health System (1990) calls for the Primary Health Care as the main gateway for users to the Health Care Network, and has promotion as one of its principles. The music, as semiotic system remains across cultures and generations, enabling and expressing feelings, memories and thoughts. Considering the importance of music, a singing group can expand access to leisure and culture, and is presented as a resource to provide better quality of life and self-esteem of people.

Objective: To discuss an amateur singing group as a device to promote health in the Primary Health Care.

Method: descriptive and qualitative approach, speech therapy and physical therapy group techniques, coordinated by speech therapist/singer and physical therapist with collaboration of an otolaryngologist (videolaryngoscopy realization) and from a musician (guitar).

Results: No patient presented laryngeal alterations. It was noticed improvement in vocal care (vocal hygiene often demanded and discussed in the group), providing greater awareness and self-care. In the course of many meetings, the body relaxation exercises, articulation, breath and vocal heating increased extent and vocal range and hence dynamic-melodic perception. The group favored rhythm, musicality and disinhibition, “giving life” to the group. Attendance and bond created between participants is a sign of health/life.

Conclusion: The group brings joy, relaxes and produces overshoot, meeting the recommended by the National Health Promotion Policy, providing improved vocal quality and discovery of musical potential, positively impacting in the quality of life of the participants.

Keywords: Primary Health Care; Interprofessional Relations; Health Promotion; Singing; Music

A598. Exposure to Pesticides on Farm Workers: Effects on Hearing
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Introduction: The study on hearing care workers was almost exclusively on the effects of noise. They are still incomplete studies on the effects on hearing health on exposure of chemicals, especially pesticides. Pesticides are used to control biological organisms harmful to agricultural production that compete with humans in crops or spreading diseases. The extensive use of pesticides in agricultural production is a major health problem due to contamination of soil, water and air.

Objective: To review and verify, in the literature, the effects of pesticide contamination on hearing health in rural workers.

Method: Relevant national and international journals were reviewed indexed in PubMed, Medline, Bireme, LILACS, Google Scholar and dissertations from 2009 to 2015.

Results: Several studies correlating hearing loss with exposure to noise have been seen in the literature, however, there are other risk factors for hearing health that have been observed in the workplace. When considering occupational hearing loss it is important to recognize the potential of otoxic chemicals, eg pesticides. The studies showed that the use of insecticides may be responsible for hearing loss, independent of the noise exposure time, or the inefficient use of personal protective equipment.

Conclusion: In view of these findings, further studies should be conducted with this population is using methods and techniques to investigate hearing damage, since there is evidence that pesticides lead to hearing loss independent of the presence of noise.

Keywords: hearing loss, pesticides, noise-induced hearing loss, ototoxicity
with ANE are presented. In this case, sudden and recurrent paralysis of his right vocal fold was the only manifestation of the disease. At the end of the fifth week.

The patient’s voice was normal, the spoken and sung vocal ranges were same as before the current episode of ANE and scores of his vocal self-assessment were appropriate.

A292. Factors Associated with the Presence of Swallowing Disorders in Children with Suspected Dysphagia
Lenice de Fatima da Silva Munhoz, Karina Elena Cadioli Bernardis Buhler, Suely Cecília Olivan Limongi
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**Introduction:** Children with neurological, cardiac and respiratory disorders, and history of prematurity may present swallowing disorders. However, only few studies verify the relationship between these clinical factors and swallowing disorders in this population.

**Objective:** To identify the clinical factors associated specifically, history of prematurity and neurological disorders associated with signs and symptoms observed in the clinical evaluation of swallowing that may suggest alterations in the pharyngeal phase, and with the oral and pharyngeal findings of the videofluoroscopic swallowing study.

**Methods:** Retrospective analysis of data from clinical and videofluoroscopic evaluations carried out in 55 children from 1 month to 7 years and 11 months old. Subjects were grouped according to the history of prematurity or neurological disorders. To clinical evaluation, the “Protocol for Clinical Assessment of Pediatric Dysphagia” was used. In the videofluoroscopy, the oral and pharyngeal phases were assessed. To statistical analysis, Chi-square and Fisher’s Exact Tests were used.

**Results:** Prematurity was associated with oxygen desaturation (OR 5.9, 95% CI 1.5-23.8; p = 0.008). No significant association was found between prematurity and the videofluoroscopic findings. Neurological disorders were also associated with oxygen desaturation too (OR 5.1, 95% CI 1.4-18.7; p = 0.010). In the videofluoroscopic, neurological disorders were significantly associated with oral phase alterations (OR 4.4, 95% CI 1.4-14.0; p = 0.009) and with post-swallow residue in valleculae and pyriform sinuses (OR 6.2, 95% CI 1.5-25.5; p = 0.007).

**Conclusion:** Oxygen desaturation was associated with prematurity and neurological disorders. Alterations in the oral phase and post-swallow residue in valleculae and pyriform sinuses were associated with neurological disorders.

A76. Factors in Childhood and Adolescence that May Influence the Auditory Processing: A Systematic Review
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**Introduction:** There is a consensus in the literature on the importance of the auditory system for the development of oral and written language. The Auditory Processing Disorder refers to the difficulty of processing auditory information.

**Objectives:** The aim of this systematic literature review was to analyze which factors occurring in childhood and adolescence may influence the auditory processing and that are not necessarily the cause or consequence of the disorder.

**Data Synthesis:** Two researchers used the PubMed and SciELO databases independently. The descriptors used were auditory processing, auditory perception, children and adolescence, in various combinations. Among the 205 articles identified, 30 articles matched the inclusion criteria and were analyzed. Only two studies showed positive factors influencing auditory processing skills: the influence of musical stimulation in infancy and the use of methylphenidate as a treatment for attention deficit hyperactivity disorder. The influence are, mostly, negative for the auditory processing, and we emphasize the relationship of the disorder with dyslexia, learning difficulties, specific language impairment, low socioeconomic status, attention deficit hyperactivity disorder, premature birth, phonological disorders, visual impairment, mouth breathing, stuttering, otitis media, cleft lip and palate, anemia, exposure to metallic mercury, obstructive sleep apnea-hypopnea syndrome, CVA, socially vulnerable children and dysphonic children.

**Conclusion:** The Auditory Processing is sensitive to the negative influences related to environmental and chemical factors, socioeconomic status, and language, auditory and neurological disorders. Exposure to music and the use of methylphenidate were the only factors with positive influence on the auditory processing.

**Keywords:** Hearing Tests; Auditory Perception; Child

A289. Family Involvement in the Initial Stages of Intervention with Children with Hearing Loss: Culture and Community Issues
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**Introduction:** The importance of partnership between parents and professionals involved in intervention of hearing impaired children in the initial stages of therapeutic process can be crucial for a favorable prognosis, considering that the counseling, orientation and identification of community resources will determine adhesion to the use of hearing aids and to intervention program.

**Method:** We selected two groups of five families in the early stage of intervention. Parents participated with the children in two moments: Speech Therapy and Family Accession Group (FaAG), weekly sessions for the identification of values, experiences regarding the difficulties, doubts and identification of the community resources.

**Results:** Parents used the group to ask the doubts and exchange experiences about the differences between their children and their hearing and educational possibilities. Cultural aspects and difference between families were identified. There was need for guidance on the placement of the ear mold, proper functioning of the hearing aids, expectations regarding language of children and recommendation for cochlear implant. The identification of community resources depended on where the family resided.

**Conclusion:** The intervention setting that includes parents group in addition to individual therapy was determinant for the consistent use of amplification and promoted opportunities for exchange of experiences among parents. The identification of the community resources was determinant in the adhesion to intervention including use a hearing aids and the frequency in therapies.

**Keywords:** Parents Group, Speech Therapy, Hearing Loss

A491. Feeding of Premature Below 34 Weeks after Hospital Discharge
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**Introduction:** Premature infants are exposed to various factors that may influence their development, especially in the nutrition. Early intervention is fundamental to achieve good growth, preventing problems and providing efficient support. The aim of this study is to analyze the feeding of premature infants below 34 weeks of gestation discharged from the neonatal intensive care unit of a tertiary hospital in the city of Belo Horizonte, Minas Gerais, Brazil. The study was conducted from January to December 2017. The sample included 50 premature infants discharged from the neonatal unit. The data were collected through clinical records and patients’ medical files. The feeding patterns were analyzed, including breast feeding, formula, and enteral feeding. The feeding difficulties were identified and evaluated. The results showed that the majority of the premature infants were discharged with breast feeding (63%), followed by formula feeding (24%) and enteral feeding (13%). The feeding difficulties were observed in 80% of the premature infants, with difficulties in establishing breast feeding and difficulties in maintaining the breastfeeding. The results showed that the majority of the premature infants were discharged with breast feeding (63%), followed by formula feeding (24%) and enteral feeding (13%). The feeding difficulties were observed in 80% of the premature infants, with difficulties in establishing breast feeding and difficulties in maintaining the breastfeeding.
A447. Findings Orofacial Myofunctional of Patients with Sleep Disorders
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Introduction: Snoring is a disorder that affects 20–40% of the population and is a result of vibration of the anatomical structures of the upper airways, it is important sign for the diagnosis of obstructive sleep apnea and hypopnea syndrome (OSAHS). Objectives: Describe the orofacial myofunctional findings of patients with sleep disorders.

Methods: Cross-sectional study conducted with patients referred for polysomnography with a random sample consisting of adult patients of both sexes, with snoring and who were not receiving any form of treatment for sleep disorder. Antroposcopic speech evaluation was performed and the results of polysomnography were collected in order to meet the objectives of the work. Approved by CEP 833.492/2014

Results: A significant association between the severity of sleep disturbance and environmental variables was found, such as smoking and alcohol consumption; also with individual characteristics such as race, body mass index, waist circumference and Hypertension. From the point of view of myofunctional characteristics, there was a positive relationship between the severity of OSAHS and the contraction of the mentalis muscle, Mallampati class, elevation of the back of the soft palate, and change in breathing pattern.

Conclusion: The research enabled a tendency to describe the existence of orofacial myofunctional disorders in individuals with OSAHS, and also revealed that the greater the degree of impairment of orofacial structures is, the larger is the degree of disorder.

Keywords: Sleep Disorders; Sleep Apnea Syndromes; Speech, Language and Hearing Sciences; Snoring

A485. Findings Vestibular in Caloric Test in Patients Diagnosed with Spectrum Disorder of Auditory Neuropathy
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Introduction: The disorder of the auditory neuropathy spectrum characterized by the involvement of the auditory branch of the vestibulocochlear nerve. However, studies have shown that affected individuals may also have vestibular disorders, arising from possible changes in the vestibular nerve portion. In vectoelectronystagmography, the caloric test enables the evaluation of the side semicircular canal and the superior vestibular nerve of each labyrinth separately, by means of temperature variation in the external auditory canal.

Objective: The aim of the study was to describe the findings of vestibular caloric test by vectoelectronystagmography in individuals diagnosed with Neuropathy Spectrum Disorder Auditory.

Methodology: The study was retrospective, through chart analysis of six women and eight men, aged 30-60 years. It was considered for the analysis vestibular history, neurologic evaluation and research findings of spontaneous nystagmus, pre-caloric nystagmus and caloric test.

Results: In vestibular entrance history, 10 subjects reported episodes of dizziness and / or vertigo. There was the presence of spontaneous nystagmus with eyes closed in eight subjects, pre–caloric nystagmus in five individuals. The caloric test, there was absence of bilateral response in half of the individuals. An examination showed the absence of unilateral response and other unilateral hypofunction. Five exams showed no alterations. On neurological examination found no peripheral or central nervous system changes.

Conclusion: The findings of this study demonstrate that there is clinical evidence of vestibular alteration in individuals with Spectrum Disorder Auditory Neuropathy, corroborating several international studies on the subject.

Keywords: auditory neuropathy; tests of vestibular function; Vectoelectronystagmography

A531. Hearing Behavior of Students in Early Literacy
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Introduction: The use of questionnaires allows to obtain qualitative information about the auditory behavior of children, and these may indicate the need to assess the auditory processing (Central).

Objective: To describe and compare hearing difficulties of students in everyday situations.

Method: Descriptive and cross-sectional study conducted in a public school in a small town of São Paulo state. The sample consisted of 36 students, of both genders, aged six and seven years. To achieve this objective, parents or guardians answered the Scale Auditory Behaviors (SAB) questionnaire. The questionnaire consists of twelve questions and focuses on the frequency of occurrence of auditory behaviors in some everyday situations. In this study, it was analyzed six questions.

Results: The analysis showed that 94.4% of parents reported some behavior that may indicate difficulty in processing auditory information, the most prevalent behaviors were: ask to repeat the information (86.1%), did not understand rapid speech (72.2%) and difficulties in identification and discrimination of speech sounds (41.6%). Comparison of
students’ auditory behavior showed that six years old students presented higher difficulty to follow oral instructions and inconsistent responses to auditory information and, seven years old students had difficulty to hear or understand in noisy environment.

**Conclusion:** Most students presented difficulties in everyday auditory behavior, and this varied according to age group.

**Keywords:** Questionnaires, Hearing, Auditory perception, Hearing tests, Child

**A281. Hearing Loss and Cognitive Effects in Sentence Recognition in Aged**
Taissane Rodrigues Sanguebuche, Débora Durigon da Silva, Maria Madalena Canina Pinheiro, Mirtes Bruckmann, Rúbia Soares Bruno
Un

**Introduction:** Among the alterations found in aged are the presbycusis and the changing in the cognitive aspects. When these two factors occur simultaneously, they lead to the loss of word recognition and sentence comprehension.

**Objective:** To evaluate the hearing loss and cognitive effects in sentence recognition in aged.

**Methodology:** A group of 30 aged took part of the study. Of these, 17 presented normal hearing and formed the control group (CG) and 13 presented hearing loss and formed the study group (SG). To evaluate the cognition, a Mini Mental State Examination (MMSE) was done and to evaluate the auditory effects the Portuguese Sentence List (PSL) Test was applied, in which the sentence recognition thresholds in silence (SRTS) and the signal to noise ratio (S/N) were researched.

**Results:** The attendees’ age mean was 68.5 years-old, the minimum of 60 and the maximum of 88 years. In the MMSE, the CG presented a higher percentual of individuals with alteration than in SG, no statistical significance. In both SRTS and S/N ratio, the CG presented better thresholds than the SG in both ears. Regarding the cognitive aspects, there was not significant statistical difference between normal and with alteration groups in the MMSE for SRTS and S/R ratio of the control group and study group in both ears.

**Conclusion:** The hearing loss exerted influence in the recognition of sentences in silence and at noise. On the contrary, the cognitive aspects did not interfered in the speech recognition in both silence and noise.

**A247. Hearing Loss and Tinnitus Complain in Head Neck Cancer Tumors**
Priscila Feliciano de Oliveira, Erica Crislane Omena de Lima, Renata Grazielle Souza Santos, Tatiane Costa Carneiro, Grasiella Pereira Ferreira
Universidade Federal de Sergipe

**Introduction:** The literature shows that head and neck cancer tumors have more complications and complaints due to treatment as a result of the anatomical cancer location. Cancer treatment has ototoxic effects and hearing loss is one of the main complications of head and neck cancer tumors and it causes communication disorders.

**Aim:** To characterize the hearing loss in head and neck cancer tumors and to correlate with tinnitus complain.

**Methods:** A cohort study of 18 patients, both genders, at the oncology department of a public hospital of Segipe was carried out. It was performed an Audiological evaluation (Pure Tone Audiometry) and was approved by the Ethics in Research Committee, under protocol #33665014.7.0000.5546.

**Results:** 50% were male and the others female, the main age was 49.5 years. Most of them (61.1%) had a sensorineural hearing loss characterized by changes from 3kHz frequency. The hearing loss group had tinnitus (45.5%) as a complain but there was no significant difference (p = 0.12). 25% reported worsening of hearing thresholds after cancer treatment and it was also not observed significant difference (p = 0.61). Mann Withney test showed positive correlation between frequencies 1 to 8 kHz in association of normal hearing thresholds with hearing loss (p < 0.05).

**Conclusion:** Hearing loss is characterized by sensorineural damage that affect frequencies from 3kHz and has no significant difference with tinnitus complain.

**Keywords:** ototoxic effects, hearing loss, cancer

**A430. Hearing Loss in Perrault Syndrome: A Case Report**
Ana Cláudia Bianco Guçao, Aline Costa Almeida, Jerusa Roberta Massola de Oliveira, Adriana Sampaio de Almeida Meyer
Universidade de São Paulo

**Introduction:** Perrault syndrome is characterized by sensorineural hearing loss in several types, affecting both male as female gender. The syndrome is an autosomal recessive inheritance, has abnormalities in the gene, and various clinical signs as ovarian dysgenesis, progressive cerebellar ataxia, and neurological disorders of speed reduced of nerve conduction to individuals of the female gender.

**Objectives:** To present the audiological profile found in an individual of the female gender, diagnosed with Perrault syndrome. Resume report: Female gender patient, 23 years, diagnosed with hearing impairment at 2 years old, possibly due to the Perrault Syndrome. The patient has progressive sensorineural hearing loss of severe degree, bilateral. She is in hearing rehabilitation using individual hearing aid.

**Conclusion:** This current case proposes an alert to hearing professionals, as otolaryngologists and audiologists about this syndrome and the possibility of hearing loss, associated with Perrault syndrome, in view of early hearing diagnostics and satisfactory rehabilitation.

**Keywords:** Hearing Loss, Diagnosis; Gonadal Dysgenesis

**A177. Hearing Screening in Middle-Aged Adults and Elderly: Community Centre Results**
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Universidade Federal do Rio Grande do Sul - Ufrgs

**Introduction:** The presbycusis diagnosis often does not occur because there isn’t a specific hearing loss complaint. Thus, the auditory screening could be an alternative to reduce the time interval between the onset of early symptoms, diagnosis and treatment.

**Objective:** To assess hearing screening results in middle-aged and older adults who attend a community center.

**Methodology:** The sample consisted of individuals of both genders in a total of 47 individuals, aged between 53 and 80 years (mean 67.42 ± 6.58 years). 43 were females (91.3%). The otoscopy was initially performed, followed by the hearing screening using portable equipment (Hearcheck Screener, Siemens), in quiet environment. The equipment emits pure tones at 1000Hz (20, 35 and 55dBHL) and 3000Hz (35, 55 and 75 dBHL). As a criterion of “pass”, the subjects should hear the pure tone sounds, except for 20dBHL at 1000Hz, as previous research has shown that even people with normal hearing can not perceive the pure tone in such loudness.
Results: From the 47 individuals tested, it was found that only 6 (12.77%) individuals passed the hearing screening in both ears. From these, three were middle-aged adults and three were elderly. Failed results were found in the right ear in 40 (85.11%) patients and in the left ear in 34 (72.34%) individuals.

Conclusion: It was found that most of the tested adults and elderly subjects failed in the hearing screening (87.23%), whereas most of them were found in the left ear.

Keywords: Mass Screening, hearing, Middle Aged, Aged

A514. Hearing Screening Network of Public Schools in Porto Alegre
Jade Zaccarias Bello, Isadora de Oliveira Lemos, Leticia Kurtz
Ufcspa

Introduction: The adequate process of oral language development is directly related to auditory integrity, because when the child has difficulties in the auditory feedback process, the oral language will be impaired and consequently the acquisition of written language, as well as their learning in general. Therefore, the school hearing screening plays a key role detecting possible hearing difficulties in children of school age.

Objectives: To verify the number of hearing screening conducted in schoolchildren from public schools in the city of Porto Alegre in the years 2012 and 2013.

Methods: DATASUS data were used from January 2012 to December 2013. There were 137,010 primary school students enrolled in public that same year, there were 222 hearing screening procedures registered, representing 0.16% of students. In 2013 there were 342 procedures registered, an increase of 54% of hearing screening in school in comparison to 2012.

Conclusion: Considering the findings of this study, although there is a considerable increase of 54% from 2012 to 2013, it is clear that there is an expressionless number of hearing screening in public schools, in comparison with the number of students enrolled. It is necessary to create public policies that contemplate this type of procedure to detect, diagnose and treat patients with hearing difficulties at school age.

Keywords: speech therapy, diagnosis, audiology

A511. High-Frequency Audiometry in Adults with Normal Hearing
Laundara Barbosa dos Santos, Fatima Cruz Ribeiro de Miranda, Sandy Maira Almeida de Andrade, Beatriz Mendes de Azevedo Soares
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Introduction: Auditory High Frequency evaluates the frequency of 8,000Hz, 9,000Hz, 10,000Hz, 11,200Hz, 12,500Hz, 14,000Hz and 16,000Hz, and it is a test that detects early hearing loss situated in the cochlea base, due to aging, exposure to ototoxic drugs, diabetes mellitus and high intensity noise.

Objective: To study the auditory profile by conventional audiometry and high frequency in a group of young people with and average age of 23 years.

Methodology: Observational, retrospective and prospective. Conventional audiometry (250Hz to 8,000Hz) and high frequency audiometry (8,000Hz to 16,000Hz) were carried out. Only young people who had no change in the conventional audiometry were observed. Also applied ques- tionnaire on symptoms, history, habits and diseases in only 46 individuals.

Results: Among 167 individuals evaluated, 14 had thresholds above 30dB. Of the 14, there was a further decline in the frequency of audibility 14,000Hz and 16,000Hz. Among the 46 who completed the questionnaire, 5 individuals demonstrate changes in high frequency audiometry and reported dizziness, tinnitus, ear fullness, diabetes, habit of drinking alcohol and headset use to listening to loud music. In the questionnaire the most frequent reports were in drink alcohol and tinnitus.

Conclusion: After analyzing the results, one can observe a decrease in levels of audibility in audiometry and also the increase in frequencies.

A514. Hearing Screening Network of Public Schools in Porto Alegre
Jade Zaccarias Bello, Isadora de Oliveira Lemos, Leticia Kurtz
Ufcspa

Introduction: Further research is required to determine the auditory profile in adults and elderly subjects.

Results: Among the 147 individuals evaluated, 14 had thresholds above 30dB. The 14, there was a further decline in the frequency of audibility 14,000Hz and 16,000Hz. Among the 46 who completed the questionnaire, 5 individuals demonstrated changes in high frequency audiometry and reported dizziness, tinnitus, ear fullness, diabetes, habit of drinking alcohol and headset use to listening to loud music. In the questionnaire the most frequent reports were in drink alcohol and tinnitus.

Conclusion: After analyzing the results, one can observe a decrease in levels of audibility in audiometry and also the increase in frequencies.

A714. High-Speed Kymography of Healthy Subjects: A Reference Pattern
Monika Tsutsumi, Regina Aparecida Pimenta, Maria Eugenia Dajar, Adriana Hachiya, Domingos Hiroshi Tsuji, Arlindo Neto Montagnoli
Universidade de São Paulo (USP/São Carlos)

Introduction: High-Speed Kymography is a technique of laryngeal images analysis currently used by laryngologists. Because of normative data shortage related High-Speed Videolaryngoscopy the goal of this study is to characterize the vocal folds vibratory pattern of healthy subjects calculating quantitative measurements of high speed kymography.

Method: Laryngeal images from 45 healthy subjects were collected during emission of sustained vowel with controlled frequency and intensity, 26 of female and 19 male. Eight parameters were analyzed: phase time (closed, opening, closing, opened), total period of vocal fold vibratory cycle and quotient, (opening, closing and speed). The software X-CAD developed by Medical Engineering Research Group (GPEM-CNPq) was used to analyze the images.

Results: Medium values, in milliseconds, of high-speed kymography parameters were: closed phase time: female = 1.75 and male = 3.32; opening phase: female = 1.47 and male = 2.32; closing phase: female = 1.51 and male = 2.22; opened phase: female = 2.91 and male= 4.56; and total period of vibratory cycle: female= 4.67 and male= 7.89. The quotients were: closing: female = 0.37 and male = 0.42; opening: female = 0.62 and male = 0.57; and speed: female= 1.02 and male= 1.12. Statistical differences were found in all phase time of vibratory cycle in comparison between genders (p<0.001), and in opening and closing quotients (p = 0.013).

Conclusion: Using specific computational tools to analyze high-speed laryngeal images we obtained quantitative parameters of High-Speed Kymography of healthy subjects that can be used as a reference pattern for future studies.

Keywords: High-Speed Videolaryngoscopy, High-Speed Kymography, normative data

A496. Indicators of Risk for Disability Hearing: Rate Hearing in Children 1 Year 2 Years
Lenita da Silva Quevedo, Ana Carolina Lago Battezini, Micheli Bristot
Universidade de Passo Fundo

Evaluate the occurrence of hearing impairment in children with risk factors for infant hearing loss, screened in Neonatal Hearing Screening Program at a hospital within the state of Rio Grande do Sul. Inclusion criteria were: patients born in that hospital, age group of one to two years old, of both genders, and that had remained in the pediatric Intensive Care
Unit (ICU) for more than five days. It was analyzed 110 children records that fitted the inclusion criteria. All were contacted, however, the sample was composed by 10 children, age group of one to two years old, these being seven boys and three girls. Most prevalent risk indicators for hearing loss were: mechanical ventilation (5) ototoxic medication (4), ICU for more than five days (10). In the RE the frequency of 4000 Hz presented the lowest value of signal/noise (S/N) relation in TEOAE, and the frequency of 2000 Hz presented the highest value of S/R relation. In the LE the frequency with the lowest value of S/N relation was 1500 Hz, and the highest value of S/N relation in 3500 Hz. In the DPOAE the frequency that presented the lowest value of S/N relation in both ears was 5000 Hz. The frequency with the highest value of S/N relation in 3500 Hz for the RE was in 3000 Hz and for LE was in 2000 Hz.

Conclusion: all children evaluated presented TEOAE and DPOAE presents in both ears, however due to the small sample size it is suggested further studies of this nature.

A641. Individuals with Genetics Hearing Loss Nonsyndromic: Audiological Findings
Pricila Sleinier, Bibiana Fuzer da Silva, Liliane Razador, Rafael Fabiano Machado Rosa, Paulo Ricardo Gazzola Zen
Universidade Federal do Rio Grande do Sul

Introduction: Deafness, whether partial or total is the most common sensory impairment found in the population. The incidence of genetic deafness in our population reaches about 16% of cases, and, 95% of deaf children are born to parents with normal hearing. 31% of cases of sporadic deafness are caused by mutations in the connexin 26 generating a genetic hearing loss character of non-syndromic.

Objective: To report the audiological findings in children with genetical hearing loss nonsyndromic, proven by the test of the search of the mutation 35delG of the Connexin 26.

Method: 12 children were studied, 06 cases of siblings, 09 male children and 03 female children, ages between 04 and 12 years old, coming from a service of hearing care in a reference hospital, submitted to an otornolaryngological evaluation, tonal threshold audiometry, acoustic immittance testing and research of the mutation 35delG of the Connexin 26.

Results: The audometric findings show hearing loss in sensorineural and bilateral types in all cases, in which 20% in moderate, 46.7% severe and 33.3% deep grades. In the acoustic immittance testing all individuals show tympanometric curves type A with total or parcial lacking of acoustic reflexes.

Conclusion: The mutation 35delG of the Connexin 26 is potentially liked to some cases of unclear hearing loss. In this paper, all children evaluated showed sensorineural bilateral hearing loss in moderate to deep grade, in this way, it’s believed that the research of this mutation could be included in the series of tests to investigate hearing loss, in order to help with the diagnostic etiology and genetic counseling.

Keywords: Hearing, hearing loss, genetic

Katia Nemr, Marcia Simões Zenari, Ana Flávia de Oliveira Nalom, Anne Caroline de Oliveira, Joyce Pinheiro da Silva
Universidade de São Paulo

Introduction: Dysphonia affects between 6%–38% of children. Rehabilitation programs have been suggested, but literature is scarce on the subject.

Purpose: To develop an infantile Speech-Language Pathology program for vocal hyperfunctioning and verify its effectiveness through vocal assessment.

Method: Adaptation of Vocal Cognitive Program for adults with vocal hyperfunctioning based on the use of dynamic images/repetitive stimuli aiming to a body reframing based on the Genetic Epistemology of Jean Piaget was developed for infantile patients. Three children participated in the pilot and all performed larynx examination. The program consisted of initial assessment and reassessment with vocal recording for perceptual and acoustic analysis and also voice assessment by the responsible for the visual analogic scale; six therapy sessions involved gradually, breathing, glottis activity and resonance/articulation and finished with reinforcement for the integration of the three aspects approached and for changing poor habits; the elected vocal techniques based on literature relied on cognitive playful strategies which were adapted to this research, aiming the understanding and retention of the new settings as well as encouraging the practice of new vocal habits.

Results: All patients showed improvements in perception and acoustic analysis; in the visual analogic scale a child kept the same initial score and two presented improvement.

Conclusion: The Infantile Cognitive Vocal Program proved to be effective and promoted positive shifts in the voice aspects approached. The cognitive playful strategies shown to be adequate and may be reproduced in larger samples and may be a highlighted intervention approach in this age group.

A426. Influence Factors and Reasons for Early Weaning Until the Third Month of Life
Luíza Silva Vernier, Diana Weber Bartz, Natasha Corrêa Ramos, Sheila Tamanini de Almeida
Universidade Federal de Ciências da Saúde de Porto Alegre

Introduction: Breastfeeding is the ideal food for newborns and those must be exclusively breastfed for the first six months of life to achieve ideal development and health. However, Brazil presents low exclusive breastfeeding indices, with early introduction of other foods on the infants diet.

Objectives: Investigate factors that influence breastfeeding discontinuance and reason reported for early weaning until infants third month of life.

Methods: Cross-sectional study, with a sample of 150 postpartum women. The data was collected from December 2013 to June 2014, in two steps. The first on the rooming in at the hospital, applying two questionnaires and the second through phone interviews, applying a questionnaire at the first and the third months of the infants life. The project was approved by UFSCPA’s Research Ethics Committee under number 481.830.

Results: There was a significant association between the use of pacifiers (p = 0.022) and bottles (p < 0.001) and early weaning at the first and the third months of the infants’ life. Significant, too, was the association between reasons related to weaning: “mother with complaints” and “insufficient milk”, with the variables education (p < 0.001), return to work (p < 0.001), immediate postpartum complaints (p = 0.035) and not have breastfed before (p = 0.008).

Conclusion: The use of pacifiers and bottles, among several variables researched, were the ones that presented significant relevance in breastfeeding discontinuance. Insufficient Milk and Complaints were the main reasons for weaning reported by mothers who had already initiated other foods on their infants diet and those are associated to woman with immediate postpartum complaints and that haven’t breastfed before.
A58. Influence of Risk Indicators for Hearing Loss in the Infant Audiological Diagnosis
Georgea Espindola Ribeiro, Daniela Polo Camargo da Silva, Jair Cortez Montovani
Faculdade de Medicina de Botucatu

**Introduction:** Universal neonatal hearing screening aim to facilitate the early diagnosis of hearing loss in order to minimize the negative effects that this deficiency can result in the speech development. In addition it is important to know which risk indicators for hearing loss causes this damage, by this way we can improve the rehabilitation process.

**Objective:** To analyze the frequency of risk indicators for hearing loss and its influence on the number of hearing impairments.

**Method:** The study was conducted in a public hospital with 796 babies.

**Results:** In the 796 infants screened, 09 had hearing loss with a prevalence of 11:1000. We found that 132 (16%) showed some risk indicator for hearing loss and the most frequent were: intensive care units (ICU) stay, Apgar score 0-4 in the first minute and/or less than 6 in the fifth minute of life, birth weight less than 1500g and use of mechanical ventilation and ototoxic drugs. There was a statistically significant relationship between the hearing loss diagnosis with the following risk indicators: ICU stay and use of ototoxic drugs.

**Conclusion:** Despite the occurrence of certain risk indicators for hearing loss in the sample, who were really associated with hearing impairment were only ICU stay and use of ototoxic drugs.

A546. Influence of Unilateral and Bilateral Tinnitus in Sleep
Rayane Brum de Fraga, Adriane Ribeiro Teixeira, Alexandre Hundertmarck Lessa, Leticia Petersen Schmidt Rosito, Celso Dall’Ignas
UFRGS

**Introduction:** Tinnitus is a disorder of high prevalence in the population. The most frequent complaints related to tinnitus are the interference with sleep and concentration difficulties in daily activities that can potentially change the emotional balance of the patients.

**Objective:** To analyze the correlation of the unilateral or bilateral tinnitus and its interference caused in the sleep.

**Methodology:** The study sample included patients of both genders from the tinnitus clinic of an university hospital. They underwent data collection on the presence of unilateral or bilateral tinnitus and the interference of tinnitus in their sleep, by means of a questionnaire prepared by the clinical team. Pearson’s test was performed to evaluate the correlation of sleep interference in cases of unilateral or bilateral tinnitus.

**Results:** We evaluated 731 subjects, 271 men (37.07%) and 460 females (62.93%), aged between nine and 88 years (mean 59.06 ± 12.84 years). There was a statistically significant correlation ($p = 0.004; r = -0.107$) between the presence of bilateral tinnitus and the complaint of sleep interference.

**Conclusion:** The data analysis showed a statistically significant correlation between the variables, indicating that the presence of tinnitus in both ears suggests greater interference with sleep, compared to patients with unilateral tinnitus.

**Keywords:** Tinnitus; Sleep; Audiology

A671. Investigating Non-Breastfeeding by HIV+ Young Mothers: Repercussions and Possibilities of Interdisciplinary Intervention
Luíza Silva Vernier, Gabriela Nunes Maia, Gabriela Cásia Ritt, Daniela Centenaro Levandowski
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**Introduction:** The prohibition of breastfeeding for HIV+ mothers may impact the mother-infant relationship and damage infant’s feeding, leading to interference in oral motor development. Thus, this condition becomes adequate to an interdisciplinary intervention, aiming to promote a dyad’s health.

**Objectives:** To analyze the repercussions of non-breastfeeding for young HIV+ mothers and to reflect on interdisciplinary care strategies.

**Methods:** Qualitative, exploratory-descriptive and cross-sectional study, with eight HIV+ mothers (15-21 years) and their babies (4-9 months) of low socioeconomic status, contacted in health services of Porto Alegre/RS. Mothers have discovered HIV infection during pregnancy or childbirth. They fulfilled a sociodemographic form and were interviewed about motherhood experience. The project was approved by UFCSPA’s Research Ethics Committee (Protocol 10-617).

**Results:** Participants reported both the desire to breastfeed, as well as “indifference” to its impossibility. The feeling of unfulfilled motherhood aroused by not breastfeeding was overcome by the desire of preventing infant illness, the fear of vertical transmission and the search for new strategies to deal with motherhood in this context.

**Conclusion:** These results highlighted the need for interdisciplinary intervention. The speech therapy could guide the proper placement of baby during feeding, and to emphasize the importance of emotional contact during this time, also providing alternatives to the supply of food proper development of the stomatognathic system. At the same time, psychologist could address the mother feelings derived from this condition and the need for adjustments, promoting the mother-baby bond. These interdisciplinary care guidelines and strategies intend to mitigate the possible adverse effects non-breastfeeding and to promote baby’s healthy development.

**Keywords:** HIV; Breastfeeding; Motherhood

A542. Labor Aspect with Emphasis on Hearing and Extra-Hearing of Gas Station Workers
Isabela de Moraes Fattore, Isabela Schroer Neis, Állan Rodrigo Vieira da Silva, Valdetê Alves Valentins dos Santos Filha
Universidade Federal de Santa Maria

**Introduction:** Among the factors that may result in occupational risk, noise is the most frequent. It is believed that the constant exposure to chemical agents leads to a potentiation of the harming effects of the auditory and extra-hearing health of the workers.

**Objective:** To analyze the labor aspects with emphasis on hearing and extra-hearing effects listed by the gas station workers facing the daily exposition to noise and ototoxic chemicals.

**Methodology:** The sample was composed of 51 gas station workers, being 15% female and 85% men, age mean of 36.8 years-old, exposed to noise and chemical agents, subjected to a questionnaire application previously developed about hearing and extra-hearing aspects.

**Results:** It was found a mean of 7.56 daily hours worked and 7.6 years of service. Concerning the receipt of auricular protector IPE, 17% of them received, of which 44% use it continuously. Regarding the auditory perception, 96%
A400. Laboral Activity in Health Professionals Exposed to Chemotherapy Drugs: A Neurotology Perspective

Assunção Cogo, Valdete Alves Valentins dos Santos Filha
Universidade Federal de Santa Maria

Introduction: The handling of antineoplastic drugs is considered high risk for accidents and occupational diseases. 
Objective: To evaluate the auditory and vestibular systems of workers exposed to chemotherapy drugs in the University Hospital of Santa Maria and to identify the use of individual protection equipment by comparing the obtained results.

Methods: A cross-sectional study and quantitative method was utilized. 33 male and female workers in the nursing and pharmacy sectors were evaluated, with ages ranging from 21 to 60 years old. The workers underwent conventional Audiologic Assessment, Transient Evoked Otoacoustic Emissions, and Computerized Vectoelectronystagmography.

Results: The majority of the sample was female (90.9%). Individual protection equipment was used by 90.9% of the workers. 56.25% of nursing workers and 52.94% of pharmacy workers complained of dizziness. In the audiological and vestibular assessments, the observed results were within normal limits in 96.97% and 74.20% of the sample respectively. However, audiometric configuration of notch type was identified in 75.75% of the workers. Notch type on audiometric configuration (76%) and altered caloric test (100%) were often associated with lack of coal mask use.

Conclusion: Among the workers evaluated, the vestibulocochlear system was within the normal range. The presence of notch configuration indicates the need to use individual protection equipment.

Keywords: Hearing, Drug Therapy, Occupational Health Services, Vestibular Function Tests, Dizziness

A527. Laryngeal Tuberculosis: Literature Review on the Interface of Post Pharmacotherapy Sequelae and Speech Therapy
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Introduction: Laryngeal Tuberculosis is an infectious disease caused by Mycobacterium tuberculosis. The transmission is direct via saliva droplets containing the infectious agent. The treatment is pharmacological, lasting six months and some patients acquire sequelae.

Objectives: To analyze the effects of laryngeal tuberculosis in the airways tract and its interference in the vocal quality, and discuss the benefits of speech therapy in the rehabilitation of these functions.

Data Synthesis: The selection of articles was held in virtual health library (BVS) in LILACS and SciELO database in the 1983-2014 period with the descriptors "tuberculosis", "larynx". Tuberculosis Laryngeal predominates in men and the most common symptoms include coughing, secretion, fever, sore throat and weight loss. It is usually diagnosed as laryngeal cancer erroneously due to similar symptoms. The incidence of dysphonia is high and speech therapy significantly improves the voice quality of these patients seen in the reduction of tension during phonation, improved pneumo-phonoroarticulatory coordination, increased loudness and decreased abrupt vocal attack, which more socially acceptable. Are obtained statistically significant improvements in fundamental frequency variability, maximum phonation time and deaf fricative relationship and sound S / Z.

Conclusion: Speech therapy despite the limitations in cases of laryngeal tuberculosis intervene positively in the healing process of the mucosa of the upper aerodigestive tract, contributing to the best vocal pattern of the patient. Being a rare disease, there is a field still being explored.

Keywords: Laryngeal Tuberculosis; Speech Therapy; post pharmacotherapy sequelae

A75. Lifetime and Amplitude of Transient Evoked Otoacoustic Emissions in Neonates
Lauanda Barbosa dos Santos, Silvana Frota, Cristiane Fregonesi Dutra Garcia, Natália Ramos, Maria Isabel Kós Pinheiro de Andrade, Suzana de Couto Mendes
Universidade Federal do Rio de Janeiro

Introduction: Cleft lip and palate– CLP- is one of the most common congenital anomalies and classified as follows: Pre-incisive foramen clefs– PIF; Post-incisive foramen clefts-POF; and Trans-incisive foramen clefts– TIF. The nasality and compensatory articulation disorders are part of the clinical picture. Aspects of language delay may occur, although they are not related to the pathology but triggered by overprotection over the deformity.

Objective: Score the impairment of the language because of the CLP.

Resumed Report: Case studies, approved by the Ethic Committee, number 039/12. Group of children accompanied weekly at a speech therapy clinic situated in a pediatric care hospital in Porto Alegre/RS, composed by: boy, 2.6 years with TIF; boy, 2.7 years with TIF; girl, 2.10 years with TIF; boy, 3.1 years with TIF. They have varied nasality and language delay for phonetic, phonological, syntactic and semantic levels. Language delay levels observed in these cases are diversified and compromises the communication function by interfering in their interpersonal communication.

Conclusion: Regardless of the type of CLP, the focus of the speech pathology consists, generally, in oral facial aspects and speech for correction of commitments generated by the extension of the deformity and its surgical correction. The speech therapy for CLP patients should include the evaluation, speech therapy and orientation of the language aspects, aiming at improving the quality of their lives and their family’s lives. The family orientation must be careful and directed towards the child’s overall development.

Keywords: Cleft Lip; Cleft palate; Language

A282. Language Delay in Children with Cleft Lip and Palate Attended at a Specialized Clinic.
Kariny Zencke da Silva, Guilherme Augusto Alff Moreira, Camila de Oliveira Lucas Marques, Grazia L. Silva Oliveira, Maria Cristina de Almeida Freitas Cardoso
Universidade Federal de Ciências da Saúde de Porto Alegre

Introduction: The presence of language delay levels observed in these cases are diversified and compromises the communication function by interfering in their interpersonal communication.
**Introduction:** Transient-evoked otoacoustic emissions (TEOAE) has been the most widely used test in newborn hearing screening. It is recommended to be performed before discharge from hospital.  

**Objective:** Evaluate the influence on the number of hours of the newborn life on TEOAE amplitude.  

**Methodology:** We observed 535 children. All children selected were born at term and did not have any risk factor for hearing loss. The study excluded children with TEOAE lower than 6 dB in the frequencies of 2, 3 and 4 kHz. The children were divided into three groups: group 1 (193 children between 12 and 24 hours of life), group 2 (169 children between 25 and 48 hours of life) and group 3 (173 children between 49h and 15 days of life). Statistical analysis were performed using the Student t test and ANOVA (analysis of variance).  

**Results:** The ANOVA test indicates that when comparing the amplitude of the EOA in relation to the three groups on the right ear, at each frequency, the amplitudes differ in groups only in frequency 4000 Hz (p-value < 0.044). For the left ear, the differences between means of groups were significant at frequencies 1.5k (significant difference between Group 1 and Group 2 and Group 1 and Group 3), 3k (significant difference between Group 1 and Group 2) and 4K (significant difference between Group 1 and Group 3). When comparing average levels of Response, also found significant differences.  

**Conclusion:** The age factor (number of born-hours) influences the amplitude of TEOAE.  

**A533. Listening in Elderly: Hearing Handicap and Quality of Life**  
Priscila Silva Passos, Aline Cabral de Oliveira Barreto, Mara Maria Gomes Barros de Andrade, Silmar Gabriela da Silva, Liliane Desguardo Pereira  
Universidade Federal de São Paulo; Universidade Federal de Sergipe  

**Introduction:** The quality of life of the elderly is influenced by physiological changes that accompany aging such as hearing loss and its social consequences.  

**Objective:** Compare the quality of life of older people with hearing loss with and without complaints of difficulty in understanding speech.  

**Method:** A total of 56 elderly without neurological and psychiatric and/or unexpected auditory-vestibular alterations in presbycusis were assessed. Participants were submitted to audiological assessment and completed SF-36 and Hearing Handicap Inventory for the Elderly–(HHIE) questionnaires in order to determine the impact of hearing loss on social, functional, emotional and situational aspects.  

**Results:** A negative correlation was observed between emotional and situational and social aspects. There was a statistically significant difference between the number of individuals reporting difficulty in understanding speech and those that did not, with respect to loss of well-being in emotional (p = 0.004), situational (p = 0.005) and functional (p = 0.008) aspects of daily life.  

**Conclusion:** Self-perception of the disadvantage caused by hearing loss has a negative effect on psychosocial aspects. Elderly with difficulty understanding speech have greater hearing handicap and poorer quality of life.  

**Keywords:** Hearing Loss; Quality of life; Health of the elderly; Comprehension
**A584. Mapping of the Deaf School in The Public School System in Lagarto**
Scheila Farias de Paiva, Maria Denise Andrade de Araujo Rodrigues, Genef Caroline Andrade Ribeiro, Ana Claudia Nascimento Santos
Universidade Federal de Sergipe

**Introduction:** The law of Guidelines and Bases for national education 9394/96, ensures every child, the right to education, including children with physical, sensory and mental disabilities, which is offered on regular network of teaching and assured as a right for all.

**Objective:** To Conduct a mapping of Hearing impaired Children enrolled in municipal schools of Lagarto.

**Method:** This is a mapping of schools and the deaf students in the city of Lagarto/SE through the data provided by the Municipal Education and Regional Department 2 (DR2) in the city of Lagarto/SE.

**Results:** The results show that over 78 schools identified as inclusive, only 55 have students with cases of Inclusion, of these, only 16 schools have students with D. A totaling 24 students enrolled in the public network (State and municipal) distributed among youth and education adults (EJA) and fundamental education I and II.

**Conclusion:** It concludes that the majority of pupils with hearing impairments in the municipal attend between the 5th grade to 8th grade of elementary school II, followed by students from 1st to 4th year of kindergarten and find themselves at a school level more advanced than expected.

**A89. Mapping of Vocal Risk in Amateur Choir**
Milka Botaro Rosa, Mara Behlau
Universidade Federal de São Paulo - Unifesp

**Introduction:** Amateur choir singers can exhibit voice symptoms due to lack of guidance.

**Objective:** To verify vocal risk in singers.

**Methods:** 526 volunteers, 186 males and 340 females, answered to four instruments: Voice Symptom Scale (VoiSS), Modern Singing Handicap Index (MSHI), List of Vocal Symptoms and Sign (LSS) and Generalized Anxiety Disorder Scale (GAD-7). Participants were classified according to the cut-off value of the VoiSS protocol into pass and failure groups. They were also classified according to the number of vocal symptoms in no risk (less than 1.7 symptoms) and with risk (more than 1.7). Four groups were created: failed in both protocols, failed only in one of them (VoiSS, LSS and no risk).

**Results:** 102 singers (19.4%) failed only VoiSS; 54 (10.3%) failed only LSS; 169 (32.1%) failed both tests and 201 (38.2%) tested normal.

**Conclusions:** Amateur choir singers can have a high number of vocal symptoms. Self-assessment instruments may assist the conductor to screen singers for further specialized evaluation. Anxiety can be higher when vocal symptoms are present. The combined use of the two protocols can enhance the possibility to identify individuals with potential problems.

**Keywords:** voice, singing, dysphonia

**A560. Middle Ear Disorders Characteristics of Preschoolers**
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Universidade Estadual Paulista "Júlio de Mesquita Filho"

**Introduction:** Middle ear disorders are very common in childhood and may have a negative impact on auditory, speech and language development; due to the sensory deprivation that this disease causes.

**Objective:** to characterize middle ear disorders in preschoolers and verify if this disorder is influenced by series and period that the child attends school.

**Method:** Descriptive and cross-sectional study developed in a Municipal School of Infantile Education of São Paulo state. 107 children of both genders, aged between four and six years, composed the sample. Of these, 55 preschoolers attended Infant I and 52 Infant II. In this study was used the answers from a questionnaire, regarding the hearing health of children, which was sent to parents. For the data analysis was used a descriptive statistics.

**Results:** Analysis of the questionnaires showed that 28 (26.1%) preschoolers had an episode of middle ear disorders; of these 57.1% were from Infant I and 42.8% from Infant II. It was also observed that preschoolers from integral had a lower incidence of middle ear disorders (17.8%) when compared to the part-time (78.6%). Of the 28 who had middle ear disorders, the most common age group was between two and six years (53.5%), with one episode per year (42.8%).

**Conclusion:** There were few reports of middle ear disorders in preschoolers and this complaint was more prevalent in preschoolers from Infant I that attend school part-time.

**A452. Monitoring of Hearing and Language in Primary Care: A Pilot P of Partial Data**
Juliane Wagner, Márcia Salgado Machado, Laura Fabiana Burkhard, Andressa Ortiz Birck, Cristina Loureiro Chaves Soldéra, Andrea Wander Bonamigo
Universidade Federal de Ciências da Saúde de Porto Alegre

**Introduction:** A good hearing is essential for the hearing and language development. The community health workers are the crucial link between the community and the Unified Health System and for this reason they can contribute to the identification of hearing loss and perform an intervention during the critical period of child development, if needed.

**Objective:** To analyze the accession of the community health workers to a pilot project to monitor hearing and language.

**Methods:** Forty-one community health workers from five Health Centers were invited to implement a monthly questionnaire during the first year of age of babies belonging to the coverage area, according to the proposal of Alvarenga et al. (2012).

**Results:** Thirty-nine (95%) community health workers agreed to participate. During the first two months (March and April/2015), seventeen infants were included and monitored by the questionnaire. There was dropping out of any community health worker so far. Among of the difficulties encountered the most challenging issue was the communication with the Health Centers participants in order to obtain the monthly results.

**Conclusion:** So far the agreement of community health workers to proceed with the monitoring of hearing and language has been satisfactory.

**Keywords:** Hearing Loss, child, Community Health Workers

**A443. Multidiaciplinary Intervention in Pregnant Group: A Case Report**
Vanessa Souza Gigoski, Liliane Menzen, Bruna de Melo Menezes, Camila da Cunha Niedermeyer, Sara Oliveira Pinheiro

**Introduction:** Middle ear disorders are very common in childhood and may have a negative impact on auditory, speech and language development; due to the sensory deprivation that this disease causes.

**Objective:** to characterize middle ear disorders in preschoolers and verify if this disorder is influenced by series and period that the child attends school.

**Method:** Descriptive and cross-sectional study developed in a Municipal School of Infantile Education of São Paulo state. 107 children of both genders, aged between four and six years, composed the sample. Of these, 55 preschoolers attended Infant I and 52 Infant II. In this study was used the answers from a questionnaire, regarding the hearing health of children, which was sent to parents. For the data analysis was used a descriptive statistics.

**Results:** Analysis of the questionnaires showed that 28 (26.1%) preschoolers had an episode of middle ear disorders; of these 57.1% were from Infant I and 42.8% from Infant II. It was also observed that preschoolers from integral had a lower incidence of middle ear disorders (17.8%) when compared to the part-time (78.6%). Of the 28 who had middle ear disorders, the most common age group was between two and six years (53.5%), with one episode per year (42.8%).

**Conclusion:** There were few reports of middle ear disorders in preschoolers and this complaint was more prevalent in preschoolers from Infant I that attend school part-time.

**Keywords:** Voice, singing, dysphonia
A676. Multiple Aspects of Language in Dementia: A Comparative between Domestic and Institutional Context
Jayne Guterres de Mello, Elenir Fedosse, Michele Vargas Garcia
Universidade Federal de Santa Maria

This study aimed to analyze the expression and interpretation of verbal and their underlying mechanisms (hearing, body balance, voice and orofacial motricity) of two elderly women with clinical symptoms of dementia - one living in the house with family and another in a home for the aged. Presented two elderly cases: a 85-year-old woman, with Alzheimer Dementia diagnosis, living with her husband and one of her daughters; and a 90-year-old woman, with Vascular Dementia diagnosis, living in a Long Permanence Elder Institution. A full speech, language and hearing evaluation took place, considering language in its many aspects (hearing, body balance, voice and orofacial motricity), in which were observed linguistic manifestations that depict less verbal production from the institutionalized elderly. Results obtained through hearing evaluation (acuity and processing) body balance, voice and orofacial motricity revealed expected features in healthy aging process. The elderly’ organic-physiological conditions were compatible with natural aging process, while linguistic-cognitive conditions appear more compromised. Language operation shows similar features â€” expected in aging with demential process â€” in both the children group with eight year as children of group with nine years, as well as in total group. There was no musical education influence on results of TPD.

Conclusion: Music education can positively affect the temporal ordering skill of children with 8 and 9 years of age.

A411. Nasalance of Adults from Two Different Brazilian State, Speakers of the Same Language
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Introduction: The goal of this work is the realization of a meta-analysis of the role of the speech therapist in the treatment of orthognathic surgery in Brazil to find what therapeutic performance of election at different stages of rehabilitation.

Material and Methods: A meta-analysis of the role of the speech therapist in the treatment of orthognathic surgery in Brazil to find what therapeutic performance of election at different stages of rehabilitation.

Results: Through a meta-analysis of the role of the speech therapist in the treatment of orthognathic surgery in Brazil, it was verified that the therapeutic action of choice in various stages of rehabilitation.

Conclusion: A clinical assessment in the pre-surgical orthognathic surgery aims of analysis of the stomatognathic system in order to meet the standards changed in order to verify the presence of parafunctional habits and muscle work in stomatognathic function, with anatomical conditions, and muscular important. In the work of post-surgical becomes even more the intervention Speech, eliminating muscular and functional alterations, ensuring the successful outcome and preventing any recurrence.
Introduction: Nasalance is the acoustic correlate of perceived nasality. According to some international studies, nasality may vary by location.

Objectives: To get the values of nasalance in young adults, Brazilian Portuguese speakers of states São Paulo and Minas Gerais, to investigate if the factors as dialect variation has influence in the nasalance and differences of its values between the genders.

Methods: It was evaluate the nasalance of 36 subjects, being 20 native from the State of São Paulo and living in that place (mean age of 23 years), and 16 people from Minas Gerais (mean age of 24 years), keeping the same criteria, using the instrumental Nasometer II model 6400 (Kay PENTAX) by three texts reading (nasal, oral, oronasal).

Results: The nasalance scores in São Paulo and Minas Gerais population were, respectively, 49.3% ± 49.9% for nasal text; 14.2% ± 9.8% for oral text; and 52.6% ± 48.8% for oronasal text. In the statistical analysis comparing the mean of nasalance of the subjects studied. However, the gender had no influence in the values of nasalance of the subjects studied.

Conclusion: despite the nasalance of people from Minas Gerais was inferior than São Paulo, both of them presented the scores in the normal standards. And the gender it was not a relevant factor, in this case, however nasalance score of women from Minas Gerais seems to be higher than men in the same group.

A481. Neonatal Auditory Health in the Basic Attention Health and Family Health Care

José Carlos Sabbag, Adriana Bender Moreira de Lacerda
Universidade Tuiuti do Paraná

The object of this study was to evaluate the quality in all area of auditory care: Universal Audiological Study for Neonatal in the Basic Attention Health and Family Health Care Unit aligned with Criança Curitibana Protocol- 2012; moreover, diagnostic and accompaniment of communication disturbances in Average/High Complexity Service at SUS. It is a retrospective study to analyze about quantity care in Curitiba public health to newborn (zero to one year) with or without pregnancy in the sample studied showed no association with changes in hearing screening of neonates exposed.

Objective: To describe a neonatal hearing screening program at a public hospital in the city of Campinas.

Methods: We conducted a retrospective, descriptive study approved through the Research Ethics Committee of the State University of Campinas (No.808.835/2014). The data were stored in EPINFO Database 6.2. Neonates who remained in a rooming-in care of a public hospital were referred to an outpatient hearing screening service after discharge. We used the Transient Otoacoustic Emission and the research for risk Indicators for hearing loss. We studied the variables: attending the hearing screening (2013), fail in the test, presence of risk indicators and its relationship with the diagnosis.

Results: A total of 2031 infants were referred to hearing screening and 1780 (87.64%) actually came to the service. There were 38 (2.13 %) and 33 (1.85 %) cases of failure in the left and right ear, respectively. Among those who came to the test, 404 (22.7%) presented risk indicators. There were two (0.11 %) confirmed cases of hearing loss, one of whom had risk indicator (50%).

Conclusion: There is a need for strategies to reduce the evasion for newborn hearing screening and reinforces the importance of achieving universal screening as half of patients diagnosed with hearing loss did not have risk indicators for deafness.

Keywords: Triage, newborn, hearing loss

A450. Newborn Hearing Screening in Newborns Exposed to Psychoactive Drugs in Gestational Period

Ruth Siqueira Grawler, Bárbara Machado Costa, Cristina Loureiro Chaves Soldera, Márcia Salgado Machado, Gabriela Pereira da Silva, Stefanie Kuhn Benvenutti
Universidade Federal das Ciências da Saúde de Porto Alegre

Introduction: The exposure to psychoactive drugs during pregnancy is not considered as an indicator of risk for hearing impairment. but your use can be associated with other indicators.

Objective: to analyze the results of hearing screening in newborns who were exposed to psychoactive drugs during pregnancy.

Methods: We analyzed the medical records pertaining to the reporting of psychoactive drug use by recent mothers, drugs (as described) and presence of risk indicators for the deaf of babies of Neonatal ICU who conducted the hearing screening in a philanthropic hospital.

Results: were analyzed 257 medical records for the period October/2014 at April/2015. Of these, 23 (8.9%) mothers reported use of psychoactive drugs in pregnancy. Mothers of drug users, 14 (60.8%) did only use of crack, three (13%) only use cocaine, three (13%) other and three (13%) over a drug simultaneously. Of the total of children exposed, three (13%) failed in hearing screening. Of these, one (33.3%) passed the retest, one (33.3%) didn’t attend the retest and one(33.3%) a failed the retest and was forwarded to high complexity. This child remained in Neonatal ICU for more than five days and presented a history of maternal infection (syphilis)and exposed to crack. Statistical analysis showed no significant association between exposure to psychoactive drugs and results in hearing screening.

Conclusion: The exposure to psychoactive drugs during pregnancy in the sample studied showed no association with changes in hearing screening of neonates exposed.

Keywords: Drugs; Neonatal Screening; Hearing Loss
A409. Newborn Hearing Screening in Philanthropic Hospital in Porto Alegre
Barbara Machado Costa, Ruth Siqueira Grawer, Cristina Loureiro Chaves Soldera, Maria Salgado Machado, Stefanie Kuhn Benvenuti
Universidade Federal das Ciências da Saúde de Porto Alegre

Introduction: Neonates who stay intensive care unit (ICU) may have multiple risk factors for hearing loss, favoring the occurrence of hearing deficits in this population.

Objectives: Analyze the results obtained in hearing screening in newborns from the neonatal ICU of a philanthropic hospital in Porto Alegre.

Methods: This is a cross-sectional observational study, which was carried out by chart analysis of 257 neonates derived from the neonatal ICU, who conducted the initial hearing screening from January to December 2013. All babies underwent transient evoked otoacoustic emissions (TEOAE) testing as an initial procedure, retest by same procedure and, in case of failure, retest with BERA.

Results: Of the 257 infants assessed, 30 infants (11.7%) failed the initial screening and were referred to retest with TEOAE. Ten infants (33.3%) did not attend and 20 (66.6%) underwent retesting. Among these, 13 (65%) failed and seven passed, showing false positive rate of 35% for the procedure. The 13 babies who failed the screening with TEOAE were referred for retesting with BERA, in which only five attended (61.5% dropout rate); two have failed and three (1.16% of the total sample) failed and were referred to audiological diagnosis.

Conclusion: The findings corroborate the literature data and showed that, despite all the advances in early detection of hearing loss, the high drop-out rates to retest is still an aspect to be discussed and studied, especially in the network of primary health.

Keywords: Risk Factors; Neonatal Screening; Hearing Loss

A580. Normative Values for Oral Syllables for Brazilian Portuguese Speakers
Thais Bogaz Hernandez, Vanessa Moraes Cardoso, Viviane Cristina de Castro Marinho, Nathalia Cuel Pizzi
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Introduction: A commonly used instrumental adjunct to the assessment of oral-nasal balance is the nasalance measurement with a nasometer. Measures of nasalance have been used to corroborate perceptual impressions of hypernasality presented by numerous clinical populations, including cleft palate, neurogenic dysarthrias, and hearing impairment. Nasalance measures using oral syllables stimuli is particularly recommended to evaluate children and adults with poor literacy. Additionally, the homogeneity of this speech stimulus may be helpful for diagnostic procedure.

Objective: The purpose of the study was to establish nasalance scores for oral syllables from Brazilian Portuguese speakers.

Methods: Nasalance scores were collected for oral syllables (MacKay-Kummer SNAP Test-R) using Nasometer II 6400. The participants were 245 speakers of Brazilian Portuguese (121 males and 124 females) in four age groups (children, adolescents, young adults and adults). They were asked to repeat each oral syllable (pa, ta, ka, sa, Sa, pi, ti, ki, Si) at least 6 times and the mean nasalance scores for each syllable were calculated.

Results: Nasalance means for oral + /a/ syllables were on average 5-8% and for /i/ syllables were on average 13-19%. The difference on nasalance scores between oral + /a/ syllables and /i/ syllables were statistically significant (p < 0.001). Adult females scored on average higher than adult males. Age differences were not found between groups.

Conclusion: Normative nasalance values were established for the nasal syllables from Brazilian Portuguese speakers. The scores obtained for the nasal syllables were similar to those reported for other languages and also showed the same pattern between vowels. These norms may be used to acoustically evaluate hiponasality due to upper airway obstruction, corroborating with clinical perceptual evaluation.

A583. Normative Values for Nasal Syllables for Brazilian Portuguese Speakers
Thais Bogaz Hernandez, Vanessa Moraes Cardoso, Viviane Cristina de Castro Marinho, Nathalia Cuel Pizzi
Faculdade de Filosofia e Ciências - Campus Marilia

Introduction: The speaker’s oral-nasal balance is commonly assessed perceptually. While the thorough auditory-perceptual assessment is indispensable and supersedes any instrumental measures, quantify instrumental measures can nevertheless serve to corroborate and augment the perceptual assessment. Nasalance measures using nasal syllables stimuli can be used to evaluate children and adults who have evidence of hiponasality due to upper airway obstruction.

Objective: The purpose of the study was to establish nasalance scores for nasal syllables from Brazilian Portuguese speakers.

Methods: Nasalance scores were collected for nasal syllables (MacKay-Kummer SNAP Test-R) using Nasometer II 6400. The participants were 245 speakers of Brazilian Portuguese (121 males and 124 females) in four age groups (children, adolescents, young adults and adults). They were asked to repeat each nasal syllable (ma, na; mi; ni) at least 6 times and the mean nasalance scores for each syllable were calculated.

Results: Nasalance means scored on average 60% for nasal + /a/ syllables and 80% nasal + /i/ syllables. The 20 points difference between syllables with vowel /a/ and /i/ were statistically significant (p < 0.001). Adult females scored on average higher than adult males. Age differences were not found between groups.

Conclusion: Normative nasalance values were established for oral syllables from Brazilian Portuguese speakers. Findings from this study provide important information for Brazilian clinicians before nasalance scores for syllables can be used for clinical purposes.

Gabriela Pereira da Silva, Fabiana de Oliveira, Marcia Angelica Peter Maahs, Lislane de Rosa Barbosa
Universidade Federal de Ciências da Saúde de Porto Alegre

Introduction: Oral habits are automations acquired persistent after infant oral phase. Depend on the frequency, duration, intensity and facial typology, changes in the stomatognathic system can be caused.

Objectives: To describe the occurrence of oral habits in childhood through reporting extension practice.

Methods: Transversal and descriptive study, conducted with parents of patients in the waiting room of the Pediatric Hospital, promotes orientation for children showing the possible consequences occasioned for this practice.
between July 2013 and May 2015. Approved by Research and Ethics Committee of UFCSPA - number 1853/12.

Results: There were used data on the usage of oral habits besides the age, type of habit and whether they had received information about it or not. Among the 176 oriented, 76% had used harmful oral habits. Of these, 80% were still practicing the habit; 55% did until the age to 5 years and 11 months; 49% were bottle users; 47% were bottle and pacifier users and 4% were pacifier only users. Only 30% of the 176 families had already received information about harmful oral habits.

Conclusion: Most oriented patients still used harmful oral habit, predominantly aged less than 6 years old. Among users, the bottle and the bottle associated with the pacifier stood out. Beyond that it was possible to notice the lack of information provided by health professionals to parents about the harmful oral habits.

Keywords: oral habits; stomatognathic system; children

A548. Occurrence of Process Phonological Net Replacement and the Talking Intelligibility in Children with Phonological Disorder
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Introduction: The Phonological Disorder is an alteration found in the phonological system of an individual which can be characterized by: substitutions, omissions and/or distortions of speech sounds. According to Shriberg and Kwiatowsk (1982), this alteration may present levels of intelligibility, as medium, medium-moderate, moderate-severe and severe.

Objectives: Analyze the occurrence of liquid replacement in speech samples in children with phonological disorder and relate to the degree of speech intelligibility.

Methods: A sample of 113 children between the age of 4 to 10 years old presenting phonological disorder from database of speech and language evaluations (CEP 995.344) was used in order to evaluate and observe the occurrence of liquid replacement and to classify the degree of speech intelligibility for each individual that was tested. For the classification of the degree of speech intelligibility the Formula Correct Consonant Percentage calculation Shriberg and Kwiatowsk (1982) was used.

Results: Sixty-two (54 %) children underwent liquid replacement. Forty-eight percent had medium-moderate grade and only 7 % had severe degree. There were 380 (42 %) substitutions 885 targets with liquid. The most frequent substitutions were: liquid side [-Previous] by [l] in 32 children and /r/ by [l] in 48 children; in both cases the predominant degree of intelligibility was the medium-moderate.

Conclusion: The phoneme /l/ demonstrated to have the highest rate of correct productions and /r/ as replacement. The degree of intelligibility is the most frequent medium-moderate.

A286. Oculoauriculofrontonasal Syndrome: An Interdisciplinary Approach
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Hospital de Reabilitação de Anomalias Craniofaciais da Universidade de São Paulo

Introduction: The Oculoauriculofrontonasal Syndrome (OAFNS) phenotype combines abnormalities of the morphogenesis of the first and second branchial arches (microtia/skin tags, epibulbar dermoids, cleft lip/palate, mandibular hypoplasia, and facial asymmetry) with malformations due to the anomalous development of the frontonasal eminence and maxillary processes (notched/bifid nasal tip, cleft lip and/or palate, and encephalocele).

Objectives: To report 7 of the 26 cases with OAFNS registered at HRAC-USP and currently followed by the craniofacial interdisciplinary team.

Resumed Report: Six patients are male and 1 female, with ages between 2 and 35 years (one patient died at the age of 8 months). Dysphagia was present in 3 cases, from which 2 required a gastrostomy feeding tube insertion; respiratory distress and/or nasal obstruction in 4 cases, 2 requiring tracheostomy; hearing loss was diagnosed in 6 cases and 1 patient was referred for hearing reassessment; 2 patients received hearing aids and 1 underwent a ventilation tube insertion. Speech evaluation was performed in 5 cases and all of them presented speech impairment. Compensatory mistakes related to velopharyngeal dysfunction was present in 2 cases, abnormal oronasal resonance in 3, language delay in 1, lisping in 2, speech therapy was required in 4 cases and 1 required a palatal prosthesis.

Conclusion: Clinical findings were variable in our sample, but speech and hearing impairment were very frequent findings, followed by respiratory and swallowing problems. Speech and hearing pathology and ENT close follow-up is suggested from birth to maturity and it is performed as a routine in our craniofacial team.

A464. Open Fit Hearing Aid Adaptation Analysis for Individuals with Hearing Loss in High Frequencies
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Introduction: Individual hearing aid adaptation of open fit type, indicated for hearing loss at high frequency is increasing, because of the possibility of reducing occlusion effect. Otherwise, it is clear that success in hearing aid fitting depends of the satisfaction users; which justifies the choice of this type.

Objective: To characterize the audiological profile of open fit hearing aid users and describe the device selection results, problems and complaints. Methodology: A retrospective study where 50 records of open fit hearing aid users were analyzed to get information about the audiological data selection and speech therapy process.

Results: Of the 50 data 44 (88%) were from individuals with bilateral deafness and 6 (12%) unilateral; moderate in 64 (64%), mild in 35 (35%) and severe in 1 (1%). Most 40 (80%) were satisfied with the hearing aids, reporting improved audibility and speech intelligibility 45 (90%), improved hearing ability of sound localization 15 (30%) and reduced and/or absence of tinnitus perception 15 (15%). In 15 (30%) remaining complaints/problems regarding the hearing aids were: difficulty of insertion/removal (10%), imbalance in the ear (4%), weak sound (4%), intermittend function (4%) and (2%) in autophonia, headache and hassle and no amplification.

Conclusion: The results of the open fit selection were positive opposite to those relating to the presence of complaints/problems, which reinforces his indicated as a viable possibility for sloping audiometric curve.

Keywords: hearing aid, audiological, deafness
A643. Oral Candidiasis: Main Complaints during Swallowing and its Relation to the Presence of Dysphagia

Mariana Saconato, Katia Alonso Rodrigues, Graziela Ultramari Rodrigues
Instituto de Infectologia Emilio Ribas

Introduction: Candidiasis is one of the most common infections in HIV patients. The most common symptom is: white plaques on the oral mucosa that may be wiped off, diffuse retrosternal pain, dysphagia and / or odynophagia.

Objective: Verify the main complaints during feeding of patients with AIDS and oropharyngeal candidiasis and its relation to the presence of dysphagia.

Methodology: A specific questionnaire was applied in 20 patients with AIDS and oral candidiasis and the results were related to the presence of dysphagia.

Results: 12 patients (60%) presented dysphagia in preparatory and oral phases. The most common symptoms were xerostomy (33%), difficulty feeling the taste (58%) and solid consistency harder to swallow than the liquid (83%). Dysphagia in the pharyngeal phase was present in 6 (30%) patients. The following symptoms were found: odynophagia (100%), difficulty swallowing specific foods (34%), difficulty in swallowing hot food (67%), nasal regurgitation (17%), liquid consistency harder to swallow than pasty and solid consistencies (83%) and excess saliva in the oral cavity (33%). For patients with possible esophageal alterations, 2 (10%), 100% had pyrosis as the chief complaint.

Discussion: Patients with oropharyngeal candidiasis have specific complaints during swallowing that should be investigated to enable dietary adjustments and life quality improvement.

Conclusion: The most common complaint among patients with abnormal preparatory and oral phases was: solid consistency harder to swallow than liquids. Among patients with dysphagia in the pharyngeal phase, the most common complaints were: odynophagia and difficulty on swallow liquid consistency.

Keywords: Dysphagia, Candidiasis, Acquired Immunodeficiency Syndrome

A666. Oral Diet Introduction in Patients with AIDS, Oral and Esophageal Candidiasis - Case Report

Mariana Saconato, Katia Alonso Rodrigues, Graziela Ultramari Rodrigues
Instituto de Infectologia Emilio Ribas

Introduction: Candidiasis is more common among AIDS patients with CD4+ cell counts less than 200 cells/mm. The most common symptoms are: odynophagia, xerostomy, pyrosis and retrosternal pain.

Objectives: Evaluating swallowing and oral diet progression in a patient with AIDS, oral and esophageal candidiasis.

Resume Report: Patient admitted with complaints of intense odynophagia, weight loss and dysphagia. During evaluation adherent white plaques were observed in buccal mucosa and oropharynx. During swallowing of pasty consistency, it is voluntary oral uptake, bolus preparation was inefficient, delay to start swallowing, moderate stasis in the oral cavity with no clinical signs of penetration / extraction. During swallowing liquids, odynophagia complaint remained unchanged even in the face of temperature change of the water and was not observed changes in the pharyngeal phase. Due to the length of oral lesions was not offered solid. Upper gastrointestinal endoscopy was performed which revealed coagulase positive Staphylococcus aureus grade 3, according to Kodsi method.

He started treatment with Fluconazole for 14 days and it was necessary to indicate via power alternative. After completion of treatment, esophageal candidiasis regressed and reintroduced diet was orally in the hydration liquid and homogenous pasty consistency, since the oral mucosa still maintained the initial lesions.

Keywords: Dysphagia, Candidiasis, Acquired Immunodeficiency Syndrome

A536. Oral Intake Introduction in a Case of Post-Brain Tumor Resection

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Introduction: Brain tumor is an abnormal growth of cells within the skull leading to compression and lesion of normal brain cells. Nausea, vomiting, lack of coordination and tone alterations are some of the symptoms experienced by individuals inflicted by tumors of this nature. These symptoms have repercussions on the nutrition of these patients, especially in children, requiring immediate intervention of the Speech therapist to assist in swallowing and prevent potential food refusals.

Objective: Case report of speech therapy intervention in an infant after brain tumor resection.

Resume Report: One and a half-years old child was referred to speech therapy after brain tumor resection, feeding exclusively by nasoenteric probe due to lack of coordination during the oral intake. The speech therapy aimed to evolve the nutrition to oral feeding and ensure safe swallowing. The child initially presented weak and arrhythmic suckings with few breaks, irregular tongue movements, extra-oral leak, flabby cheeks and aversion to food. The therapeutic process comprised oral sensorimotor stimulation with non-nutritive sucking and gustatory stimulation with textures and varied flavors to develop children’s nutrition, as well as guidance to caregivers to maintain the benefits from therapy. The child developed sucking-swallowing-breathing coordination, as well as strengthening of the oral structures, and food acceptance. These conditions enabled the evolution of oral intake to pasty consistency.

Conclusion: The speech therapy was important to develop the skills necessary to feed the child, reducing sequels, and bringing the patient closer to his family.

Keywords: Infant; Speech, Language and Hearing Sciences; Deglutition Disorders

A294. Oral Motor Intervention in a Case of Newborn with Cleft Lip

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Introduction: Difficulty in feeding the newborn comes cracked soon after birth due to losses in sucking and swallowing, resulting from the lack of anatomical integrity.

Objective: To report the Speech Language Pathologist (SLP) intervention in helping to oral feeding in a case of newborn (NB) with cleft lip (CL).

Resume Report: A case study pertaining to project approved by number 9742014.0.0000.5335. SR, female, 10 days of life, born at term. He admitted in Neonatal Intensive Care Unit due to neonatal asphyxia, remaining intubated for 2 days. The medical staff asked SLP evaluation to aid in the transition from alternative supply route to the oral route and breastfeeding. In the structural clinical evaluation, it was observed: CL, palate intact, posture parted lips and a reflection of weak suction. In non-nutritive sucking (NNS) showed:
weak sucks, standard 8 sucks / pause, rhythmic, crying stress signals and run. In breastfeeding presented handle and inadequate suction. It began SLP therapy, with orofacial sensorial end motor stimulation and SNN, in addition to supporting breastfeeding. After 5 days in SLP therapy, showed adequate caught in breastfeeding, with strong and efficient, rhythmic sucks, with adequate breaks and is indicated breastfeeding on demand. The team found that the NB will discharge conditions with exclusive breastfeeding.

Conclusions: The SPL intervention is essential in cases of NB cracked due to feeding difficulties that they may have. The clinical case evolved from weak suction and breastfeeding difficulties for strong and efficient sucks with adequate caught in breastfeeding.

Keywords: Speech, Suction; Cleft Lip

A42. Oropharyngeal Dysphagia in a Case of Polydermatomyositis
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Introduction: Polymyositis and dermatomyositis are autoimmune diseases classified as asidiopathetic inflammatory myopathies, in other words, inflammation of muscle fibers with unknown cause. Although they are distinct they have a common feature: weakness of the proximal muscles. The annual incidence is less than 10 cases per million people. Women are more affected (3: 1). Dysphagia is presented in 15% and results from the involvement of the striated muscles of the pharynx and upper esophagus.

Objective: Describe speech therapy demonstrations.

Resumed Report: Female patient, 68, was accompanied at the Rheumatology service of the University Hospital of the University of Sergipe and was referred for speech therapy assessment with a complaint about mouth opening and difficulty in swallowing solid consistency. The assessment revealed straight facial type, usual position of closed lips with accumulation of saliva, strength and mobility of lips and tongue reduced, mouth opening (24.6mm), asymmetrical face with reddish spots, hypofunctioning tongue, oral feeding route in paste consistency (yogurt), liquid (water) and solid (cookie). During swallowing, it was observed elevation of the reduced larynx, inappropriate tongue movement for all tested consistencies, inadequate bolus propulsion for pasty and solid consistencies, inadequate vocal production and respiratory control with accumulation of saliva, strength and mobility of lips and tongue reduced. The analysis of TEOAE showed that 44 (62%) children passed bilaterally, 12 (17%) passed unilaterally and 15 (21%) failed bilaterally. Regarding DPOAE, 36 (51%) children passed bilaterally, 14 (20%) passed unilaterally and 21 (29%) failed bilaterally. The analysis of the procedures showed a high failure rate and demonstrated that children failed more on DPOAE when compared to the TEOAE.

Keywords: Otoacoustic emissions; workers exposed to noise and organophosphate

A530. Otoacoustic Emissions in Workers Exposed to Noise and Organophosphate
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Introduction: Exposure to organophosphate and high sound pressure levels can cause damage to outer hair cells.

Objective: to evaluate transient evoked and distortion product otoacoustic emissions of workers.

Method: Descriptive and cross-sectional study developed with workers of a state autharchy exposed to noise and organophosphate. The sample consisted of 52 males, with age ranging from 24 to 59 years. Transient evoked otoacoustic emissions (TEOA) and distortion product otoacoustic emissions (DPOAE) were obtained using the Accuscreen screening equipment (Madsen). It was considered that the worker passed the TEOAE when presented eight peaks of response and the DPOAE when presented response in three frequencies.

Results: The analysis of TEOAE showed that 45 (86.5%) workers passed bilaterally, five (9.7%) passed unilaterally and two (3.8%) failed bilaterally. Regarding DPOAEs, 30 (57.7%) workers passed bilaterally, 10 (19.2%) passed unilaterally and 12 (23.1%) failed bilaterally. When the two procedures were compared it was observed that 28 (53.8%) workers have passed bilaterally in both procedures, 16 (30.7%) passed bilaterally only on TEOAE and one (2%) failed bilaterally in both procedures.

Conclusion: There was a higher rate of failure in DPOAE when compared to the TEOAE.

Keywords: Otoacoustic emissions; noise; organophosphate; workers

A436. Participation Restriction Questionnaire Hearing Handicap Inventory for the Elderly - Screening Version (HHIE-S)
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Introduction: Hearing rehabilitation by adapting the Individual Sound Amplification Device (HA) and auditory training provides improved communication skills and the quality of life of the elderly. The participation restriction questionnaire HHIE-S is a fast tool, easy to understand and fits this evaluative purpose.

Objectives: Check the effect of auditory training by applying the HHIE-S before the adaptation of hearing aids and after auditory training.

Methods: Application of HHIE-S in 39 elderly subjects over 60 years with sensorineural, bilateral, symmetrical and mild to moderately severe hearing loss, users of the Unified Health System, referred to the hearing aid sector of Centre health Clelia Manfro - Hearing Unit.

Results: 25 (64%) male subjects and 14 (35.9%) female. The average age was 74.2 years (± 7.7), with minimum of 61 and maximum of 89 years. Regarding education the average was 4.4 years (± 2.8) of study with a minimum time of 0 and a maximum of 12 years. By comparing the variables before and after the auditory training, statistically significant relations have not been identified. But when comparing the HHIE-S performance held before and after the auditory training statistically significant relations were observed (p<0.001).

Conclusion: There was a reduction in participation restriction through the HHIE-S questionnaire, indicative of the effects of hearing aid fitting and auditory training.

A446. Patient Care Team Intervention in Obesity and Laryngomalacia Child Case
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Introduction: Laryngomalacia is a common cause of vocal stridor in childhood. In cases of respiratory difficulties associated to that disease often swallowing disorders are found.

Objectives: To describe the Patient Care Team intervention in laryngomalacia and obesity child case.

Resumed Report: A six month old baby, male, laryngomalacia diagnosed, weighing 12.335 kg. Family was contacted by teachers of speech therapist, physiotherapist, pharmacist, nutritionist, nurse and psychologist. Three home visits were made to interview, evaluation and to return process. There was low tolerance behavior concerning the child’s frustration and recurrent crying. Family was conditioned to feed the baby whenever he cries, presenting difficulties of interaction. He was overeating with inappropriate food for the age. In clinical phonaudiological assessment, was observed cervical auscultation with increased noise during and after of liquid supplies and low laryngeal elevation. Child already has mild neuropyschomotor developmental delay (NPMD) due to obesity. It was possible to prepare a nutritional menu about adequate food for children, in pasty consistency (aiming security lower airways) as well as guidance material about NPMD and activities and games tips to strengthen ties and interaction between family and the child which can be used in boy’s frustration moments.

Conclusion: From the Patient Care Team intervention, family and child made gains in the organization of the daily routine. It is understood that the view of different professionals on the case contributes to the end result, which is better health and life’s quality for patients.

Keywords: Patient Care Team; Laryngomalacia; Obesity

A366. Percentage Analysis of Types of Concerns Regarding Tinnitus
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Introduction: The population that complains about tinnitus may often associate the perception of sound without external stimulus with other pathological diseases. Worries regarding tinnitus may influence its complainer life quality causing fear, affliction and horror.

Objective: To analyze the types of concerns related to tinnitus symptoms by the individuals that presents it.

Methods: Individuals who complain about tinnitus were picked as sample. The data collection for further analysis was done through a proper instrument at the Chronic Tinnitus Ambulatory. There were four options to answer the question regarding concerns about tinnitus: 1- Serious Disease; 2- Going deaf; 3- Getting worse; 4- Other. Each patient could choose more than one option. After the data collection the percentage analysis carried out.

Results: The sample was composed of 732 individuals, of both sexes and between the ages of nine and 89. The percentage score of the sample was: 1- Serious Disease (14.34%); 2- Going deaf (25%); 3- Getting worse (24.18%); 4- Other (19.53%); 21.99% didn’t show any concerns.

Conclusion: The results of the sample show a greater concern about going deaf and getting worse.

Keywords: Questionnaires, Tinnitus, Audiology

A213. Perception of teachers regarding the change in the auditory abilities in schoolchildren
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Introduction: The auditory processing refers to analysis of the sound stimuli by the central nervous system, involving detection, analysis and interpretation of external sounds.

Objective: To analyze the perception of teachers on the auditory processing disorders in schoolchildren and identify children with potential abilities changed.

Methodology: A study of the type prospective, quantitative, longitudinal, comparative. There was a brief explanation about auditory processing to teachers of three public elementary schools. After the conversation was requested that they were the indication of students with possible changes in auditory processing.

Results: We interviewed 23 teachers, 3 directors and 3 special educators, who teach classes in 23 classes, wherein they referred 74 children for the auditory processing evaluation, for believing that these children had change in central hearing abilities. Of the total number of directed, 26 agreed to participate in the study. Of these 39% (n = 11) had two or more altered abilities, 3.6% (n = 1) diagnosed with conductive hearing loss and 14.4% (n = 4) were forwarded to other professionals. For each hearing ability in the total number of children, the changes found were: temporal resolution 14.9% (n = 14), selective attention 42.8% (n = 12) and figure-fund 35.7% (n = 10).

Conclusion: it was observed that the perception of teachers is inadequate, because less than half of the children sent by the schools presented changes in auditory skills evaluated.
A475. Perception of Tobacco Growers Exposed to Pesticides on the Quality of Life
Adriana Bender Moreira de Lacerda, Ana Maria Cazé
Universidade Tuiuti do Paraná

The aim of this study was to analyze the perception of tobacco growers exposed to pesticides on the quality of life with emphasis on working conditions, and general hearing health. It is a descriptive, cross-sectional with a quantitative approach, conducted in the municipality of Rio Azul-PR, with tobacco growers. Data were collected from November 2012 to November 2014, after explicit consent of the subjects. For data collection, we chose an instrument already validated, the SF-36 and a questionnaire prepared by the working core, health and UTP society with closed questions on working conditions, health and hearing health. We evaluated 78 subjects, 40 growers and for the control group 38 residents of Blue River, not occupationally exposed to pesticides. The results showed that tobacco growers because they have little schooling, do not realize that they could have a general hearing health and better access to better living conditions and perceptions of your reality. Regarding health in general showed no significant difference between the two groups, but in relation to hearing health study showed that tobacco growers in the auditory complaints were significant confirming the studies cited above.

Conclusion: The damage arising from it are naturalized and tobacco growers do not realize the damage to health and the loss of quality of life caused by the use of pesticides.

A543. Performance in MLD Tests (Masking Level Difference) and PSI (Pediatric Speech Intelligibility) of Children with Abnormal Acoustic Reflex
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Introduction: Auditory Processing Disorder can be understood as a disorder that affects hearing abilities, commonly due to some alteration at the brainstem functioning. This structure is also responsible for the occurrence of the acoustic reflex, which is triggered when there is integrity of the central and peripheral auditory system. In individuals with normal hearing thresholds is expected the presence of acoustic reflexes. In these cases, the reflex changes can be explained by the occurrence of APD.

Objectives: To assess the performance of children with and without hearing complaints in the MLD and PSI tests.

Methods: Quantitative, descriptive and cross-sectional study. The study included 31 children from 6 to 9 years old with some absence of contralateral or ipsilateral acoustic reflexes. Individuals who belong to a database with speech and language evaluations (CEP 995 344), had results of tympanometry and normal hearing thresholds, with available results of MLD and PSI test. It was decided to observe such tests because these tests evaluate the processing that is performed in the brainstem.

Results: In approximately 71% of children was observed alteration in at least one test (23 individuals). Of these children, 54% presented alterations in both tests, while 22% individuals only presented on MLD or PSI. Other results will be demonstrated by statistical analysis.

Conclusion: A significant percentage of the observed sample presented alterations in MLD and PSI tests, suggesting difficulty in the brainstem’s functioning at the cases where there is some absence of acoustic reflexes.

A140. Perceptual Error Identification of Human and Synthesized Voices
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Universidade Federal de São Paulo

Introduction: Perceptual auditory analysis is the gold standard to evaluate dysphonia. Auditory training gives this analysis a greater reliability. Synthesized stimuli are advantageous, vocal characteristics are known and can be manipulated, but they must sound natural.

Objectives: Verify the ability of voice specialists, general speech language pathologist and laymen to discriminate human and synthesized voices.

Methods: 70 subjects (20 voice specialists, 20 general speech language pathologist, 30 laymen) preformed listening task to classify 54 voices: 18 human and 18 synthesized vowels, male and female (9 each), with different type and degree of deviation. 50% repetition was used for intrarater reliability. Voice disorders were simulated by vocal frequency perturbations (roughness); additive noise (breathiness) and by increasing tension and subglottal pressure and decreasing vocal folds separation (strain). Human voices were collected from a vocal clinic database.

Results: Voice specialist presented less error than the other groups, 31.3%. Voices that had greater perceptual confusion were human male with severe breathiness, synthesized female with mild breathiness and human female with severe roughness. Voices with breathiness had greater perceptual confusion, 42.9% for human and 53.3% for synthesized breathiness. There was no difference in the amount of error considering all groups between human (36.8%) and synthesized (38.9%) voices ($p = 0.452$).

Conclusion: High quality of synthesized samples. Human voices with moderate to severe deviation and synthesized voices with mild deviation had greater perceptual confusion. Voice specialist presented lower amount of error, which allows us to infer that auditory training assists on vocal analysis tasks.

Keywords: Voice; Dysphonia; Auditory Perception

A79. Profile and Prevalence of Hearing Loss of Aged in Brazil
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Introduction: Hearing is essential for the processing of acoustic events and for the issue and understanding of speech signals. Hearing loss can also be associated with cognitive decline and depression.

Objective: This aims to analyze the prevalence of hearing complaints in Brazilian elderly and to describe the profile of older people with and without hearing complaints.

Methodology: The study included 7315 elderly sample were interviewed in their homes, in 59 cities of Rio Grande do Sul. Inclusion criteria were age 60 years or older and accept participate. A questionnaire used was designed from the Global age-friendly city guide was applied. For statistical purposes was performed chi-square test and logistic regression to assess the correlations between variables.

Results: 139 participants were excluded for not retain answered the question about auditory perception and 9 self refer deafness, a sum total of 7167 elderly. The average age among the elderly without hearing complaints was
5.10/C6 the elderly without hearing complaints presented 69.44/C6 SOPs, as a way to standardization tasks. Health and Human Ecology has proposed the establishment of Audiology Service of the Centre for Studies in the Worker Management System (QMS). Standardizing activities is very Fiocruz Centro de Estudos em Saúde do Trabalhador e Ecologia Humana-Quixabeiro, Viviane Moreira Franco Anelisse Vasco Mascarenhas de Freitas, Elinaldo Leite Quixabeiro, Viviane Moreira Franco Centro de Estudos em Saúde do Trabalhador e Ecologia Human-Fiocruz

Introduction: Since the Industrial Revolution, the quality has been described. The matter is so important that the International Organization for Standardization (ISO), published ISO 9001 establishing requirements for the Quality Management System (QMS). Standardizing activities is very important to the quality management effectiveness, establishing a unique way of doing a certain activity represented systematically as Standard Operating Procedure (SOP). The Audiology Service of the Centre for Studies in the Worker’s Health and Human Ecology has proposed the establishment of SOPs, as a way to standardization tasks.

Objective: To perform evaluation of 3 SOPs in Audiology Service related to the examination of Brainstem Evoked Response Audiometry and check if the procedure is effective, or if there is a need of adjustments on the SOPs so that the understanding of the task is objective.

Methods: 3 speech pathologists and 7 doctors without previous experience with the examination or with the equipment used took place in it. They read and executed each SOP. At the end they also had to answer a questionnaire for assessment of POP. Results: All participants were able to complete the SOPs up to the end, but systematic errors were identified by 93% of the sample and random errors with smaller proportions. Revisions have been made in SOPs as part of the process of continuous quality improvement.

Conclusions: Assists the POP on the execution of day-to-day tasks even for those who do not have experience with the procedure by ensuring safety and quality of the service provided.

Methods: It was evaluated the quality of life in swallowing of institutionalized elderly and non-institutionalized, with swallowing complaints, through the Quality of Life in Swallowing Disorders protocol. The data analysis was performed through the SPSS for Windows 18.0, the significance level established was 5%.

Results: The sample consisted of 20 elderly, divided into two groups matched for age and sex. Group 1 was composed by 10 institutionalized elderly, 80% female, with an average age of 74.1 years (SD ± 7.9), and average on the Mini Mental State Examination 23.5 (SD ± 3.66), Group 2 was composed by 10 elderly, 80% female, with an average age of 73.2 years (SD ± 7.2), and average on Mini Mental State Examination 26.5 (SD ± 2.41). It is noted that Group 1 has lower scores in all domains of Quality of Life in Swallowing Disorders when compared with Group 2.

Conclusion: The score of the questionnaire was lower in Group 1, suggesting worse quality of life related to swallowing in institutionalized elderly.

A544. Quality of Life in Swallowing: Comparison of Institutionalized Elderly and Non-institutionalized

Introduction: From a phonoaudiological point of view, among the various alterations that we can find in the aging process, swallowing disorders are frequent and significant. These changes may lead to a impairment of the feeding process in elderly, and therefore compromise their quality of life.

Objective: To compare the quality of life in swallowing of institutionalized and non-institutionalized elderly.
Introduction: The Phonological Disorder is a language disorder frequent in children, characterized by omissions or swaps in speak sounds. It has been observed association between this language disorder and the Auditory Processing Disorder, characterized for difficulty in organizing and comprehending auditory stimulus. The Auditory Processing Disorder is diagnosed through a battery of behavioral tests, which assesses the auditory skills and classifies them in subtypes: Auditory Decoding, Integration and Prosodic.

Objective: Analyze the listening skills of children with Phonological Disorder and determine the presence or absence of Auditory Processing Disorder, as well as classify it in subtypes.

Methods: Quantitative and descriptive research study, through secondary data analysis collected from a database, approved by the ethical research committee (protocol number 995.344). The sample was composed by 10 subjects diagnosed with Phonological Disorder, with age between 7 and 10 years old. From the behavioral tests battery were observed the following auditory skills: RGDT (temporal resolution); PPS (temporal pattern); MLD (binaural interaction); PSI (background/closing); SSW (binaural integration).

Results: From the affected auditory skills, was determined the presence or absence of Auditory Processing Disorder and its classification into subtypes. From the 10 subjects, 70% presented Auditory Processing Disorder (p = 0.026). From these, 100% presented auditory decoding subtype and 43% presented Integration subtype (p = 0.705) and 43% presented prosodic subtype (p = 0.705).

Conclusion: The results suggest association between Phonological Disorder and auditory decoding subtype. Thus, the importance of auditory processing endorsement of children with language disorders is evidenced.

Keywords: Child Language, Language Disorders, Hearing Disorders

A1730. Relation between Swallowing and Cognition in Bedridden Institutionalized Elderly

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Introduction: The aging process predisposes several anatomical and functional changes. Among these, swallowing disorders and cognitive disorders.

Methods: It was performed phononuediagnostic evaluation through the Protocol For Bedside Cinal Evaluation (Carrara-de Angelis, 2010), in bedridden individuals of both genders, from August to November 2012. The data analysis was performed through the SPPS for Windows 18.0, the significance level established was 5%

Results: The sample was composed by 46 elderly, of these 56.5% were female, with an average age of 83.3 years (± 10.9). It was found that 30.4% of the patients presented swallowing alteration. Regarding the evaluation of behavioral characteristics, 82.6% of the elderly were alert at the time of evaluation and 71.7% cooperative. In the cognitive screening, 78.2% of the elderly showed alterations. Regarding the cognitive aspects evaluated, it was verified that there was no significant association with swallowing disorders (p = 0.10).

Conclusion: Most of the elderly evaluated presented risk for cognitive impairment, but it was verified low...
prevalence of swallowing alterations, with no significant relation between these two alterations.

A416. Relation between Tympanometric Curves, Clinical History of Otitis Media and Complaints of Alterations in Children’s Speech
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Introduction: It is known that recurrent otitis media in the childhood can cause fluctuating hearing loss and, consequently, changes in the acquisition of speech sounds. The tympanometry provides data on the functioning of the tympanic-ossicular system and can demonstrate changes in the sound conduction system.

Objective: To analyze the relation between tympanometric curves, clinical history of otitis media and alterations in the speech of children.

Methods: This is a retrospective, quantitative and descriptive research study, conducted from secondary data from the initial interview and audiological evaluation of patients attended at an infant/audiology outpatient clinic. There were analyzed 252 records, selected 57 children from 5 to 11 years old, with alterations in the speech and same type of tympanometry in both ears. The history of recurrent otitis media was also analyzed.

Results: Of the 57 children with alterations in speech, 36 (63.1%) presented normal tympanometric curves (type A, according to Jerger) and 21 (36.91%) presented abnormal curves (type B or C, according Jerger), with a statistically significant association of alterations in speech and normal curves (p =0.047). Of the 36 children with normal curves, 25 (69.4%) had history of otitis, with a statistically significant association between history of otitis and alterations in speech (p = 0.02).

Conclusion: There was statistically significant association between history of otitis and alterations in speech, even in children with normal tympanometric curves. Therefore, the results suggest that likely exists a influence of clinical history of recurrent otitis media on language acquisition.

Keywords: Child Language, Hearing, Otitis Media

A501. Relation of Video-Head-Impulse Test and Caloric Irrigation in Patients with Vertigo
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Introduction: The video head impulse test (vHIT) has been proposed as an objective approach to detect peripheral vestibular disorder in a clinical setting. Various studies have shown that vHIT and air caloric tests may not always identify vestibular hypofunction; instead, the results of the tests might be contradictory.

Objective: To explore the relationship between lateral canal vestibular ocular reflex gain (hVOR) in a sample of patients attending a clinic for balance disorder.

Methods: Use of sensitivity and specificity of the vHIT test relative to air caloric test was studied for evaluate canal paresis in clinical sample of 12 patients (12 female) who attended a private clinic for balance disorders within one month.

Results: Of 5 patients in the clinical sample that had significant canal paresis indicated by air caloric tests, only 1 showed a significant abnormality in either canal using a measurement of vHIT gain. vHIT gain does not correlate with canal paresis as indicated by air caloric testing. In 4 patients we had ipsilesional abnormal caloric testing in the presence of normal vHIT. Some studies indicate that could be a pattern of findings observed in patients who have “definite” Ménière’s disease.

Conclusion: Since caloric irrigation and vHIT measure the hVOR in low and high frequency ranges, respectively, these tests have to be considered complementary. The video head impulse test may be a useful addition to the existing vestibular test battery, but it does not appear to be an alternative to it.

Keywords: Caloric test; Ménière; dizziness; vertigo; video-head impulse test

A574. Relationship between Perception of Parents and Guardians, Voice and Quality of Life in your Children ‘S Voice
Thais Pretti Chiabai, Michelle Ferreira Guimarães, Alana Tagarro Neves, Alexandra Frasson da Silva
Universidade Federal do Espírito Santo

Introduction: Vocal disorders in individuals of school age are relatively frequent. Such disorders may go unnoticed by the family because dysphonia may not present symptoms involving other systems, delaying thus the demand for intervention.

Objective: To assess whether there is a relationship between self-perception of the presence or absence of vocal complaints, the vocal quality of individuals and the quality of life in voice.

Methods: This study was conducted at the pediatric clinic of a university hospital. Participated 23 parents/guardians of children and adolescents aged 2-18 years. A vocal screening protocol and a hearing-perceptual voice assessment analyzed by a speech therapist were applied. To analyze the impact of dysphonia on quality was applied a protocol of Life Quality in Voice (Pediatric) answered by the family.

Results: It was observed that 66.7 % showed no change of vocal disorder complaints. For this group, after the hearing-perceptual assessment, 19.1 % were considered dysphonic individuals. The group with vocal complaints correspond to 33.3 % of the sample and, after perceptual evaluation, 9.8% were categorized as dysphonia. There was no effective relationship between the presence and absence of vocal complaints reported by parents/guardians and the scores at the protocol of Life Quality in Voice (Pediatric).

Conclusion: There are indications that the perception of parents/guardians at dysphonia in children and adolescents is not sensitive and that the impact of a vocal disorder on quality of life of these individuals may not have been perceived by them.

Keywords: Parents Perception; Vocal Complaints; Life Quality

A472. Report of Speech Therapy Intervention in Infants with Hypoplastic Left Heart Syndrome
Ruth Siqueira Grawer, Laura Fuchs Nunes, Lisiane de Rosa Barbosa, Karen de Oliveira dos Passos, Priscila Regina Reznick
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Introduction: The Hypoplastic Left Heart Syndrome is congenital cyanotic severe heart disease, relatively common, being the most frequent cause of death for heart disease in the first week of life. The treatment is surgical, in some cases indicated transplant. During the treatment the patient is subjected to numerous procedures, such as prolonged orotracheal intubation and alternative pathway of food.
**Objective:** To report the speech therapy intervention in Infants with Hypoplastic Left Heart Syndrome. Approved by the CEP ISCMPA n° 467,673 of 11/5/2013.

**Resumed Report:** Female patient, diagnosed with hypoplastic left heart syndrome, intubated for 25 non-consecutive days, forwarded the speech therapy in post-operative for Cardiac Team to oral stimulation. First service held at 28 days of age, in Pediatric ICU, 6 days post-surgery, exclusive nutrition for orogastric tube, on Motor-Sensory-oral Evaluation was observed: orofacial tonus and sealing lip appropriate, extraoral leak of saliva and cervical auscultation noisy. Bite and swallowing reflexes are present, with poor sucking pattern. After the patient is transferred to the hospitalization, after 8 sessions conducted, 63 days old, this receiving tube and oral diet, in Bottle presents with sucking arrhythmic, extraoral leak and the presence of episodes of cough. In breast presented rhythmic sucking with spontaneous breaks, presence of labial sealing and coughing at the end of the feed.

**Conclusion:** The Speech Therapist is the professional who was in charge of discussing the multidisciplinary team to safely power supply, encouraging breast feeding when possible, and in this case the better performance.

**Keywords:** Deglutition Disorders, Heart Disease; Breastfeeding

**A455. Research about Pregnant Knowledge about Newborn Hearing Screening and Effectiveness of Guidelines in High Risk Clinic**

Verônica Salazar Moreira, Ana Francisca Constantino Ferreira de Sousa, Juliana Pinheiro Leite, Erissandra Gomes, Prícila Sleifer

**Introduction:** Believed to be of extreme importance investment in prevention, such as health strategy suggests promoting better health and information to the public through educational activities, which is consistent with providing the multidisciplinary committee hearing health, recommending a promotion health of pregnant women, newborns and infants.

**Objective:** To evaluate the knowledge of pregnant women on universal newborn hearing screening (UNHS) before and after speech therapy guidelines.

**Methods:** A retrospective, observational study, characterized by single-arm clinical trial. 128 pregnant women, accompanied in high-risk clinic, who answered a questionnaire before and after UNHS guidelines, were interviewed.

**Results:** Before the guidelines provided, 52.1 % of participants had heard about the UNHS, but among the 128 pregnant women surveyed 92.3 % did not know referencing why to perform the test. After orientation 97.8 % of participants reported knowing the test. Only 36.2 % of participants did not know referencing why is important to perform the test, reducing the percentage in 56.1 %.

**Conclusion:** It was found the effectiveness of information of pregnant women about TANU after speech therapy guidelines, which confirms the need for informed action by speech therapists and other professionals involved in prenatal programs.

**Keywords:** Health promotion, Pregnant women, Prenatal care, Hearing loss, Speech, language and hearing sciences, Neonatal screening

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**A59. Retest of Auditory Brainstem Response in the Infants with Failure in Hearing Screening**

Daniela Polo Camaro da Silva, Georgesa Espindola Ribeiro, Priscila Suman Lopez, Jair Cortez Montovani

**Introduction:** Currently the audiological diagnosis in children is carried out by electroacoustic and electrophysiological measures. However, such measures may be influenced the maturation process.

**Objective:** To retest the results of auditory brainstem response (ABR) after failure in newborn hearing screening.

**Methods:** Retrospective longitudinal study conducted in a tertiary public hospital. All neonates underwent transient evoked otoacoustic emissions and ABR, being this one done in two steps.

**Results:** The study included 28 infants of both sexes. In the evaluation by otoacoustic emissions, 75 % had bilateral failure and 25 % one-sided. All patients underwent evaluation by ABR, with an average age of two months in the first evaluation and 43 % had bilateral alterations and 57 % one-sided. In the second ABR, with an average age of 4 months, 64 % had kept your results in ABR, though 36 % had normal ABR in both ears.

**Conclusion:** It is not always possible to identify hearing loss with a single assessment. The retest of abnormal results of hearing screening is important for the identification of the real cases and the correct treatment of hearing loss.

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**A394. Risk Factors for Hearing Impairment in Neonatal Intensive Care Unit**

Bárbara Machado Costa, Ruth Siqueira Grawer, Jordana da Silva Freitas, Karina Mazzotti, Márcia Salgado Machado, Cristina Loureiro Chaves Soldera

**Introduction:** Newborns with risk indicators are more likely to hearing impairment.

**Objective:** To analyze the risk factors observed in newborns from neonatal Intensive Care Unit.

**Methods:** We conducted analysis of neonatal hearing screening clinic database of a philanthropic hospital. Two hundred fifty-seven medical records of infants who were admitted to the neonatal intensive care unit in this hospital were analyzed and underwent hearing screening from November 2012 to December 2013. We analyzed data on risk indicators for hearing loss and results in newborn hearing screening.

**Results:** We observed the prevalence of the following risk factors associated with neonatal ICU stay for more than five days: mechanical ventilation (47.8 %), use of ototoxic medication (46.3 %), post-natal infection (26 %). Regarding the results in hearing screening, 227 (88.3 %) passed and 30 (11.7 %) failed the initial screening. Of the 30 infants who failed the initial screening, only five made retest with Brainstem Evoked Response Audiometry, demonstrating 83.33 % dropout rate in the retest. Of the five babies who underwent retesting, three failed and were referred for further evaluation. These infants had two or more risk factors associated, including: use of ototoxic medication, syndromic features and syphilis.

**Conclusion:** In this sample, the most prevalent risk indicators were: mechanical ventilation, use of ototoxic medication and maternal infection. These indicators were also identified in babies who failed the retest, highlighting the attention they deserve in care related to children’s hearing health.

**Keywords:** Risk factors; neonatal screening; hearing loss
A662. Satisfaction with use of Hearing Aids and Speech Perception Test in Subjects with Sensorineural Bilateral Hearing Loss

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Introduction: Hearing loss is the difference between hearing performance of the individual and the normal ability for sound detection and can be minimized with the use of the hearing aid. Satisfaction is the measurement of auditory performance of the individual and the normal ability with bilateral sensorineural hearing loss.

Objective: Check satisfaction with the use of hearing aid and speech perception with competitive noise in subjects with bilateral sensorineural hearing loss.

Methods: Approval of the CEP process n°299.353. Participated 21 subjects of both sexes, aged 45-65 years diagnosed with bilateral sensorineural hearing loss. To evaluate the recognition of judgments was applied Hearing In Noise Test (HINT) with speech presented frontally stimulus in silence and with frontal noise, with and without hearing aids. Satisfaction with Amplification in Daily-Life (SADL) was used to assess the satisfaction, questionnaire with 15 questions divided and four subscales: Positive Effects, Services and Costs, Negative Factors and Personal Image.

Results: The sample was divided into two groups based on age: G1 - 45-54 years and G2 - 55 to 65 years. In the HINT was no significant difference when comparing the results with and without the use of hearing aids. The two groups have shown their satisfaction with the use of hearing aids.

Conclusion: Subjects with sensorineural bilateral hearing loss showed better performance in the perception of speech in noise test with the use of hearing aids.

A653. Screening of Motricity Orofacial of Teachers from Public Education In Nerópolis – Goiás

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Pontifícia Universidade Católica de Goiás

Introduction: The imbalance of orofacial muscles and decreased mandibular opening restrict vocal projection, enabling the emergence of compensation, incorrect use of voice and speech problems, affecting communication of teacher.

Objective: Describe the main findings of the screening of orofacial motricity of teachers from public education in Nerópolis â€” Goiás.

Methods: They were evaluated with protocol of screening adapted from the protocol of orofacial motricity from the clinical speech therapy of Pontifícia Universidade Católica de Goiás that contemplates phonoarticular organs, masticatory muscles and breathing.

Results: The sample consisted of 89 teachers, 85 women and 4 mens. Morphology of upper lips adequate in only 48.3%; lower lip in 51.7%; muscle tension of the upper lip adequate in 65.2%; the lower lip by 64%; mobility adequate in 73%. The tongue morphology adequate in 50.6%; the appropriate tension in 70.8%; adequate mobility in 80.9%. The cheeks are asymmetric in 66.3% of teachers; adequate mobility in just 47.2%. By palpation, masseters are balanced in only 46.1%, while the temporalis in 50.6% of teachers. Soft palate mobility adequate in 78.6%. The hard palate is normal in 54%. The predominant mode is the nasal breathing with 80.9%; the airflow is bilateral in 68.5% of teachers. At the end of each evaluation, teachers were advised to seek expert service for full evaluation.

Conclusion: Having the main changes in screening been characterized, it is possible to perform educational activities in the school environment to promote quality of communication for teachers.

Keywords: Speech, Language and Hearing Sciences; Faculty; Primary Prevention

A471. Semi-Occluded Vocal Tract Exercises In Voice Therapy - Patient With Parkinson's Disease

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Pontifícia Universidade Católica de Goiás

Introduction: About 70% of individuals with Parkinson’s disease have voice disorders, with reduced voice intensity, monotony, imprecise articulation, changes in speech rate, tremor, hoarseness and breathiness.

Objectives: To describe the therapeutic results of the technique semi-occluded vocal tract in patients with voice disorders in Parkinson's disease.

Resumed Report: Patient, 67, male, diagnosed with Parkinson’s disease seven years ago, forwarded to clinical speech therapy school at the Pontifícia Universidade Católica de Goiás. At baseline had a weak, trembling voice, with laryngeal-pharyngeal resonance, slurred speech, maximum phonation time of 7.65 seconds, s/z ratio of 0.74 seconds. In acoustic analysis with vowel /e/ sustained, the fundamental frequency was 142.31Hz, minimum intensity of 48.63dB, maximum of 81.70dB, irregularity of 4.24 and 0.40 of noise. The therapy was planned with relaxation exercises, breathing, resonance and voice quality, use of corporal method and phonation competence method, semi-occluded vocal tract exercises using speech variations in cup, LaxVox and straw. After five sessions, maximum phonation time 8.91 seconds, s/z ratio of 0.92 seconds, fundamental frequency of 136.34Hz, intensity minimum of 60.28dB, maximum of 60.84dB, 4.03 of irregularity and 0.37 of noise.

Conclusion: Despite the vocal instability present, balanced resonance, intelligible speech and meaningful progress with use of the technique semi-occluded vocal tract in auditory-perceptive evaluation, as in acoustic analysis when compared to the first session data.

Keywords: Speech, Language and Hearing Sciences; Parkinson Disease; Voice Disorders; Voice Quality; Voice

A11. Sound System for the Deaf

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Fundação Otorinolaringologia

Introduction: The primary rehabilitation tool for hearing impairment is hearing aid (aid). Bottleneck technology (low bandwidth for transducers and DSPs, complexity fitting application â€” just to name few) do not allow hearing impairment to take the most of music. In general run best aids have frequency range from 250 up to 8 Khz with peaks and valleys amidst the bandwidth. Acoustic feedback, mono aural response, resonance, occlusion effect, and low power amplification are one of the remaining drivers to curb a true music sensation. An audio power system designed for hearing impairment can deliver a true stereo music to hearing impairment without the need of aid.

Objective: Introducing the very first stereo system for the deaf.

Materials and Methods: One entire new electronic topology was implemented to excel the demand. It encompasses a 16-bit DSP, filter bands, pre amplifier, bass, mid and
high booster, a dedicated fitting application, and an interface to Hi-Pro. One can connect any Bluetooth® to this system with no frills.

Results: A music experience ranging from 80 up to 16 kHz, up to 120 dB gain in full stereo system, no occlusion effect, adjusted through a fitting application. Wired and Bluetooth® devices enabled.

Conclusion: Take the aids off the ear and take the most of a true stereo sound system designed for hearing impairment: an experience second to none.

Keywords: Hearing aids, music, assistive technology, hearing loss, high frequency

A166. Sound-Source Location Test in the Presence Of Noise
Gleide Viviani Maciel Almeida, Angela Ribas
Universidade Tuiuti do Paraná

Introduction: The difficulty to realize the sound source is something that people with hearing loss report, even after intervention either with conventional or implanted hearing aids.

Objective: To validate the auditory perception test in free-field, developed to evaluate the sound localization ability in the presence of noise.

Methods: The sample consisted of 100 healthy subjects with normal hearing and aged over 18 years who have agreed to participate. After the pure tone audiometry was applied the sound-source location test. For this, a calibrated free-field test environment was set where 30 random pure tones were presented in two speakers located at 45 degree (right and left of the subject) and the noise in a third located at 180 degree. The noise was presented in three listening situations: Hearing optimum condition (no noise), to noise ratio -10dB and to noise ratio -15dB. The individual should point out which side he/she perceived the tone pure, even in the presence of noise.

Results: The 100 participants took the test in an average of 99 s. The average score was 21, the median 23 and standard deviation of 3.05.

Conclusion: The Sound-Source Location Test in the Presence of Noise proved to be easy to organize and to apply. The results obtained in the test validation suggest that individuals with normal hearing should locate 70% of the presented stimuli. The test can configure an important tool in measuring the interference of noise on the ability of sound localization.

Keywords: Sound Localization; Hearing Tests; Noise; Hearing

A4. Speech: Awakening Listen to Deaf Child
Lorraine da Silva Cabral, Maria Esther de Araújo
Faculdade Redentor

Introduction: Childhood deafness affect both the acquisition and the development of speech and language. Therefore, auditory training therapy and the use of hearing aids to amplify sounds, aims to establish communication, enhance auditory skills and perform cognitive and language skills.

Objective: To demonstrate the effects of speech therapy stimulation of speech and language in the hearing aid fitting process in children diagnosed with late deafness.

Methodology: Approved by the Ethics Committee for Research, No. CAAE 30973514.7.0000. 2648, the research was carried out in stages, in which an analysis was performed of the previous situation of two children who started therapy at six-nine. After this analysis gave up the monitoring and record of the evolution of speech therapy after the hearing aid. The development of oral language was observed during therapy, in the analysis of the protocols used before and during the therapeutic process (Auditory Discrimination Test Boston and Behavioral Observation Protocol) and perception of the family and the evolution of communication skills.

Results: The applied protocols showed that both patients improved after therapy. This improvement was also reported in family perception, especially in social interaction and speech of patients.

Conclusion: speech therapy was a great ally to promote the acquisition and development of children, because even with the late diagnosis, (re) habilitation and hearing an enabling environment for dialogue, enabling the development of speech and language.

Keywords: Child; Language Development; Speech; Speechtherapy; Hearing loss; hearing aids

A287. Speech Language Pathologist Intervention in a Case of Newborn with Cleft Lip
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Introduction: Difficulty in feeding the newborn comes cracked soon after birth due to losses in sucking and swallowing, resulting from the lack of anatomical integrity.

Objective: To report the Speech Language Pathologist (SLP) intervention in helping to oral feeding in a case of newborn (NB) with cleft lip (CL).

Resumed Report: A case study pertaining to project approved by CEP-ISCMFA under number 9742014.0.0000.5335. SR, female, 10 days of life, born at term. He admitted in Neonatal Intensive Care Unit due to neonatal asphyxia, remaining intubated for 2 days. The medical staff asked SLP evaluation to aid in the transition from alternative supply route to the oral route and breastfeeding. In the structural clinical evaluation, it was observed: CL, palate intact, posture parted lips and a reflection of weak suction. In non-nutritive sucking (NNS) showed: weak sucks, standard 8 sucks / pause, rhythmic, crying stress signals and run. In breastfeeding presented handle and inadequate suction. It began SLP therapy, with orofacial sensorial end motor stimulation and SNN, in addition to supporting breastfeeding. After 5 days in SLP therapy, showed adequate caught in breastfeeding, with strong and efficient, rhythmic sucks, with adequate breaks and is indicated breastfeeding on demand. The team found that the NB will discharge conditions with exclusive breastfeeding.

Conclusions: The SLP intervention is essential in cases of NB cracked due to feeding difficulties that they may have. The clinical case evolved from weak suction and breastfeeding difficulties for strong and efficient sucks with adequate caught in breastfeeding.

A589. Speech Therapy Clinical Outcomes at the Bedside in Case of Diabetic Ketoacidosis
Liliane Menzen, Vanessa Souza Gigioski, Gabriela Pereira da Silva, Lisiane de Rosa Barbosa, Maria Cristina de Almeida Freitas Cardoso
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Introduction: Diabetic ketoacidosis, present in diabetics mellitus type 1 patients and some type 2, has the clinical picture of absolute lack of insulin, causing metabolic imbalance. The applicants complications include hypoglycemia, hyperglycemia, acidosis, polyuria, weight loss, weakness,
vomiting, drowsiness, abdominal pain, pancreatitis, changes in level of consciousness and cerebral edema. Edema is most severe complication is present in 0.5 to 2% of patients. Mortality is between 40 and 90% and morbidity of 10% to 25%.

**Objectives:** Report on speech therapy clinical outcomes at the bedside in a case of child diabetic ketoacidosis, admitted to a pediatric hospital. Approved by Research and Ethics Committee of UFCSPA 467.673.

**Resumed Report:** Girl, 11 years, with clinical diabetes mellitus type 1, diabetic ketoacidosis developed frame and later petechial hemorrhage in the basal ganglia. Neurological examination revealed dysmetria, diadochokinesia, left upper limb hypertension, chorea and hemiballism left. In clinical assessment it was observed: written language of isolated and dysgraphias words; posture parted lips with saliva previous escape, change the motor and orofacial mobility; difficult to coordinate chewing and swallowing, dysarthria setting frame hyperkinetic and moderate oropharyngeal dysphagia.

**Conclusion:** After 16 sessions was observed talking with two-word phrases; writing sentences; good opening and closing of the mouth; evolution of oral diet to pasty consistency. The patient progressed satisfactorily. By one diabetic ketoacidosis framework for speech therapy should be intense and persistent, respecting the clinical limitations of the patient.

**Keywords:** swallowing disorder; metabolism; dysarthria

**A522. Speech Therapy in Pediatric Case of Post Hemorrhagic CVA Dysphagia**

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**Universidade Federal de Ciências da Saúde de Porto Alegre/Inmandade Santa Casa de Misericórdia de Porto Alegre**

**Introduction:** Arteriovenous malformation (AVM) is a neurological disorder caused fetal development, manifesting itself at any age, including childhood. Complications can be observed as Cerebral Vascular Accident (CVA) hemorrhagic, with an incidence of 1.1 / 100.000 children. Post-stroke neurogenic dysphagia has an incidence of 40% to 70% in ischemia and greater than 75% in hemorrhagic. 59% have decreased in oral opening, and also reported numbness only in the lower third, but less sharply. It is currently managed in follow up met once a month with stability in treatment.

**Resumed report:** Describe a case of speech therapists in bleeding after stroke oropharyngeal dysphagia in children.

**Resumed report:** Approved study by CEP n°:467673. Boy, 16, referred to speech evaluation, with motor impairment, dysarthria and oropharyngeal dysphagia, post-surgical emobilization due to hemorrhagic stroke, caused by MAV in parietal lobe. They met orofacial changes in the mobility and strength of the oral structures (lips, tongue and jaw), especially in the earlier movements of speech organs; coordination and strength in language back, good management and saliva swallowing with adequate cervical auscultation. After 23 sessions of speech therapy was observed improvements in: abstraction of food, mouth opening, tongue movement, phonation time and vocal intensity. In direct evaluation of swallow with paste food, the patient clean cervical auscultation without vocal change. Presented stasis food decreased in oral after swallowing with subsequent bleeding. Mother and patient were instructed on how to conducting exercises and their importance to the orofacial motor.

**Conclusion:** It was observed importance of speech therapy to minimize and assist in the dysphagia described. The post-hemorrhagic stroke dysphagia frames are severe but may be detected by the bed and recovered swallowing, even partially.

**Keywords:** swallowing disorder; Stroke; pediatrics

**A46. Speech Therapy in Systemic Sclerosis: A Case Report**

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**Universidade Federal de Sergipe**

**Introduction:** Systemic sclerosis is an autoimmune disease, a rare, multisystem that affects people aged between 30 and 50 years, in a proportion 3-15 women to one man. It is characterized by vascular involvement and excessive deposition of collagen in the skin and internal organs, especially the gastrointestinal tract, lungs, heart and kidneys. Some studies also show changes in the stomatognathic system.

**Objective:** Report on speech therapy performance in a systemic sclerosis case.

**Resumed report:** Male individual with 25 years, diagnosed with systemic sclerosis two years ago, was referred the rheumatology service at a university hospital for clinical assessment to present restriction of mouth opening and numbness in hemiface. Clinical evaluation revealed dry mouth, gingival inflammation, intra and extraoral numbness in the left facial, limited mouth opening (35mm), hardened face, facial asymmetry, lack of expression lines, nasal tapering, tone and mobility of altered phonoarticulatory organs, incoordination pneumophonoarticulator with use of air booking, speaks with locked joint. Patient was referred for speech therapy seeking the molecular modification by running isotonic and isometric exercises. After an average of 60 weekly sessions showed improvement in all aspects worked, gain 8mm mouth opening, and also reported numbness only in the lower third, but less sharply. It is currently managed in follow up met once a month with stability in treatment.

**Conclusion:** Becomes important disclosure and participation of an speech therapist in multidisciplinary team, mainly due to the improvement in aspects related to the stomatognathic system.

**Keywords:** Speech, Language and Hearing Sciences; Scleroderma, Systemic; Speech therapy

**A549. Speech Therapy Intervention During Patient Hospitalization with Cerebral Palsy Diagnosis**

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**Universidade Federal de Ciências da Saúde de Porto Alegre**

**Introduction:** Cerebral Palsy is a permanent brain damage occurring at the central nervous system maturation period, that can affect swallowing control areas and disorders in their processes, causing dysphagia.

**Objectives:** Report speech therapy intervention during patient hospitalization with cerebral palsy diagnosis. Approved by CEP ISCPMA n467.673 on 05/11/2013.

**Resumed Report:** Female patient, 2 years old, with Cerebral Palsy due to anoxia. Was hospitalized due breathing difficulties. Caregiver state that always offered oral feeding. Was requested to a clinical evaluation of swallowing due to aspiration pneumonia diagnostic hypothesis. At the interview, the family reported that had never observed signs of aspiration offering food. During evaluation was observed: muscle hypertonia of the orofacial region and reflex of bite and suction were still present. At the feeding, labial closure inefficient, previous oral escape, weak cough, wet cry and inefficient laryngeal elevation. Also, there was an improper handling at the feeding, both utensils, as position and offer rhythm. Evaluation **Conclusion:** Oropharyngeal Neurogenic Dysphagia moderate-severe. Therefore, indicated use of alternative pathway to nourishment. Orientations about oral hygiene, handling and intra/extra-oral stimulation providing
The Speech Therapist is the professional in charge of feeding security of the inpatients and able to discuss the correct conduct with the medical team about the diet that should be offered at the hospital beds, avoiding the worsening of the respiratory condition of patients.

**Keywords:** speech therapy, hospitalization, cerebral palsy

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**A48. Speech Therapy Practice in NASF: Health Education Action at the Community Health Agents in Celebration of the Day of the Voice**

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Universidade Luterana do Brasil

**Introduction:** The insertion of Speech Therapy in Public Health has increased considerably, especially after the creation and implementation of the Center for Family Health Support (NASF) in 2008 by Decree 154 of the Ministry of Health. This multi core was created in order to complement and qualify the actions developed by Family Health Teams. Among the NASF assignments are technical and pedagogical support teams, which aims at a more comprehensive care to the population. The actions of health education are an important part of technical and pedagogical support, and as such should be directed to the whole team, especially the Community Health Agents, which constitute important link between the population. The actions of health education are an important part of technical and pedagogical support, and as such should be directed to the whole team, especially the Community Health Agents, which constitute important link between the minimum staff and users.

**Objective:** To promote the knowledge of vocal health to a group of Community Health Agents belonging to seven family health teams, linked to a territory of the city of Canoas - RS.

**Resumed report:** The action had the participation of 18 Community Health Agents, which together account for 13.500 users. Conversation circle were held and dynamic seeking guidance on caring for the use of the voice and the instrumentalization of these professionals so that they can guide the population and assist in the early identification of possible vocal alterations. The action had the participation of Speech Therapy, Physical Therapy and Physical Education.

**Conclusions:** The action had a positive balance, because the shared information and the reported experiences added knowledge and a fresh look at the individual vocal health and assisted population.

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**A350. Speech Therapy Profile of Adult Patients in an ICU**

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**Introduction:** The recent practice of speech-language therapists in hospitals is growing, and its role is to care for the dysphagic's patients.

**Objective:** Characterizing the speech therapy profile of adult patients in an ICU.

**Methodology:** Retrospective, descriptive study performed by the analysis of risk assessment protocols for dysphagia’s patients in an ICU from June, 2012 to April, 2014. This study was approved by the Ethics Research Committee of the participant institutions following protocols n° 706.298 and n° 760.622.

**Results:** The sample included 110 records of forward patients with clinical manifestations of pulmonary or neurogenic alterations, between the ages of 17 and 86. Significant associations between severe dysphagia associated to tracheotomy (p = 0.007) and mild dysphagia associated to malnutrition (p = 0.041) were found. Patients with mild dysphagia were 56.6 years old, on average, while severe patients with severe dysphagia were 64.5 years old, on average. Patients with severe dysphagia are male (54%).

**Conclusion:** The patient profile showed pulmonary and neurological disorders; moderate dysphagia; with orotracheal intubation; nasoenteral feeding tube; without tracheotomy; severe dysphagia with tracheotomy; and mild dysphagia with malnutrition. Data regarding the age group and the prevalence of baseline disorders associated to mechanical ventilation and tracheotomy suggest dysphagia or risks for the development of the disorder. The degree of dysphagia varied and was more severe in older patients. Speech-language therapists allow for the early diagnostics of dysphagia, reduction of hospital costs, and time in the ICU.

**Keywords:** Deglutition; Swallowing disorders; Intensive Care Unit; Tracheotomy; Intratracheal intubation

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**Objective:** proposing a protocol alternative version that allows evaluating verbal language (oral and written) related to hearing, body balance, voice and orofacial motricity.

**Methods:** the protocol alternative version results of the theoretical and methodological effort of Speech, Language and Hearing professionals to articulate different specialties of the field, as in the different aspects implicated in human communication, body balance and feeding process. It’s proposed to evaluate the subjects’ linguistic-cognitive work indicated above through some linguistic devices (interview, narratives, comments, proverbs, syllogisms, daily problems), reading and writing and aspects implicated in language operation: hearing, body balance, voice and orofacial motricity. It’s suggested that hearing is evaluated by pure tone audiometry, speech audiometry, behavioral tests of hearing processing and, if possible, of Long-Latency Evoked Auditory Potential (LEAP); body balance through tests of static and dynamic balance and movement coordination, through sensory organization test and, if possible, vectoelectricromyography; voice through perceptive-hearing analysis; and orofacial motricity through observation of structures and functions of the stomatognathic system, especially swallowing dynamics.

**Results:** a protocol alternative version that allows to evaluate/comprehend an elderly in demential process (or not) relating different implied in language production and interpretation.

**Conclusions:** protocol alternative version does not propose different procedures from those already developed in Speech, Language and Hearing Science, but proposes they’re fully developed, relating the valued aspects. The script favors accurate diagnoses in Speech, Language and Hearing clinics.

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Dainanny de Souza Silva, Maria Esther de Araújo
Faculdade Redentor

**Introduction:** In beauty salons, workers are exposed to various risks, including physical and chemical. Noise can cause different effects on the hearing of individuals and, when associated with chemicals, damage to workers’ hearing health is enhanced.
Objective: To investigate the presence and perception of risk for the hearing of individuals who work in beauty salons.

Methods: Approved by the CEP under n° 30973714.5.0000.5648, this cross-sectional study of investigative and descriptive character was carried out in five salons in the city of Itaperuna/RJ. The observation of the workplace was followed by direct collection with the application of a semi-structured form. The sample consisted of 16 workers and the data were analyzed statistically.

Results: The mean time in the environment is of eight hours. The environment is considered noisy by 93.75% of the workers and 68.75% of them feel uncomfortable with the odors and gases present. Approximately 40% reported auditory symptoms, fatigue and stress. There is no report of the use of hearing EPI and 81.25% state they are aware that noise is harmful to the audition, but 68.75% are unaware not only that the chemical can cause deafness but also of the existence of protection programs to hearing health.

Conclusion: The study favored a vision of the reality of hearing risks present in beauty salons, and the perception of the worker of their hearing health, emphasizing the importance of implementing health policies in order to better working conditions and quality of life.

A392. Spinal Impairment and Dizziness Complaint: A Perspective from the Vestibular Test
Lícia Assunção Cogo, Natália Martinez Fernandes, Aron Ferreira da Silveira, Valdete Alves Valentins dos Santos Filha
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Introduction: Knowing the vestibular system and its possible changes is relevant in clinical practice, such changes can be indicative of impairment of body and can hinder their daily activities and consequently quality of life. Changes in the spine may be associated with these changes.

Objective: Describe the vestibular findings of individuals with dizziness and self-reported spine changes, and categorize the sample about the type of dizziness, the site of spine changes and the presence of tinnitus.

Methods: 16 male and 40 female were attended in the University Hospital of Santa Maria Speech Language Pathology and Audiology Course from 2012 to 2013, with ages ranging from 27 to 79 years old, mean age of 57.83 years old. The subjects underwent anamnesis, visual inspection of the external acoustic meatus and Computerized Vectoelectronystagmography.

Results: The complaint of vertigo was reported by 44.64% of the subjects. It was found that 21.42% of the subjects had cervical and lumbar spine alteration, 10.71% cervical, lumbar 12.50%, 1.78% thoracic and 53.57% did not specify. Tinnitus was reported in 60.71% of patients; and the Vectoelectronystagmography obtained 71.42% of normality.

Conclusion: Vectoelectronystagmography was predominantly normal. The cervical and lumbar impairment was prevalent among subjects who pointed the affected region of the spine. However, cannot rule out the possible association between dizziness and spine impairment in 28.58% of the subjects with abnormal vestibular tests.

Keywords: Neurotology, Dizziness, Vestibular Function Tests, Spine, Postural balance

A276. State of the Art of Brazilian Literature Production in the Area of Voice
Telma Dias dos Santos, Ariane Moulin Pedra, Amanda Giglio Eugenio Barreiros, Ana Terra Santos Pompeu, Ivana Correa Tavares Oliveira, Teresa Maria Momensohn dos Santos
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Introduction: From the survey of published literature in a particular area, it is possible to define a problem, knowing the research methods and the paths used in the scientific material that is published. The mapping of how and where are the scientific contributions in the area of Voice produced by researchers it is necessary to understand the current landscape in Brazil.

Objective: to know the State of the art of Brazilian bibliographical production in the area of voice using the quantitative methodology or literature review.

Methods: A survey performed on the Brazilian platforms of indexed journals in the health area BIREME, CAPES and SCIELO. The variables were: type of production (original articles or review), language (Portuguese), country of affiliation (Brazil), thematic (voice) and period (from 2009 to 2013).

Results: we found 334 articles, of which 14 have appeared at BIREME, 110 in the Scielo and 25 just in CAPES journals, which results in 198 articles in Portuguese language. As for the literature review, 14 appear at BIREME, six on SCIELO and no one on CAPES. Calls attention to the high rate of articles indexed in Scielo platform in relation to indexed in other platforms. This may be a demonstration of the difficulty of the Brazilian researchers to publish in internationally indexed journals. Investigate the reasons why this occurs is very important for the international recognition of Brazilian phonauralingual research.

Conclusion: it is important to invest in scientific production of Brazilian phonauralingual researcher so he can publish in international journals.

A557. Stimulating Children’s Oral Language in Prolonged Hospitalization
Priscila Regina Reznicek, Ruth Siqueira Grawer, Laura Fuchs Nunes, Karen de Oliveira dos Passos, Lisanie de Rosa Barbosa
Universidade Federal de Ciências da Saúde de Porto Alegre

Introduction: Short bowel syndrome patients have severe cases of malabsorption. Total parenteral nutrition is initially used until the hemodynamic profile is stabilized, so then the patient can be slowly subjected to the introduction of oral diet. The child should be subjected to prolonged hospitalization and consequently the environmental and social stimuli, required to the development of language, become restricted. Children with prolonged or repeated hospitalization experience have developmental delay risk increased.


Resumed Report: Male patient one year and nine months old, 32 weeks gestation premature, short bowel syndrome. Sent to follow up with speech therapy team. Initially interviewed, the child’s caregiver reports that the patient is hospitalized for many months, uses nozzle and bottle and speaks few isolated words. Only his caregiver and his mother live with the child daily. Language delay diagnosis after initial assessment. Later, it was told how to perform the oral language stimulating, as example, ask the boy to speak what he wants. Also, interaction has been demonstrated using children’s books in which the boy showed oral production interest.

Conclusion: The speech therapy is the stimulating oral language capable professional. In prolonged hospitalization, guidance and monitoring are important to provide the children’s communication acquisition and development, minimizing hospital effects.
Keywords: Speech therapy; language; prolonged hospitalization

A2. Study of the Components of the Auditory Evoked Potential Long Latency and Heart Rate During Mental Arithmetic Test
Viviane Borim de Góes, Simone Fiuza Regaçone, Renata Sperancin Marcomini, Ana Claudia Frizzo
Faculdade de Filosofia e Ciências - Unesp/Marília-Sp

Introduction: Auditory processing is based on the effective functioning of the central nervous system (SNC) and the cardiovascular system is regulated by neural pathways located in the brainstem and areas above the brainstem. The auditory evoked potential long latency (PEALL) evaluates the SNC, which allows the measurement of neuroelectrical activity in different sites of the auditory pathway and the observation of auditory information processing in ms. Heart rate variability (HRV) is a method that analyzes the cardiac autonomic modulation.

Objective: To evaluate whether there is an association between the components of PEALL and indexes of HRV during mental tests.

Method: Nine healthy female subjects aged between 18 and 30 years were analyzed. We recorded HRV of the subject through the heart rate monitor (Polar RS800CX) before and during the examination of PEALL. PEALL recording was made using binaural frequency protocols and duration binaural. Registration and analysis of components N2 and P3 were analyzed correlated to the SDNN index.

Results: It can be seen that correlation predominantly weak and without significance between the components N2 and P3 PEALL SDNN with HRV index in duration and frequency protocols.

Conclusion: There was no association between the components of PEALL with parasympathetic and sympathetic modulation of the heart during a specific mental arithmetic test.

A54. Study on Tinnitus Laterality and the Score on the Visual-Analog Scale
Tais de Azevedo Picinini, Adriane Ribeiro Teixeira, Alexandre Hundertmark Lessa, Letícia Petersen Schmidt Rosito, Celso Dall'Igna
Universidade Federal do Rio Grande do Sul e Hospital de Clínicas de Porto Alegre

Introduction: Tinnitus is a common symptom in individuals from different age groups and can affect the individuals’ quality of life. The use of assessment rating scales can help professionals to verify the impact of this symptom.

Objective: To verify the relationship between the score of the Visual Analog Scale (VAS) and tinnitus laterality.

Methodology: 771 patient records were assessed, seen between the years of 2002 and 2014 in a specialized outpatient clinic. The data was assessed on the VAS score and laterality of tinnitus. Data were analyzed quantitatively. The project was approved by the ethics committee of the institution.

Results: The sample consisted of individuals of both genders, aged between nine and 89 years (mean 59.14 ± 12.92 years) and 487 females (63.16%). Regarding the laterality of tinnitus, it was found that 140 (18.2%) subjects reported tinnitus in the right ear, 179 (23.23%) in the left ear, 394 (51.1%) in both ears and 52 (6.7%) patients reported the perception of tinnitus in the head. The VAS scores ranged from 0 to 10 points, averaging 7.33 ± 2.10. It wasn’t verified any relationship between the two variables: (p = 0.94).

Conclusion: It was found that in the sample studied, there was no relationship between the laterality of tinnitus and the score on the VAS.

Keywords: tinnitus, symptoms, questionnaires

A529. Stuttering Multidimensional Analysis in Children who Stutter
Rayssa Beatriz Onuki de Moura, Talissa Almeida Palharini, Cristiane Moço Canhetti de Oliveira
Unesp - Universidade Estadual Paulista “Julio de Mesquita Filho”

Introduction: Stuttering is a multidimensional fluency disorders that can cause wide ranging psychosocial impact.

Objectives: The purpose was to assess the fluency and the attitudes and feelings of the school-age children who stutterer aware of the disorder.

Methods: This was an analytical cross-sectional, performed at the university public clinic of São Paulo state, approved by the Ethics Committee of the Institution (n° 0081/2011). Participants were 35 children who stutter (CWS), ages 6-11 years, of both genders, speakers of Brazilian Portuguese. The procedures used were: fluency assessment, application of the questionnaire on awareness of stuttering and the assessment of attitudes and feelings about stuttering by children through the protocols proposed by the Stuttering Foundation of America - SFA (Chmela and Reardon, 2005).

Results: The percentage of stuttering syllables ranged from 3 to 19.50% (average 7.19%, SD = 4.60). The attributes related to stuttering were: (1) negative: stuttering, people attitude, humiliation and bullying; (2) positive: speech and speech therapist. Concerns stuttering were: speaking, suffer teasing and bullying and to be accepted by others.

Conclusion: The most frequent negative feelings found in children with persistent developmental stuttering and aware of the disorder were: anxiety, sadness, worry and fatigue. Negative attitudes that prevailed in children’s responses were: child’s concern about the attitude of people and disfluent speak their consequences in the social and academic environment; isolation or avoidance of communicative or social situations; the crying and the passivity of some children in relation to the speech disorder.

Keywords: Speech Disorders; Stuttering; Evaluation; Child

A80. Subjective Visual vertical with the Bucket Method in Brazilian Healthy Individuals
Maristela Mian Ferreira, Fabiana Cunha, Cristina Freitas Ganaçña, Heloisa Helena Caovilla Malavasi Ganaçña, Mauricio Malavasi Ganaçña
Universidade Federal de São Paulo/Escola Paulista de Medicina (Unifesp/Epm)

Introduction: The ability to judge whether a line is vertical is called subjective visual vertical.

Objective: To obtain the subjective visual vertical reference value with the bucket method in healthy Brazilian individuals.

Method: Subjective visual vertical was measured binocular in 100 healthy volunteers, 50 female and 50 male. Volunteers had estimated the true vertical relative to the ground line indicating when a fluorescent line inside a bucket reached the vertical position. The bucket was rotated slowly, five times clockwise and five counterclockwise.

Results: The two-dimensional scatter plot was chosen to represent the mean of the absolute values of the vertical...
deviations from the age and gender. The highest concentration of values was found to 3° of vertical deviation, regardless of gender; and, the vertical deviation did not increase with age. In the analysis of the mean absolute values of the vertical deviations of 90% of the sample was found the maximum value of 2.6° and in the analysis of the 95%, the maximum value was 3.4°.

**Conclusion:** The absolute deviation limit of subjective visual vertical in relation to the true vertical line in healthy Brazilian individuals is 3°.

**A588. Support Group Formation for People with Tinnitus: A Treatment Tool**
Marjana Gois, Isadora Gonçalves Pelissari, Sheila Jacques Oppitz, Rubia Soares Bruno, Michele Vargas García
*Universidade Federal de Santa Maria*

**Introduction:** Tinnitus is a symptom characterized as sound perception in the absence of external sound source.

**Objective:** To demonstrate how we organized a support group formation for people with tinnitus combining categories of treatment-TATandBCT.

**Methods:** The sample consisted of 28 participants, for convenience, 18 females and 10 males, from the HUSM Audiology Service. They were divided in 3 groups. The treatment group consisted of 5 meetings structured with half-hour duration, once per month. The sessions were developed based on principles of TAT associated withBCT. The groups were made up of 10 people who attended the monthly sessions as subgroups that were previously divided. Subjects in each group were counseled about tinnitus and general issues that influence. Were scheduled consultations for group and were listened to patients regarding their demands to delineate the topics order to be addressed. Thus, the subject was first discussed nutrition and physical inactivity, as regards the dietary errors; importance of fractionation meals and physical activity practices. Subsequently, discussed sleep theme, addressing daytime and evening activities that improve sleep; tips on good habits for good night’s sleep. The next session was about thought and emotions, they discussed the possibility that everyone has to change their emotional reactions, connections between thought and emotional state. All topics were illustrated with informative material.

**Results:** Of 30 places available 28 contemplated and participated in the support group and performed the complete battery auditorytests: Audiometry, SpeechTests, Tympanometry, Auditory Processing, Transient Evoked Otoacoustic Emissions, Suppression Of Emissions, Auditory Brainstem Response, Long Latency Auditory Evoked Potential, Acuphenometry. Was researched the tinnitus degree discomfort through Visual Analogue Scale-VASon first date and at discharge. Also, answered the questionnaireTHI, and HAD scale discomfort IOWA; 11 patients were discharged with only one group meeting; None was discharged on second meeting; 3 gave discharged on fourth meeting; 3 gave high in fifth meeting and 11 patients remain in care.

**Conclusion:** The support group for people with tinnitus has proven to be useful tool in treatment for tinnitus's people at different ages and different subgroups.

**A534. Swallowing and Speech Alterations in a Case of Posterior Reversible Encephalopathy Syndrome**
Daniel Lucas Piccânci Marchand, Amanda do Nascimento Pires, Mariana Pombo Bofill

**Introduction:** The posterior reversible encephalopathy syndrome is usually caused by hypertensive encephalopathy, eclampsia and neurotoxicity cyclosporine-A. Symptoms are progressive and include headache, decreased level of consciousness, seizures and visual disturbances. The symptoms regressed completely if corrected in time the determinants, otherwise it may set irreversible damage such as cortical blindness and death.

**Objectives:** Report speech therapy findings in a case of Posterior Reversible Encephalopathy Syndrome.

**Resumed Report:** 3 years and 8 months old girl, hospitalized due to headache, presented changes in electroencephalography, pointing to diffuse moderate encephalopathy, pronounced in the posterior areas of both hemispheres. Referred to the speech therapy service due to speech and swallowing issues. At the beginning of treatment the patient showed up poorly responsive, no communicative intention and with food refusal. The family was advised to encourage the child’s communication through conversation, reading stories and songs. As for the food, we started therapy with textures and flavors that the patient like.

**Conclusion:** Because of early diagnosis, the patient had a good recovery and speech therapy was essential to keep the girl’s quality of life. There are few speech therapy studies on posterior reversible encephalopathy syndrome, requiring more scientific papers on this subject.

**Keywords:** Syndrome; Speech, Language and Hearing Sciences; Deglutition Disorders

**A559. Swallowing Tests of Association: Case Study**
Marcelo Henrique Ferreira, luiza suita fauth, Aline Gasparini Rabaioli, Maria Cristina de Almeida Freitas Cardoso
*Universidade Federal de Ciências da Saúde de Porto Alegre*

**Introduction:** hydranencephaly is defined as the congenital absence of the cerebral hemispheres or the mass destruction of these secondary to interruption of blood flow by occlusion of the internal carotid, remaining the thalamic and hypothalamic regions generally intact and functioning.

**Objective:** To involve clinical evaluation of dysphagia the swallowing videofluoroscopy a case hydranencephaly.

**Resumed Report:** Boy, 9 months, sent by the Neurology Service, for research and monitoring in speech therapy with the presence of oropharyngeal dysphagia. This study was approved by the CEP / UFCSPA under registration number 039/012. At the request of imaging test was necessary because of the direct tests of swallowing, have evidenced the presence of moderate dysphagia. In our case, the absence of brain structures raises doubts as to the prognosis of the child and effectiveness in carrying out the orofacial functions.

**Conclusion:** The use of diagnostic method with radiation emitting equipment X, has become increasingly more current and secure, the exhibition held in recorded media being can be seen several times, with frame-by-frame viewing, the speed to be, thus preventing re-exposure to the radiation. For the study of swallowing, the possibility to verify the occurrence of the dynamic event, makes accurate and reliable diagnosis as well as opposite to the case of no protection mechanism airway video fluoroscopy is the most efficient method of diagnosis. The results of the patient videofluoroscopy exam confirm the oropharyngeal dysphagia, showing presence of tracheal aspiration.

**Keywords:** Hydranencephaly; videofluoroscopy; deglutition disorders
A149. Swallowing the Aspects Associated with Tracheomalacia: Case Report
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Universidade Federal de Ciências da Saúde de Porto Alegre

Introduction: Tracheomalacia is a frequent congenital anomaly. Cartilaginous skeleton of the immaturity of follows that, by not being adequately rigid, allows the collapse of the airway lumen during the inspiratory movement. The clinical manifestations presented by the children with tracheomalacia are: wheezing, difficulty feeding, crying hoarse, hoarseness. Surgical treatment is recommended in cases whose conservative treatment is not enough, and consists of correcting the underlying etiology, tracheostomy and aortopexia.

Objective: To characterize swallowing front of tracheomalacia.

Resumed Report: Boy, 2 years and 5 months, sent by the Pneumology team for evaluation and speech therapy, diagnosed with tracheomalacia. For the investigation of dysphagia we used the Dysphagia Protocol Pediatric (PAD-PED) are recording, lip seal, suitable hold the straw, appropriate pauses, the suck-swallow-breathing and laryngeal elevation present in the test liquid in the cup offered and straw. There was also adequate funding spoon, chewing pattern suitable for the age, proper handling of language, breathing-swallowing coordination and proper oral transit time in the test with heterogeneous pasty consistency. This study was approved by the Research Ethics Committee / UFCSPA under number 039/12.

Conclusion: Although it is expected compromise respiratory function, this case emphasizes coordination between the tasks diagnosed with normal swallowing and the absence of clinical signs suggestive of dysphagia.

Keywords: Tracheomalacia, swallowing disorders, tracheostomy

A420. Temporal Processing in Adolescents with School Difficulties Complaints
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Preliminary study, part of a research "cognitive-linguistic skills, Sensory and Motor in Adolescents with School Difficulty: evaluation proposal" (Ethics Research Committee HUPE/UERJ 21042513.0.0000.5259), developed at the Adolescent Health Studies Center of the Rio de Janeiro State University (NESA/UERJ).

Objective: To analyze the profile of temporal processing of adolescents with school difficulties complaints.

Methodology: Data from the temporal processing (TP) of the 13 adolescents who completed the baseline survey were selected. They performed behavioral Duration Pattern Test (DP), Frequency Pattern Test (FP) and Gaps in Noise test (GIN), in a soundproof booth, with 50dBSL and in two sessions.

Results: Of the 13 assessed, 62% are female and 38% male, with 77% of series / age gap. All (100%) had disorder of temporal ordering (DP), with a great variety of answers and average of 29.02% accuracy. Sixteen teenagers showed alterations in at least one more test (46.1%). In GIN, 9 individuals began the test by right ear (RE) and 4 by left ear (LE); the average gap detection threshold was 5.61ms in RE and 5.07ms in the LE and the percentage of correct answers of 67.9% in the RE and 70.62% in the LE, revealing index below expectations for children 11 and 12 years in RE, which may have been influenced by not control the start test ear variable.

Conclusion: the profile of the temporal processing adolescents with school difficulties complaints shows changes regarding the ordering and temporal resolution Results corroborate studies that put the temporal processing as fundamental to speech intelligibility.

A198. Temporal Resolution: Gap in Noise Test Application in Elderly
Taissane Rodrigues Sanguebuche, Alessandra Luana Schwantes, Bruna Pias Peixe, Fernanda Freitas Vellozo, Quemile Prib Martins, Michele Vargas Garcia
Universidade Federal de Santa Maria

Introduction: The auditory ability of temporal resolution is one of the first to be affected by aging and consists on the minimum time required to segregate or solve acoustic events, being essential to the speech comprehension.

Objective: To describe the Gap in Noise (GIN) Test findings in elderly.

Methodology: The study has a descriptive, quantitative and transversal character. A number of 35 persons between 60 and 82 years-old were evaluated, mean of 68.71 years-old, however, 7 of them were excluded by asymmetry between the ears and 3 could not understand the test and, therefore, did not realize it. Thus, the sample was consisted by 25 subjects, being 17 female and 8 male, mean of 66.56 years-old, presenting from normal hearing to sensorineural hearing loss (SNHL) moderate, bilateral and symmetric. The individuals were subjected to Pure-Tone Threshold Audiometry, Logaudimetry, Acoustic Immittance Testing and Testing Track 1 of GIN test, which is composed by 35 white noise segments that contain from 0 to 3 gaps of silence each. The gaps duration are 2, 3, 4, 5, 6, 8, 10, 12, 15 and 20ms and are presented 6 times each.

Results: Among the subjects, 18 had normal hearing, 3 mild bilateral and symmetric SNHL and 4 moderate bilateral and symmetric SNHL. A mean was done according to each subject’s hearing and it was found 7.4ms as a reference value for normal hearing, 9ms for mild SNHL and 9ms for moderate SNHL where the lower response to stimulus was 2ms and the higher 15ms.

Conclusion: It was possible to perform the test in most elderly evaluated and generate reference values to the population in study.

A165. Test of Hearing Perception in Free-Field in the Presence of Noise
Gleide Viviani Maciel Almeida, Angela Ribas
Universidade Tuiuti do Paraná

Introduction: Users of conventional and/or implantable hearing aids complain about the difficulty in understanding speech in noisy environments. Speech tests performed in clinics/practices occur in quiet environments.

Objective: To validate the Auditory Perception in Noise Test, which checks recognition skills of speech in noise in free-field.

Methods: The sample consisted of one hundred healthy subjects with normal hearing and aged over 18 years who have agreed to participate. After the pure tone audiometry, was applied speech recognition test, with monosyllabic and disyllabic words, in free-field, with standardized material, in three listening situations: hearing optimum condition (no noise), to noise ratio -10dB and to noise ratio -15dB. To do so, was assembled a calibrated free-field test environment where speech was presented in two speakers located at 45 degree, and noise in a third located at 180 degree.

Conclusion: the profile of the temporal processing
**Results:** The one hundred subjects were divided into groups: G1 aged 18 to 40 ($n = 72$) years and G2 composed of individuals above 40.1 ($n = 28$) years. All had logaudiometry results in free-field between 88% and 100% in the three listening situations. There was no statistically significant difference between the two groups.

**Conclusion:** Auditory Perception Test in Free-field in Noise proved to be easy to organize and to apply. The results of the test validation suggest that individuals with normal hearing should hit between 88% and 100% of the presented stimuli. The test can configure an important tool in measuring the noise interference on speech perception skills.

**Keywords:** Auditory Perception; Hearing Tests; Noise; Hearing

**A17. The Fonoaudiologia Contribution in the Elderly Reinsertion Presbycusis the Labour Market - Hearing Aids**

Blanca Marques Rocha, Maria Esther de Araújo

**Faculdade Redentor**

**Objectives:** To identify the benefits of using hearing aids related to socialization, communication and labor activity in elderly presbycusis.

**Methods:** Approved by the CEP (CAAE 30980014.0.0000.5648), an empirical/exploratory research was conducted, with direct data collection, applied in 9 elderly between 60 and 88 years old. The form was composed of dichotomous questions itemized scale, addressing handicap, sociability and quality of life.

**Results:** Of the participants, 89% reported improvement in social aspects after the use of hearing aids, especially in the interaction, communication and social routine, feeling more secure and satisfied in their work activities.

**Conclusion:** Psychosocial factors such as aging spectrum representation become more challenging when associated with poor hearing ability (MONDELLI & SOUZA, 2012). Presbycusis ultimately cause a gradual withdrawal and sometimes definitive of their professional environment, social and family. (Russo et al, 2003). The use of hearing aid is the environmental sounds and speech improving communication conditions (Paiva et al, 2011) (Arakawa et al, 2010). Thus the hearing aid, combined with effective adaptation, through the speech therapist’s role, can provide this old the chance to regain their social activities, rejecting the isolation they would be imposed, bringing back the independence and autonomy of life of this individual. (Almeida, 2013).

**Keywords:** presbycusis; Aging; Hearing aids; Return to Work; Quality of life

**A498. The Importance of Therapy in Patient with Hyperacusis: Case Report**

Isabella Marques Pereira Rahme, Geraldo Majela Pereira

**Universidade Federal de Minas Gerais**

**Introduction:** Hyperacusis is defined as abnormally strong reactions occurring within the auditory pathways resulting from exposure to moderate sounds. People experiencing hyperacusis typically have negative emotional associations with environmental noises or sounds in general leading to an abnormally high gain (amplification) to signal arriving from cochlea.

**Objectives:** Describe a case report of 13-year-old woman with hyperacusis complaint for 6 months and the subject treatment conducted.

**Resumed Report:** There was no specific sound or sound frequency that bother her, reporting discomfort with sounds of various natures. Tests as Audiometry, Littmanometry, Otoacoustic emissions, Brainstem audiometry were performed with all results within normal limits. The Uncomfortable loudness levels test confirmed the diagnosis of hyperacusis, whereas at 500, 1000, 2000 and 4000 Hz frequencies thresholds were below 80 dB. The treatment conducted was the Tinnitus Retraining Therapy (TRT) sessions with sound therapy and directive counseling. We eliminated any doubt about the hyperacusis, since the patient was concerned regarding your clinical complaint. Any drug was taken during the treatment. The patient reported significant improvement of hyperacusis where the sounds that usually bother her she can deal with them with success.

**Conclusion:** The management of patients with hyperacusis complaint is of utmost importance, since people with the condition are so sensitive to noise and their quality of life is affected in most cases avoiding social situations. TRT is a helpful method for patients with hyperacusis.

**Keywords:** hyperacusis, hyper-responsiveness, directive counseling, tinnitus retraining therapy

**A293. The Influence of Age on Swallowing Dysfunction Presence in Children with Suspected Dysphagia**

Lenice de Fatima da Silva Munhoz, Karina Elena Cadioli Bernardis Buhler, Suely Cecilia Olivean Limongi

**Hospital Universitário da Universidade de São Paulo**

**Introduction:** Studies which verify the influence of age on swallowing dysfunction in children are scarce.

**Objective:** To verify the influence of age on clinical signs and symptoms indicators of pharyngeal phase swallowing dysfunction observed in clinical evaluation and on oral and pharyngeal phases dysfunctions in videofluoroscopy in children with suspected dysphagia.

**Methods:** Retrospective analysis of data from clinical and videofluoroscopic evaluations carried out in 55 children from 1 month to 7 years and 11 months old. Subjects were divided in age groups: 1-6 months, 7-14 months, 15-36 months, >37 months, ≤1 year and >1 year. To clinical evaluation, the “Protocol for Clinical Assessment of Pediatric Dysphagia” was used. In the videofluoroscopy, the oral and pharyngeal phases were assessed. To statistical analysis, Chi-squared and Fishe’s Exact Tests were used.

**Results:** In clinical evaluation, children of 1-6 months showed less cervical auscultation ($p = 0.022$) and vocal quality alterations ($p = 0.008$) and more respiratory distress ($p = 0.013$); 7-14 months more cervical auscultation alteration ($p = 0.042$); >1 year more vocal quality alteration ($p = 0.041$). In videofluoroscopy, children of 1-6 months showed less oral phase dysfunctions and pharyngeal residue ($p = 0.001$); 7-14 months more thin fluid pharyngeal phase dysfunctions ($p = 0.040$); 15-36 months more oral phase dysfunctions ($p = 0.018$); >37 months more puree pharyngeal phase dysfunctions ($p = 0.036$); >1 year more oral phase dysfunctions and pharyngeal residue ($p = 0.002$).

**Conclusion:** It was found differences for clinical signs related to age. Oral and pharyngeal phases dysfunctions observed were not expected to age in the population studied.

**A418. The Influence of Anterior Dental Open Bite Malocclusion on Bite Force in Children**

Joana Carolina Martins Simões, Lucia Dantas Giglio, Janaina Bueno da Silva, Luciana Vitaliano Voi Trawitzki

**Faculdade de Medicina de Ribeirão Preto da Universidade de São Paulo - FMRP - USP**

**Introduction:** The anterior dental open bite malocclusion occurs when there is no contact between the incisors. Maximal isometric bite force is one component of chewing function and is related to many stomatognathic system structures, such as dental occlusion.

**Objectives:** The aim of the study was to investigate if the anterior dental open bite, isolated or associated with others malocclusions, influences the maximal isometric bite force in children, compared with age-matched normal subjects.

**Methods:** Sixty six young patients, boys and girls, were selected for the study. They were separated in two samples, with and without malocclusion anterior dental open bite. And all children were classified according to age group, there was three to five years and six to eight years old. The test group was subdivided in three others samples according to kind of malocclusion: only anterior open bite group, anterior open bite associated with others malocclusions and finally a group anterior open bite associated with others malocclusions without cross-bite. For everybody, the examiners conducted an orofacial myofunctional evaluation and were performed measurements of bite force by an electronic gnathodynamometer.

**Results:** it was found only a significant difference about bite force values relating to age in the group with malocclusion anterior dental open bite.

**Conclusion:** in this study the anterior dental open bite, associated with others malocclusions or isolated, did not influence the maximal isometric bite force in children around 3 to 8 years old.

This work was supported by Fundação de Amparo à Pesquisa do Estado de São Paulo, Brazil.

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**A63. The Knowledge of Pregnant Women about the Importance of Newborn Hearing Screening**

Patricia Arruda de Souza Alcarás, Fernanda Soares Rodrigues

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**Introduction:** in recent years, in Brazil, several discussions about hearing impairments have been publicly held with the goal of determining what programs and actions can help prevent, identify, diagnose and rehabilitate children with hearing impairments.

**Objective:** investigate how much expectant mothers know regarding the importance of OAE testing for early detection of hearing impairment. All of these pregnant women are participating in a program called Advice for Expecting Mothers developed in a Basic Health Unit located within the state of São Paulo. In addition, there were informative actions, through lectures, in the same Basic Health Unit, on the Newborn Hearing Screening (NHS) program.

**Methods:** the sample consisted of 12 pregnant women who were in prenatal care, ages 14 to 32 (mean = 24.83, SD = 5.83).

**Results:** 91.6% did not know about the OAE test, all claimed ignorance on the factors that can cause hearing loss, 83.3% reported never having received information about a baby’s hearing development, 75% are unaware of locations where the tests are performed, 83.3% said that there is a lack of disclosure about at health units about the OAE test, and 100% of the pregnant women have shown intention to have their babies tested using the NHS.

**Conclusion:** concluded that the women in the study did not have enough knowledge regarding NHS, making it necessary to carry out actions to enable health promotion and access to this population for neonatal screening programs.

**Keywords:** hearing, hearing loss, screening
A508. The Relationship between Hyperacusis and Autism Spectrum Disorder: A Review Literature
Isabella Marques Pereira Rahme, Tanit Ganz Sanchez, Erika Maria Parlato Oliveira
Universidade Federal de Minas Gerais

Introduction: The autism spectrum disorder (ASD) is a developmental problem characterized, in part, by sensory abnormalities. Different hearing disorders are reported among children with ASD, and hyperacusis is one of the most common challenges.

Objectives: Describe the relationship between autism spectrum disorder and sensory-perceptual abnormalities, emphasizing auditory hypersensitivity (hyperacusis) and discuss their effects in auditory pathway.

Data Synthesis: Systematically review literature in Pubmed database, using the keywords “autism and hyperacousis” and “autism and auditory hypersensitivity” in 2005-2015 period in humans. Sound hypersensitivity in the ASD may be due to abnormality of the efferent auditory system by lack of sufficient contralateral suppression. Auditory sensory modulation difficulties are common in ASD and may stem from a faulty arousal system that compromises the ability to regulate an optimal response. Superior semicircular canal dehiscence (SSCD) was more prevalent in autistic children with hyperacusis. Evoked potentials measures in autistic with hyperacusis can provide a clinical clue of a possible SSCD.

Methods: Systematically review literature in Pubmed database, using the keywords “autism and hyperacousis” and “autism and auditory hypersensitivity” in 2005-2015 period in humans. Sound hypersensitivity in the ASD may be due to abnormality of the efferent auditory system by lack of sufficient contralateral suppression. Auditory sensory modulation difficulties are common in ASD and may stem from a faulty arousal system that compromises the ability to regulate an optimal response. Superior semicircular canal dehiscence (SSCD) was more prevalent in autistic children with hyperacusis. Evoked potentials measures in autistic with hyperacusis can provide a clinical clue of a possible SSCD.

Conclusion: The early diagnosis of auditory pathway disorders in autism is considered relevant for the possible identification of atypical sensorial markers.

Keywords: autism, hyperacusis, hyper-responsive-ness, auditory processing, child behavior

A514. The Relationship Between Recurring Otitis and Acquisition of Coronal Fricatives
Laura dos Santos Abon Zahr, Kariny Zencke da Silva, Bruna Santos Sant’Anna, Rayane Abreu do Nascimento, Leticia Pacheco Ribas
Universidade Federal de Ciências da Saúde de Porto Alegre

Introduction: Studies show that children who have recurring otitis may have a reduced perception of speech sounds, especially in relation to fricatives such as /s/ and /z/. This fact may explain the difficulty in acquiring these phonemes in children with phonological disorder.

Objectives: To investigate the history of ear infections in children with phonological disorder and the phonemes /s/ and /z/ are acquired at different syllabic positions.

Methods: It was evaluated subjects from the database VALDE (CEP 995 344), composed of speech and language evaluations of 130 children diagnosed with phonological disorder with ages between 4 and 11 years. Of the entire Bank, the data was selected from those who had reported recurrent otitis in anamnesis and analyzed the phonological systems over phonemes /s/ and /z/, totaling a sample of 37 subjects with ages between 5 and 9 years.

Results: From the data analyzed, 16% of children did not acquire the /s/ in, at least, one of the positions that it may occupy (Onset Initial/medial, Medial Coda/Final), 43% did not acquire the phoneme /z/ in Initial Onset and 40% did not acquire in Medial Onset. It is important to note that 5% of the children studied did not acquire the fricatives /s, z/ in any position.

Conclusion: Based on this study, it can be noticed that children with recurring otitis have a major difficulty in the acquisition of fricatives, especially in relation to /z/.

A538. The Role of Speech Therapy in Alternative Feeding Route Indication: A Case Report
Caroline Godois Destri, Bianca Regina Dresc, Karen de Oliveira dos Passos, Bárbara Machado Costa, Rayane Abreu do Nascimento, Lisiane de Rosa Barbosa
Universidade Federal de Ciências da Saúde de Porto Alegre

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Methods: It was evaluated subjects from the database VALDE (CEP 995 344), composed of speech and language evaluations of 130 children diagnosed with phonological disorder with ages between 4 and 11 years. Of the entire Bank, the data was selected from those who had reported recurrent otitis in anamnesis and analyzed the phonological systems over phonemes /s/ and /z/, totaling a sample of 37 subjects with ages between 5 and 9 years.

Results: From the data analyzed, 16% of children did not acquire the /s/ in, at least, one of the positions that it may occupy (Onset Initial/medial, Medial Coda/Final), 43% did not acquire the phoneme /z/ in Initial Onset and 40% did not acquire in Medial Onset. It is important to note that 5% of the children studied did not acquire the fricatives /s, z/ in any position.

Conclusion: Based on this study, it can be noticed that children with recurring otitis have a major difficulty in the acquisition of fricatives, especially in relation to /z/.

A541. The Relationship Between Recurring Otitis and Acquisition of Coronal Fricatives
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Introduction: Studies show that children who have recurring otitis may have a reduced perception of speech sounds, especially in relation to fricatives such as /s/ and /z/. This fact may explain the difficulty in acquiring these phonemes in children with phonological disorder.

Objective: To investigate the history of ear infections in children with phonological disorder and the phonemes /s/ and /z/ are acquired at different syllabic positions.

Methods: It was evaluated subjects from the database VALDE (CEP 995 344), composed of speech and language evaluations of 130 children diagnosed with phonological disorder with ages between 4 and 11 years. Of the entire Bank, the data was selected from those who had reported recurrent otitis in anamnesis and analyzed the phonological systems over phonemes /s/ and /z/, totaling a sample of 37 subjects with ages between 5 and 9 years.

Results: From the data analyzed, 16% of children did not acquire the /s/ in, at least, one of the positions that it may occupy (Onset Initial/medial, Medial Coda/Final), 43% did not acquire the phoneme /z/ in Initial Onset and 40% did not acquire in Medial Onset. It is important to note that 5% of the children studied did not acquire the fricatives /s, z/ in any position.

Conclusion: Based on this study, it can be noticed that children with recurring otitis have a major difficulty in the acquisition of fricatives, especially in relation to /z/.
**Introduction:** Cerebral Palsy is a chronic encephalopathy, non-progressive, arising from injury at the central nervous system of a child. Its motor impairment can affect swallowing, requiring rehabilitation and even alternative feeding route. Speech therapy, by evaluating the deglutition, collaborates with the multidisciplinary team in choosing a secure method to feed these children.

**Objectives:** Report the role of speech therapy in the indication of alternative feeding route. Approved by ethics and research committee ISCMQA no 467 673 of 11/05/13.

**Resumed Report:** Female patient, two years, history of microcephaly by anoxia and delayed psychomotor development. Admitted respiratory difficulty and had significant weight loss. In evaluation of swallowing, presented insufficient lip seal, significant anterior oral escape, weak cough, as amened laryngeal elevation, delayed pharyngeal swallowing response, and persistent biting reflex. She was diagnosed with moderate to severe neurogenic oropharyngeal dysphagia. Due to little time in therapy, the patient remained unable to oral feeding. Alternative feeding route was indicated 36º in cooperation with the medical team - due to the risk of bronchoaspiration, along with indirect therapy for dysphagia. Such conduct was held in conjunction with the multidisciplinary team, based on the case and clinical assessment.

**Conclusion:** It is noteworthy the importance of speech therapy actions along the multidisciplinary teams in order to assess, prevent and rehabilitate swallowing disorders, contributing to discussions and preserving feeding security of hospitalized patients.

**Keywords:** Deglutition Disorders; Cerebral Palsy; Speech Language and Hearing Sciences

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**A474. Therapeutic Counseling in Individuals with Hearing Impairment Presenting Tinnitus**

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**Introduction:** Tinnitus is a disorder that affects millions of Brazilians. Since tinnitus is a subjective symptom and presents great impact on the individual's life, all scientific contribution becomes significant and valuable. In the presence of hearing loss, hearing aid fitting can interfere with central auditory representation of tinnitus, reducing its perception, but this therapeutic approach must be linked to counseling, which should contain basic information about tinnitus.

**Objective:** To check effectiveness of counseling associated with the hearing aid fitting in reducing the degree of tinnitus annoyance.

**Methods:** 10 adult individuals of both genders, with hearing loss and tinnitus, participated in the study. The methodology consisted of two groups, a control group and an experimental group, belonging to the Hearing Health Division-DSA/HRAC/USP-Bauru. The individuals were submitted to the subjective self-assessment questionnaire, Tinnitus Handicap Inventory and the Visual-Analogue Scale, before and after hearing aid fitting. The experimental group participated in three counseling sessions, which took place in the pre-adaptation level, in the first and third month after fitting.

**Results:** After three months, in the intragroup analysis, most patients showed significant improvement in the tinnitus annoyance. There was no statistically significant difference between the groups.

**Conclusion:** The use the hearing aid generated improvement in reducing the degree of tinnitus annoyance, getting similar responses in both groups. It was not possible to check significant differences in the effectiveness of the counseling sessions carried out with the experimental group.

**Keywords:** Hearing, Tinnitus, Hearing Aids, Counseling

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**A35. Tinnitus Annoyance in Individuals with and without Hearing Loss**

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**Introduction:** The tinnitus annoyance can be assessed by different scales, and the Tinnitus Handicap Inventory (THI) is one of the most frequently used.

**Objective:** To compare the annoyance caused by tinnitus in individuals with and without hearing loss.

**Methodology:** A retrospective study was performed on records of 795 individuals treated in an outpatient care facility for chronic tinnitus. Initially were selected the records of patients with tinnitus and normal hearing (lower than 25dBHL in frequencies from 250 Hz to 8000 Hz) and presenting history and THI. Subsequently, individual patient records were selected with tinnitus and hearing loss and matched in age and sex with the individuals with normal hearing.

**Results:** From the 25 (3.14%) that had normal hearing, 17 (68%) women and 8 (32%) men, the same proportion of the hearing loss group. The first one aged 29 and 69 years (mean 52.52 ± 9.80 years) and the second, aged between 29 and 69 years (mean 52.56 ± 9.74 years). To the normal hearing group, the THI score ranged between 6 and 84 points, averaging 27.20 ± 20.76 points and to the hearing loss group, between 8 and 96 points, averaging 36.24 ± 23.30 points. There was no significant difference in the score of THI between individuals with and without hearing loss (p = 0.55).

**Conclusion:** It was found that there was no difference in the tinnitus annoyance in individuals with and without hearing loss.

**Keywords:** tinnitus, hearing loss, questionnaires, hearing

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**A248. Tinnitus in Chemotherapy and Radiotherapy as a Cancer Treatment**

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Universidade Federal de Sergipe

**Introduction:** Tinnitus is highly complex and it refers to a conscious perception of sound heard in the absence of physical sound sources. The literature reports that 8 to 15% of adults experience tinnitus. Its difficult to define the cause, but people that have cancer tumors often suffer from it. Its known that cancer treatment have ototoxic effects and it is the cause of hearing loss and possibly tinnitus.

**Objectives:** Assess the tinnitus in cancer treatment and correlates with hearing loss.

**Method:** Cohort clinical study carried out at Oncology in a Public Hospital of Sergipe. Anamnese and Audiological evaluation (Pure Tone Audiometry) were performed in 119 patients undergoing chemotherapy and radiotherapy. It was approved by the Ethics in Research Committee, under protocol # # 3366501.7.0000.5546.

**Results:** The main age was 44.2 years; female (81.5%) and breast cancer exhibited the highest incidence. 62.2% reported tinnitus and 29% had sensorineural hearing loss. Subjects with hearing loss told that tinnitus was evident but
there was no significant difference between them \((p = 0.46)\). Patients that were in the middle of the treatment had tinnitus (57.3%) and there was a positive statist correlation \((p = 0.00)\). 33% reported a change in hearing thresholds after cancer treatment and 85.8% of them had tinnitus as a complain with a significant difference in Chi square test \((p = 0.00)\).

**Conclusion:** Tinnitus affects patients with cancer timers, but there is no correlation between hearing loss.

**Keywords:** ototoxic effects, hearing loss, cancer


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**Master's And Doctoral Program In Communication Disorders**

**Universidade Tuiuti do Paraná**

**Introduction:** Tracheostomy in a surgical procedure commonly used in intensive care units (ICU) for the management of respiratory complications, as to overcome an upper airway mechanical obstacle, reducing respiratory resistance. In the tracheostomy weaning process, a multidisciplinary approach shows lower incidence of complications, and better results in the rehabilitation of the patient.

**Objective:** to examine the methodologies that assess the actions of the multidisciplinary team in tracheostomy decannulation process, emphasizing the Speech Language Pathologist participation in the period between 1980 and 2014.

**Data Synthesis:** It was performed a systematic review of medical and speech therapy literature on speech therapy approach in tracheostomy decannulation process, covering the period from 1980 to 2014, not limited by language or nationality. Among 205 articles found in the exploitation of the databases, it was included in this review 9 articles that mention speech therapy in the tracheostomy decannulation process. According to nationality, 4 articles were from the U.S. A., 2 from UK, 1 from Brazil, 1 from Germany and 1 from Canada. According to the type of study, 4 were prospective, 2 were descriptive, 2 were retrospective and 1 was a review.

**Conclusion:** We found no studies that describe speech therapy parameters to be followed in the process of management and total removal of the tracheostomy. It is therefore necessary that these parameters are researched by speech language pathologists.

### A255. Two Dichotic Tests Comparison in Elderly

**Fernananda Freitas Vellozo, Quemile Prib Martins, Alessandra Luana Schwantes, Taissane Rodrigues Sanguebuche, Michele Vargas Garcia, Bruna Pias Peixe**

**Universidade Federal de Santa Maria**

**Introduction:** The dichotic tests consist of different stimuli presentation in both ears simultaneously or by superimposition, in syllables, sentences, stories or onomatopoeias patterns. The purpose is to evaluate the speech sounds of figure-background ability.

**Objective:** Compare two dichotic tests in elderly.

**Methodology:** The current study presents a transversal and prospective character. The sample was composed by 30 subjects, 19 of them presenting normal hearing and 11 presenting sensorineural until moderate, symmetric and bilateral hearing loss. The age range was between 60 and 82, mean of 66 years-old. The sample was subjected to visual inspection of the external acoustic meatus, tonal and vocal audiometry, Acoustic Immittance and binaural integration test stage from the Dichotic Digits Test (DDT) and the Dichotic Sentence Identification Test (DSI).

**Results:** The following results are preliminary of a study in progress. The totality of the sample could realize the DDT and 620% could not realize the DSI Test because they presented visual difficulties and had lower scholar level. In the DDT, the mean percentage of correct answers was 94% for both ears (BE) in elderly presenting normal hearing (63%) and 88% in BE for elderly presenting hearing loss (37%). In the DSI Test, the mean for the right ear (RE) was founded 70% and for left ear (LE) 83% in elderly presenting normal hearing (67%) and 75% for the RE and 74% for the LE in elderly presenting hearing loss.

**Conclusion:** The DDT yielded higher applicability compared to the DSI Test, however, presenting low alteration percentage concerning the elderly complaints. Therewith, the DSI proved to be more sensitive to alterations, but less applicable.

### A176. Two Temporal Resolution Tests Comparison

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**Introduction:** The temporal resolution is a hearing ability that consists in the minimum time required to segregate or solve acoustic events, being essential to the speech comprehension. It is the first ability affected by the senescence. The Random Gap Detection Test (RGDT) and Gap in Noise Test (GIN), which present different acoustic parameters, can evaluate the temporal resolution test.

**Objective:** Comparing two temporal resolution tests in elderly.

**Methodology:** This study has a descriptive, quantitative and transversal character. A number of 35 persons were evaluated, being 8 excluded because they presented asymmetry between the ears or they could not realize the tests. Therefore, the sample was composed by 27 elderly presenting complaint about auditory processing, divided in three groups of age between 60 and 82 years-old, and mean of 67 years-old: group 1 (G1) normal hearing, group 2 (G2) mild symmetrical sensorineural hearing loss (SNHL) and group 3 (G3) moderate symmetrical SNHL. The individuals were subjected to Pure-Tone Threshold Audiometry, Logaoudiometry, Acoustic Immittance Testing, RGDT and Testing Track 1 of GIN test.

**Results:** The following results are preliminary of a study in progress. In the GIN test, the medium threshold of G1 is 7.4ms, of G2 is 9ms and of G3 is 9ms, whereas 2 subjects could not realize the test. In the RGDT test, the medium threshold of G1 is 26.75ms, of G2 is 52.62ms and of G3 is 7.4ms, one subject could not realize the test.

**Conclusion:** In this study, the RGDT demonstrated higher sensibility to temporal resolution alteration compared to the GIN Test, concerning the elderly’s complaints.

### A540. Using of the Modified Blue Dye Test In Tracheostomized Children

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**Universidade Federal de Ciências da Saúde de Porto Alegre**

**Introduction:** Tracheostomy is an endotracheal tube inserted surgically for airway clearance and indicated for patients with prolonged endotracheal intubation. It modifies integration of respiratory and swallowing functions and may result in dysphagia and aspiration. Speech therapy acts by evaluating swallowing, and may use the modified Blue Dye Test, which consists of swallowing saliva and/or food blue
dyed and verifying if bluish secretion will come out the tracheostomy afterwards.

**Objective:** Report use of the modified Blue Dye Test in tracheostomised children at Children’s Hospital. Approved by ethics and research committee UFCSPA no 467-673 of 05.11.2013.

**Methodology:** The test was applied in 9 children up to 24 months old. In 6 subjects feeding through alternative feeding route, was performed to verify initial aspiration of saliva, associated gloved finger suction in infants, being performed with food in case of negative findings. Children who received oral feeding were tested with food. The procedure was performed upon request and recognition of medical staff.

**Results:** Of the nine children evaluated, 5 (55%) tested positive for aspiration and 4 (45%) children showed no aspiration signs.

**Conclusion:** The Blue Dye Test has been an alternative in the clinical evaluation of swallowing, although there is shortage of description of its use in children in the literature. This way, we recommend further research with more representative samples to reinforce the importance of this test in the clinical evaluation of swallowing.

**Keywords:** Deglutition Disorders; Tracheostomy; Speech Language and Hearing Sciences

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**A92. Verbal Praxis in Adults: Speech in Excellence**

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Universidade de São Paulo - Bauru

**Introduction:** Speech Motor Control includes the planning, preparation and execution of movement plans to result in muscle contractions and displacement of structures. In this perspective, the non-verbal-stimulus of the Praxis Speech is a theory that aims to improve the orofacial system for use in Speech.

**Objective:** Stimulate Non-Verbal-Praxis of lips and tongue in adults to promote excellence in articulation pattern.

**Resumed Report:** participated in this project 8 adults, mean age of 43.5 years. Speech therapy evaluation was performed with a test scores with orofacial praxis and evaluation and Speech Fluency, with specific text recording to control the Speech patterns. 8 subjects were instructed to perform exercises in sequence of lips and tongue for 60 consecutive days, for 5 minutes and 3 reps a day, and performed weekly speech therapy sessions. At the end of 60 days, participants were reassessed. 5 subjects showed improvement in the test of oral praxis, with score increased by more than 10 points, which featured greater coordination of the muscles involved. The default Speech was marked by increasing speed in reading, improved speech coordination, articulation more precise and clients perceptions.

**Conclusion:** The Stimulation may have contributed to the pattern improves articulation of speech of these adults subjects. This work can opens up the possibility of a more comprehensive work with adults speakers, where the coordination of orofacial structures can enable the best possible muscular performance. This study suggests that the exercise of praxis skills can minimize nonverbal speech disorders.

**Keywords:** adult, motor control, speech

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**A187. Verifying the Voice Therapy Efficacy in Patients with Vestibular Phonation**

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**Introduction:** The laryngeal muscle tension and the standard hyperkinetic phonation pattern may cause an improper adjustment, which favors the vestibular folds’ use during phonation. The Speech therapy helps the patient to adjust the vocal pattern.

**Objective:** To determine the phonation adjustment techniques’ efficacy in the vestibular phonation.

**Methods:** A voice therapy sector's patient database of the Hospital Complex Santa Casa of Porto Alegre was used for the research. The sample included 3 patients of male gender and 1 female, with average age of 60 years, who attended 12 therapy sessions on average. In the evaluations the GRBASI (Hirano, 1981; Dejonckere, Remacle and Fresnel-Elbaz, 1996) protocol was used and the findings of breathing were observed through anteroposterior chest movement, vertical and transverse, also the maximum phonation times’ measurement. Speech therapy had focus on breathing, body and phonation competence methods, seeking a primary muscle adjustment and sufficiently balanced voice.

**Results:** In GRBASI protocol, it was found that the overall voice’s alteration level changed in two patients, from the intense degree to the lightest, in the others there was no change. In chest motion’s evaluation, all patients altered the pattern from high to medium. The pre intervention phonation’s maximum time averaged 6.47 seconds and after speech therapy was 8.51 seconds.

**Conclusion:** These findings demonstrate the used methods’ effectiveness in speech therapy in patients with vestibular phonation, decreasing the effort during phonation and promoting laryngeal muscle adjustments, favoring the adequate and efficient glottal closure.

**Keywords:** voice disorders, dysphonia hyperkinetic, speech therapy

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**A497. Vestibular Evoked Myogenic Potential in Dancers: Study of the Vestibule-Spinal Via**

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**Introduction:** As the vestibulocerebral reflex is important for the postural stabilization, the knowledge of dance effects on magnitude can contribute not only on basic neuroscience field, but it can also strongly affect practices in neuro-rehabilitation. Objectives: To verify the influence of practiced dance movements on vestibular system and, specifically, to compare magnitudes of dancers and not dancers vestibulocervical via responses.

**Methods:** The sample was composed of 61 individuals, aged between 18 and 35 years, with 31 dancers and 30 control. Only subjects with normal hearing sensitivity and no history of hearing and/or vestibular disorders were included. A cervical vestibular evoked myogenic potential record was performed on sternocleidomastoid ipsilateral to stimulation. 100 tone-bursts stimulus were evoked in 500Hz, 5Hz rate, 95 dB NAn intensity, bandpass filter from 5 to 2.200 Hz. Data were processed by SPSS 17.0 software using TStudent test or Mann-Whitney test. Values were significant when p â‰¤ 0.05 and alpha value was 0.1.

**Results:** Between groups, there was no significant difference when both right and left years were compared, considering p â‰¤ 0.05. Cervical vestibular evoked myogenic presented earlier waves and bigger amplitudes when it was recorded on dancers group compared to control group. There was significant difference for all parameters between both groups, except p13 latency and p13-n23 interlatency, p < 0.005.
**Conclusion:** Higher amplitudes and lower latencies on dancers vestibulocervical reflex were found when compared to control group parameters, what reflects that dance provides reflex with higher magnitude.

**Keywords:** Sacule and Utricle, Postural Balance, Vestibular evoked myogenic potential

A591. Vestibular Rehabilitation and Quality of Life In Patient TEC Victim

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**Introduction:** Dizziness is a feeling of change in body balance and can be rotating or non-rotating character. The illusory sense of movement as revolve around yourself or the balance and can be rotating or non-rotating character and are characterized as dizziness, usually noticeable in chronic condition.

**Objective:** To do VR for reestablishment of body balance and improves the quality of life in patients victims of traumatic brain injury (TBI). Methodology: it was done five meetings that consisted of application of IHL (Dizziness Handicap Inventory) and vestibular evaluation before and after rehabilitation, activities for stimulation of dynamic and static balance and implementation of level 1 and 2 of Cowthorne protocol and cookseyor stimulation reflection Ocular Vestibule.

**Results:** In the pre RV evaluation the patient presented lateropulsion right and anteropulsão the dynamic and static balance tests, the DHI the patient presented alterations in all occupational emotional and physical aspects, since the post RV assessment the balance changes were not so noticeable since there was an improvement in the DHI mainly in the physical and emotional aspects.

**Conclusion:** The vestibular rehabilitation was effective, significantly improving the patient’s quality of life through the reestablishment of body balance.

A528. Videofluoroscopy Findings of Patients with Severe Dysphagia

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**Introduction:** A videofluoroscopy is an instrumental that allows greater visibility of the structures during swallowing.

**Objectives:** To report the videofluoroscopy findings of three patients with severe dysphagia.

**Methods:** Retrospective study of medical records approved by the Ethics in Research Committee n. 41354. Initially, a sample of 14 patients with severe dysphagia who were referred between January to October 2014 were analyzed. These patients were referred by the Internal Medicine Team of a hospital to verify the reintroduction of oral feeding. Of these, five did the videofluoroscopy, but only three had the report details in the database. Two of them were male and one female, age between 68 and 79 years, with ischemic stroke diagnosis followed by hemorrhagic transformation, urinary tract infection and polyneuropathy in critical patients.

**Results:** In the oral phase, one patient presented inability in the food uptake due to limitation of mouth opening, with oral extra escape. Two showed premature spillage to oropharynx, and one of them presented inability in the preparation, organization and food ejection. During pharyngeal phase, two had residues in valleculae and one did not realized the anterior movement and hyolaryngeal stabilization. Still in pharyngeal phase, two patients had tracheal aspiration, and one had laryngotracheal penetration. The esophageal phase was not evaluated in these three patients.

**Conclusion:** Swallowing disorders with important impairments to maintain oral feeding were observed in this sample. The videofluoroscopy complements the speech pathology clinical evaluation and it should be solicited when necessary.

**Keywords:** Adult, Deglutition Disorders, Techniques and Procedures

A625. Vocal Characteristics in Subjects with Parkinson’s Disease

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**Introduction:** Parkinson’s disease is a neurologic pathology characterized by motors symptoms like tremor, rigidity and bradykinesia. Difficulties on respiratory, phonatory and articulatory subsystems may impair the speech negatively. Hypophonia is perceived as breathy, tremulous voice and reduced in loudness.

**Objective:** To describe the acoustics characteristics of phonatory production of Brazilian Parkinsonian’s speakers.

**Methods:** 22 individuals diagnosed with Parkinson’s disease, 16 men and 6 women, mean age 68 years old (standard deviation = 8.4), treated with Levodopa participated in this study. The acoustics analysis was performed and the following parameters were considered: fundamental frequency, intensity, jitter, shimmer, harmonics to noise ratio and tremor. Only fundamental frequency was analyzed isolated by gender group.

**Results:** Males mean frequency was 133.8 Hz (standard deviation = 2.4, n = 16) and females were 168.1Hz (standard deviation = 19.3, n = 6), intensity (mean = 63.5, standard deviation = 1.60) and jitter (mean = 0.6, standard deviation = 0.2). These values are compatible with the literature. However, standard deviation of fundamental frequency on the female group was increased. The values of shimmer (mean = 5 %, standard deviation = 1.5), harmonics to noise ratio (mean = 19.4, standard deviation = 0.7), frequency of tremor (mean = 5.2, standard deviation = 2.7) and amplitude of tremor (mean = 24.7, standard deviation = 6.6) showed high values.

**Conclusion:** Although there are evidences in the literature of reduced loudness on parkinsonian, the findings of this study do not corroborate this assumption. The values of standard deviation, shimmer and noise found in women’s participants, indicates variability in cycle-to-cycle and the values of tremor suggest difficulties to keep stable the phonatory system, in both short-term and long-term.

**Keywords:** Parkinson’s disease, dysphonia, acoustics, voice disorders

A576. Vocal Complaints and Voice Characteristics in Individuals with Parkinson Disease: a Preliminary Study

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**Introduction:** The voice alterations most commonly found in Parkinson’s disease are decreased prosody, low vocal intensity, hoarseness, breathiness and vocal tremor.
Objectives: To verify the voice complaints reported and to analyze the vocal characteristics found in this population.

Methods: Cross-clinical study of 19 adults diagnosed with Parkinson Disease, 10 men and 09 women, aged between 57 and 85 years old (mean 73.1). A questionnaire was applied to raise voice complaints for each participant and was held recording sustained vowel /a/ in acoustically isolated room. The recordings were edited, eliminating the start and the end of emission. The Multi-Dimensional Voice Program and PRAAT softwares analyzed acoustic parameters.

Results: The most frequently reported vocal complaints were low intensity (50% by women and 37.5% by men) and hoarseness (37.5% by women and 50% by men). The acoustic parameters analyzed for men about mean fundamental frequency, F0 frequency jitter, absolute jitter, jitter percent, fundamental frequency variation, shimer in dB, shimer percent, peak-to-peak amplitude variation, noise-to-harmonic ratio and soft phonation index were subsequently: 126,853Hz; 5,445Hz; 109,003us; 1.038%; 2.215%; 0.329dB; 3.731%; 17.308%; 0.125; 22.760 and 76,568dB; and for women were: 195,755Hz; 4,373Hz; 186,812us; 4.048%; 13.030%; 22,430dB; 7,783%; 27,829%; 0.272; 15.303 and 76,091dB.

Conclusion: The individual with Parkinson Disease present vocal complaints and the acoustic analysis measures showed in vocal quality to be able to justify their complaints.

A456. Vocal Rehabilitation in a Case of Dysphonia Caused by Vestibular Folds Phonation
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Introduction: The voice is the main instrument of human communication. It is produced by the movement of the vocal folds, caused by the expulsion of air from the lungs during exhalation, and modified in the supraglottic cavities, resulting in the production of sound waves. In some individuals, there may be the participation of vestibular folds in the phonation process, resulting in changes in voice quality, with signs of hoarseness and vocal strain. Given the frequent occurrence of clinical cases of this nature, it is proposed to present a case of vocal disorder by use of vestibular folds.

Objective: Report vocal rehabilitation in a patient diagnosed with functional dysphonia caused by vestibular folds phonation.

Resumed Report: A 64 years-old male, forwarded by the ENT team to start speech therapy after laryngeal microsurgery to remove warty lesions and use of vestibular folds during phonation. The patient is a former smoker, complaining of hoarseness. Applied protocols, evaluations and perceptual and computerized voice analyzes aiming to characterize the patient’s clinical status. Presented moderate roughness, breathiness and tension and slight vocal instability. The patient received information regarding vocal health, as well as stretches, massages and vocal techniques, like Finnish tubes and finger kazoo, aiming at the detachment of vestibular folds, balance resonance and decrease laryngeal tension.

Conclusion: The patient demonstrated adherence to treatment, showing improvement in all vocal symptoms. After new laryngoscopy, there wasn’t any use of vestibular folds during phonation, confirming the effectiveness of speech therapy.

Keywords: Speech, Language and Hearing Sciences; Voice; Voice disorders

A484. Voice Disorders Related to Teaching: A Case-Control Study
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Introduction: Teachers constitute professional category with high occurrence of voice disorders due to this occupation’s intense vocal demand and to unfavorable work environments. Aim: To identify job’s factors associated to voice disorders in teachers of the public school of the city of São Paulo.

Methods: This is pair matched case-control study. The case group was composed of teachers with vocal quality deviations and vocal fold lesion. The control group was selected at the same schools in which the case group individuals worked. Both groups answered the questionnaires: Conditions of Vocal Production® Teacher(CVP-T), Job Stress Scale(JSS) and Work Ability Index(WAI). The analysis was done using chi-squared association test and multiple regression models.

Results: The analyses of case and control groups show that the samples are comparable, with no significant difference in demographic and control variables. In analyzing the association of job stress, 78.8% of the control group are concentrated in lower levels of demand, while 69.3% of the case group are located at higher levels. Regarding work control, the situation is reversed. 63.1% of the subjects in the control group manifested higher levels of control, while 73.1% of the case group are in the lower categories. In analyzing the association of the ability to work, there is association between low work ability and voice disorder.

Conclusions: Low and moderate ability to work show high correlation with the presence of voice disorder. The presence of voice disorder may jeopardize their careers because these professionals depend essentially on their voices to teach.

A277. Where are the Brazilian Bibliographical Productions on the Area of Audiology?
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Introduction: The Audiology is one of the Brazilian Phonaudiology specialty with greater number of scientific production. Evaluating the scientific production allows outline methodological trends, themes and observe the developments of knowledge in the area.

Objective: raise the phonaudiological productions in Audiology that used quantitative methodology and review of the literature on three major search platforms for periodicals.

Method: descriptive documentary study, which analyzes the publications of the audiology area. We conducted a bibliographic survey in BIREME databases, periodic CAPES and SCIELO. The variables used in this study were type of production (original articles), language (Portuguese), country of affiliation (Brazil), thematic (audiology welcomes) and period (from 2009 to 2013).

Results: we found 256 quantitative articles 65 articles on literature review. We found that 62 quantitative articles appear in platform BIREME, 163 on SCIELO and 21 in CAPES. As for the literature review 5 appear at BIREME, 34 on SCIELO and 30 in CAPES. As for the intersection of information between platforms, 9 quantitative articles appear on three surveyed platforms, 26 in two of the sites and 167 in a single platform. No articles of literature review appears in three research platforms, 25 appear in two platforms and 40 appears in only one research platform. The path to finding the items indexed platforms is easy, but research by keywords on indexed platforms generate unsatisfactory results.

Conclusion: we found 202 articles quantitative and 65 articles on literature review about audiology. Not all publications appear on all platforms surveyed.
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## Preliminary Schedule of Courses 2nd Semester 2015

### Set Up and Make Your Entry

#### August

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<th>Date</th>
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</thead>
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<td>13th Stomatology Journey</td>
<td>28/29 SP</td>
<td></td>
</tr>
<tr>
<td>IX Practical Course of Eletronistagmography</td>
<td>31 August and 01/02 September SP</td>
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<thead>
<tr>
<th>Course</th>
<th>Date</th>
<th>Location</th>
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<tbody>
<tr>
<td>XII Course of Swallowing Disorders and Laryngopharyngeal Reflux - Theory and Practice (Hands On)</td>
<td>03/04 SP</td>
<td></td>
</tr>
<tr>
<td>VI Polysomnographic Report Interpretation Course</td>
<td>09 SP</td>
<td></td>
</tr>
<tr>
<td>XVII Course on Snoring and Obstructive Sleep Apnea – Theory, Live Clinic and Live Surgery</td>
<td>10/11 SP</td>
<td></td>
</tr>
<tr>
<td>Otomaster (Ent Recyclin Course)</td>
<td>14/21 ONLINE</td>
<td></td>
</tr>
<tr>
<td>II Multicenter Cochlear Implant Course – Audiologist Module</td>
<td>24/25/26 PR</td>
<td></td>
</tr>
<tr>
<td>International Workshop on Hearing Aid Verification</td>
<td>25/26 SP</td>
<td></td>
</tr>
<tr>
<td>Endoscopy Course for Otolaryngologists - Theory and Practice - Part I and II</td>
<td>30 September / 01 and 02 October SP</td>
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</table>

#### October

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<thead>
<tr>
<th>Course</th>
<th>Date</th>
<th>Location</th>
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<tr>
<td>XII Course for Speech Pathology in Cochlear Implant</td>
<td>02/03 SP</td>
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<tr>
<td>Otomaster (Ent Recyclin Course)</td>
<td>05/19/26 ONLINE</td>
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</tr>
<tr>
<td>IV Nose - Live Endoscopic Endonasal Surgery Course</td>
<td>07/08 SP</td>
<td></td>
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<tr>
<td>26th Big Ear</td>
<td>26/27/28 SP</td>
<td></td>
</tr>
<tr>
<td>Laryngeal Microsurgery Course with Dissection – Theory and Practice</td>
<td>21/22/23 SP</td>
<td></td>
</tr>
<tr>
<td>2nd Advanced Dissection Course in Otolaryngology - Rinology</td>
<td>27/28 SP</td>
<td></td>
</tr>
<tr>
<td>2nd Advanced Dissection Course in Otolaryngology - Otology</td>
<td>28/29/30 SP</td>
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<tr>
<th>Course</th>
<th>Date</th>
<th>Location</th>
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<tbody>
<tr>
<td>VI Broadcasted Course in Radiology in Otorhinolaryngology</td>
<td>03/04/05/06 ONLINE</td>
<td></td>
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<tr>
<td>Otomaster (Ent Recyclin Course)</td>
<td>09/16/23/30 ONLINE</td>
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<tr>
<td>2nd Advanced Dissection Course in Otolaryngology - Plastic</td>
<td>10/11/12 SP</td>
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</tr>
<tr>
<td>2nd Advanced Dissection Course in Otolaryngology - Laryngology</td>
<td>12/13 SP</td>
<td></td>
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<tr>
<td>V Meeting of Cochlear Implant Team of HCFMUSP with Parents of Children with Hearing Loss</td>
<td>14 SP</td>
<td></td>
</tr>
<tr>
<td>109th Temporal Bone Dissection Course</td>
<td>30 November / 01 and 02 December SP</td>
<td></td>
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</table>

#### December

<table>
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<tr>
<th>Course</th>
<th>Date</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>95th Endoscopic Sinus Surgery Course - Hands On - Bahia</td>
<td>03/04/05 BA</td>
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<tr>
<td>Otomaster (Ent Recyclin Course)</td>
<td>07/14 ONLINE</td>
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</tr>
<tr>
<td>1st Laryngeal Microanatomy and Endoscopy Course</td>
<td>11/12 POA</td>
<td></td>
</tr>
<tr>
<td>Course BlepharoPlasty and Forehead Rejuvenation Surgery - Hands On</td>
<td>11/12 SP</td>
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</table>

* Schedule subject to change

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Richard Voegels

MODULE II
OTOLOGIC AND NEUROTOLOGIC SURGERY
Ricardo F. Bento and Rubens Brito

MODULE III
FACIAL PLASTIC SURGERY
Carlos Alberto Caropreso

MODULE IV
SNORING AND SLEEP APNEA SURGERY
Luiz Ubirajara Sennes

MODULE I AND II
27. OCT. 2015 TO 30. OCT. 2015

MODULE III AND IV
10. NOV. 2015 TO 13. NOV. 2015

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Oral Presentations

S1  Otorhinolaryngology
August 13, 2015, 8am to 12:15pm
Room: Havana and Anfiteatro da Oftalmologia - ICHC

S7  Speech, Language and Hearing Sciences
August 13, 2015, 1:45pm to 6:00pm
August 14, 2015, 8:00am to 3:00pm
Room: Havana

E-Posters

S20  Otorhinolaryngology

S58  Speech, Language and Hearing Sciences
Date: August 13 to August 15, 2015 Room: Exhibition Area
Time: 8am to 6pm

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