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A5852. Epidemiological Profile of Hearing Loss in Brazil between 2010 and 2015
Amanda Sampaio Almeida, Marcus Miranda Lessa, Álvaro Muiños de Andrade, Lara Freitas Matias, Cristina Salles
Universidade Federal da Bahia, Salvador, BA, Brazil

Introduction: Hearing loss is the more common sensorial deficit. In Brazil, there is more than 9.8 million people affected by hearing disabilities. Yet, there is a lack of studies that present the national profile of the patients with hearing loss.
Objective: To describe the epidemiological profile of patients with hearing loss in Brazil.
Methods: Epidemiological study using secondary data from Hospital Information System of Brazilians Unified Health System (SIH-SUS), available from Information Technology Department of the Public Health Care System (DATASUS). Hearing loss is classified by the code H90-H91 according the chapter VIII of 10th International Classification of Disease (CID-10).
Results: During 2010 to 2015, 4883 cases of hearing loss were notified in Brazil. Southeast was the region that accounted the highest number (3,274), while North showed the lowest number (156). Female gender predominated in 51.05% cases. Children aged 1 to 4 years old were the most notified age group, with 38.02%. The pediatric population represents 63.19%, while adults and elderly represent 30.20% and 6.47% respectively. Regarding race, white color was prevalent in 56.13% of the cases.
Conclusion: The prevalent epidemiological profile found in Brazil was female gender, white color, mainly the children aged 1-4 years old. The pediatric population was the most affected by hearing loss. These data point to the importance of newborn and school-aged children hearing screening and the necessity of encouraging the expansion of DATASUS system concerning hearing loss information.
Keywords: hearing loss, children; public health; epidemiological study; Brazil.

A6296. Otobone®: Temporal Bone Biomodel made 3D Printer for Simulation of Simple and Complex Surgical Procedures
Ricardo Ferreira Bento, Fernando de Andrade Balsalobre, Edson Leite Freitas, Bruno Aragão Rocha
Hospital das Clínicas - Faculdade de Medicina da Universidade de São Paulo, São Paulo, SP, Brazil

Introduction: The anatomy of the temporal bone is complex due to the large number of structures and functions grouped in this space small. With the difficulty of obtaining anatomical parts and the increasing number of ENT doctors, there was a need to create the most real alternatives possible for otology surgeries training.
Objective: To develop a technique to produce models of temporal bones allowing them to maintain the external and internal anatomical features reliable natural bone.

Materials and Methods: For this study, we used a computed tomography (CT) scan of the temporal bones of a male patient, 30 years old, with no structural morphological changes or any other pathology detected in the examination, which later it was sent to a 3D printer, producing a temporal bone biomodel.
Results: After dissection, the author evaluated the plasticity of the workpiece and its similarity in drilling a natural bone as grade "4" on a scale of 0 to 5 where 5 is the closest to natural bone and 0 farthest from natural bone. All proposed structures were found in the method, with the color proposal.
Conclusion: It is concluded that it is feasible to use biomodels in surgical training of medical specialists. After dissection of biomodel bone was possible to find the anatomical structures, make more surgical approaches used in surgical practice and training implants.

A6336. Patient Characteristics and Difficulties in the Federal Hearing Rehabilitation Program
Flavio Serafini
Universidade de Taubaté, Taubaté, SP, Brazil

Introduction: This is a retrospective study of the characteristics, adaptation difficulties and life improvement related to the use of hearing aids in patients of the Federal Hearing Rehabilitation Program (PASAVP), in the area of the Vale do Paraíba, state of São Paulo, Brazil. Such a survey is important to justify the continuation of such a program and point possible changes to correct problems encountered by researchers.
Objectives: Determine who received hearing aids, what prevented or diminished their use and if there was quality of life improvement. Study format: Cross-sectional. Method: Patients who received hearing aids in the first semester of 2009 were submitted to interviews containing closed and open-ended questions.
Results: Of the 100 patients, sensorineural bilateral deafness was the most common kind. About 50% presented moderate hearing loss. The majority had progressive hearing loss and took 10 to 19 years to visit a health professional in order to treat or rehabilitate their loss. The most common cause of deafness was of unknown etiology followed by presbiacusis. The most common associated symptom was tinnitus. The most common complaint was pain during the use of hearing aids. The most frequent suggestion was the donation of batteries. The average family income was about three minimum wages per month.
Conclusion: Most patients were above 65 years old, had moderate sensorineural loss and took long to adapt hearing aids. They would use the aids even longer if they received batteries.
Keywords: hearing aid, Program, deafness.
A5879. Evaluation of Patients Submitted to CPAP Titration in Sleep Lab
Fabio Tadeu Moura Lorenzetti, Silvia Carolina Almeida Sandes Bracher Beilke
Hospital de Otorrinolaringologia de Sorocaba - Grupo Bas, Sorocaba, SP, Brazil

Introduction: Continuous positive airway pressure (CPAP) is considered the gold standard treatment for patients with obstructive sleep apnea (OSA), especially moderate and severe. However, several studies show low adherence to CPAP rates. In Brazil, the public system and many health insurance companies do not provide CPAP routinely free, worsening adherence rates to this treatment.

Purpose: Evaluate patients who underwent polysomnography for CPAP titration in sleep laboratory to know how many are actually using this equipment.

Methods: Retrospective study evaluating 30 patients with OSA who underwent lab CPAP titration from July 2014 to August 2015.

Results: Of the 30 patients evaluated, only 7 (23.33%) were using CPAP routinely. Among the reasons cited by the other 23 patients (76.67%) for non-compliance: Lack of time to return to the doctor and/or to purchase the equipment (39.13%); Negative first impression of CPAP (21.74%); Economic difficulties (17.39%); Underwent surgical treatment (13.04%); other reasons (8.7%).

Conclusion: Although laboratory CPAP titration is the recommended method to introduce this therapy, the low percentage of CPAP users in this sample revealed that adherence to CPAP remains a major challenge.

A5959. Chronic Obstructive Pulmonary Disease and Obstructive Sleep Apnea: can the overlap syndrome be suspected by clinical symptoms?
Flávio Danilo Mungo Pissulin, Debora Bruno Figueiredo, Silke Anna Theresa Weber, Maíra Almeida Aldá, Flávio Danilo Mungo Pissulin, Francis Lopes Pacagnelli
Universidade Estadual Paulista – Unesp, São Paulo, SP, Brazil

Introduction: Overlap of COPD and OSA seems to be frequent, whereas prevalence, identification by screening methods still require investigation.

Objectives: To determine the frequency of OSA symptoms and diagnosis of OSA in COPD patients.

Methods: This cross-sectional study invited COPD patients, ranked by GOLD. All realized polysomnography, Epworth Sleepiness Scale (ESS), Berlin Questionnaire (BQ), SGRQ, BDI, MMRC, beside biochemical exams as total cholesterol and fractions, interleukin 6 (IL-6), leptin and adiponectin. Patients were divided in 2 groups by OSA diagnosis (Group I COPD + OSA, Group II COPD-OSA) and demographic data, clinical symptoms and biochemical exams were compared.

Results: 86 COPD patients, 38 men, mean age 61.2 years, were included. OSA was diagnosed in 61 (67.4%) patients, 31 men, 15 with severe OSA. Both groups showed no difference for age. BMI, metabolic markers. OSA screening (BQ) was highly positive in both groups (p > 0.05), excessive daytime sleepiness (ESS) was poorly related in both groups (p > 0.05). Beside severe and very severe COPD being more frequent in Group II, minimum oxygen saturation was significantly lower in OSA patients (GI-75.9 ± 9.7 vs GII 84.2 ± 9.8, p = 0.0004).

Conclusion: COPD patients seem to be at higher risk for OSA compared to the general population. Excessive daytime sleepiness was not frequently related, screening questionnaires as Berlin showed poor correlation to the PSG diagnosis of OSA, thus, polysomnography should be considered for the diagnostic tool. The presence of OSA did not influence the patients perception of health impairment or of dyspnea. Metabolic status was not worsened in OSA patients.

A5973. Investigating Children's Sleep Quality: The Use of Standard Questionnaires in Brazil
Debora Bruno Figueiredo, Maria Gabriela Cavalheiro, Luciana Paula Maximino, Camila de Castro Corrêa, Silke Anna Theresa Weber
Faculdade de Medicina de Botucatu-Unesp, Fob-Usp, Botucatu, SP, Brazil

Introduction: Sleep disturbances are frequent in childhood, different questionnaires being applied for their investigations.

Objectives: to analyze which questionnaires for children aged 2 to 15 years old, are validated for Brazilian Portuguese and are applied in Brazil.

Methods: The study was based on a literature review in the databases Lilacs, Scielo and PubMed using the Mesh terms sleep quality and children. Articles not published in full length and those without the full application of the questionnaire were excluded.

Results: The search at Lilacs resulted in 55 articles, at Scielo database we found 23 ones, PubMed had no included article. Thus, seven original articles and one thesis were analyzed. We found in use four different questionnaires. The questionnaire for children’s quality of life OSD 6 (Obstructive Sleep Disorders-6) was found in three articles, however each article applied a different version. The other questionnaires found were the Questionnaire for Sleep Habits Inventory for Preschool children, OSA-18 (Obstructive sleep apnea -18) and the Sleep Questionnaire by Reimão and Lefèvre-QRL.

Conclusion: the most cited questionnaires for sleep quality were OSA-18 and OSD-6. The variability of the questionnaires and the lack of patterns of investigation of sleep disorders in the pediatric population are handicaps for the analysis of the epidemiology of sleep disorders in Brazil, as well as for the analysis of follow-up. The most cited questionnaire in pediatric sleep literature, the Pediatric Sleep Questionnaire-PSQ, was not found to be validated for Brazilian Portuguese.

A6004. Oral Language Performance in Children with Obstructive Sleep Apnea
Camila de Castro Corrêa, Caroline Fernandes Rimoli, Silke Anna Theresa Weber, Luciana Paula Maximino
Faculdade de Medicina de Botucatu-Unesp, Fob-Usp, Botucatu, SP, Brazil

Introduction: In literature, there is related a possible relation between obstructive sleep apnea (OSA) and disorders in language acquisition and performance, but there is no investigation on the different levels of language skills performance.

Objectives: to analyze the performance of oral language performance in OSA children.

Methods: The project was approved by the local Ethics Commission. Children, both genders, aged 5 to 10 years old, mean age 7.7, median age 8 years old, all at follow-up at the Sleep Clinics of Otolaryngology in a University Hospital, were included. All had polysomnographic diagnosis of OSA, considering for diagnosis an Apnea-Hypopnea- Index > 1 e/h, classification for OSA severity was used as follows: 1 < IA < 5 as mild, 5 < IA < 10 as moderate and IA > 10 as severe OSA. A psychologist evaluated analogic reasoning and non-verbal
A6045. Inflammatory Profile and Oxidative Stress Level in Patients with Obstructive Sleep Apnea Syndrome before and after Use of Continuous Positive Airway Pressure: A Randomized Double-Blind Clinical Trial

Alessandra Stefani Jim, Silke Anna Theresa Weber, Debora Bruno Figueiredo
Faculdade de Medicina de Botucatu-Unesp, Fob-Usp, Botucatu, SP, Brazil

Introduction: Obstructive Sleep Apnea Syndrome (OSAS) is associated to production of inflammatory response and to the increase of oxidative stress.

Objective: To evaluate serum levels of pro- and anti-inflammatory cytokines and markers of oxidative stress in OSAS patients treated with CPAP for one week.

Methods: 60 adult patients with polysomnographic diagnosis of OSAS were distributed into two groups: Group I was composed by patients using CPAP at minimum pressure of 4 cmH2O (n = 30) and Group II by patients utilizing CPAP at therapeutic pressure (n = 30). Interleukin-6, interleukin-10, cytokines and tumor necrosis factor-1 were verified by Enzyme-Linked Immunosorbent Assay, Hydrophilic Antioxidant Capacity (HAC) and Malondialdehyde (MDA) by urographic and chromatographic techniques, respectively.

Results: Analysis of all patients showed no correlation of markers and BMI and AHI, whereas a correlation tendency of both groups showed no difference for IL-6, IL-10, TNF-α and MDA. HAC increased in Group I, but in Group II only as a tendency.

Conclusion: Oxidative stress showed a tendency of positive correlation to OSAS severity. Inflammatory profile and oxidative stress level did not change after one week of therapeutic or minimal pressure CPAP.

Keywords: Obstructive sleep apnea, CPAP, inflammatory profile, oxidative stress.

A5980. Transmission Electron Microscopy Study of the Presbylarynx in the Aging Voice Process

Regina Helena Garcia Martins, Tatiana Maria Gonçalves, Cintia Vanette, Norimar Hernandes Dias, Caroline Fernandes Rimoli
Faculdade de Medicina de Botucatu-Unesp, Fob-Usp, Botucatu, SP, Brazil

Introduction: Microscopy studies on presbylarynx have identified epithelial atrophy, as well as vocal muscle atrophy, increased collagen, and decrease in non-fibrous proteins of the extracellular matrix. Ultrastructural studies of presbylarynx can help us understand the physiopathology of presbyphonia.

Objective: To describe details on the ultrastructure of presbylarynx by transmission electron microscopy.

Methods: 16 human larynges were removed and distributed into two groups: control (n=8; 30-50 years; 6F, 2M), and elderly (n=8; 75-92 years; 6F, 2M). After preparation for transmission electron microscopy, the specimens were examined and photographed at increasing magnification, including epithelium and lamina propria.

Results: Control Group: the epithelium was intact, with overlapped cells, and desmosomes between the intercellular junctions. The basement membrane was continuous and uniform, and the lamina propria contained collagen and elastic fibers in a loose arrangement with regular distribution, and some fibroblasts of different shapes. Elderly Group: the epithelial cells were separated by enlarged intercellular junctions. The basement membrane was delicate and continuous. In the lamina propria, there was predominance of elongated fibroblasts and below the basement membrane a dense network of collagen fibers.

Conclusions: In this study with transmission electron microscopy some structural changes peculiar to the older larynx were identified, both in the epithelium and in the lamina propria, some of them with likely participation of fibroblasts, which reinforces the importance of additional ultrastructure as well as molecular studies targeting those cells, since they are the main precursors of the extracellular matrix components.

Keywords: presbylarynx, transmission electron microscopy, presbyphonia, elderly.
significance about the best treatment for laryngeal granulomas secondary to endotracheal intubation.

A6330. Voice and Videolaryngoscopic Findings in Patients Undergoing Thyroidectomy
Renata Mizusaki Iyomasa, Elaine Lara Mendes Tavares, Regina Helena Garcia Martins, José Vicente Tagliarini, Cintia Vanette, Carlos Segundo Paiva Soares
Faculdade de Medicina de Botucatu-Unesp, Fob-Usp, Botucatu, SP, Brazil

Introduction: Thyroidectomy can result in injuries of the laryngeal nerves, superior (NLS) or inferior (NLR). The involvement of NLR is the primary cause of post thyroidectomy dysphonia (5 to 10%). Injuries of the external branch of the NLS are less frequent (0.3 to 13%).

Objectives: To analyze the impact of thyroidectomy in vocal parameters and the videolaryngoscopy findings before and after surgery.

Methods: Prospective study included 152 patients undergoing thyroidectomy (131 women, 21 men). We excluded patients with previous paralysis. All were submitted to laryngoscopy, perceptual voice assessment (G - GRBAS scale), acoustic analysis (MDVP) and MPT (/a/). Moments: pre-operative, post 1 (seven to 15 days), post 2 (one month), post 3 (three months). Patients with paralysis of laryngeal nerves maintained until the third month were reassessed six months after surgery.

Results: Perceptual Analysis: G: In women and men, predominated the scores 1 in all moments without statistical difference between genders. The acoustic analysis did not differ between times or genders. TMF in women was reduced. Videolaryngoscopy: Post surgery 1 identified paralysis / paresis RLN (33) and NLS (2). Post 2 and post 3 - paralyses NLS (24; 18) and NLS (1; 1). After six months - NLR palsies (10 – 7%). Histology: benign (86), papillary carcinoma (63), follicular carcinoma (2), medullar carcinoma (1)

Conclusions: The vocal analysis did not identify significant changes. In the immediate postoperative, we identified 23% of laryngeal nerve injuries; 2/3 of them recovered after six months.

Keywords: Thyroidectomy, dysphonia, paralysis.

A6226. Audiometric Profile of a Specialized Service in Otorhinolaryngology, by Age Group
Adriano Sergio Freire Meira, Bruno Leonardo Barbosa Machado, Alexandre Augusto de Brito Pereira Guimarães, Nelson Jose Barboza Quintino, Thais Eugênio Gomes, Yuri Ferreira Maia, Adilson de Albuquerque Viana Junior
Sos Otorrino, João Pessoa, PB, Brazil

Introduction: The audiometry allows detecting the degree and type of hearing abnormalities found in people, and may guide preventive or curative measures to be taken.

Objectives: To analyze the audiometric profile of patients seen in an otorhinolaryngology practice, at João Pessoa, Paraíba, by age group.

Methods: A retrospective descriptive study with 160 audiometric reports performed at SOS Otorrino, João Pessoa - Paraíba, in 2015. Age groups were divided into: < 18 years; 18 to 40; 41-59 years; > 60 years.

Results: Among 160 Audiometries, 27 (16.9%) had less than 18 years, 60 (37.5%) were 18 to 40 years, 28 (17.5%) were 41 to 59 years and 45 (28.5%) were greater than 60 years. The female gender was the most prevalent, with 54.37%. In children under 18, we found 66.7% of normal hearing tests, 22.2% of conductive hearing loss, mixed loss 7.4% and 3.7% of sensorineural hearing loss. 18 to 40 showed 71.75% of normal audiometry. The conductive and sensorineural loss had both, 11.7% and mixed loss of 7.4%. In the age group 41-59, normal audiometry were 53.6%, sensorineural losses were 25%, the 14.3% conductive and mixed 7.1%. In over 60 years, we found 87.8% of hearing loss, and only 22.2% of normal audiometry. The losses were 51.1% sensorineural, 17.8% mixed and 8.9% were conductive.

Conclusion: The audiometric profile found shows that with increasing age, the numbers of hearing loss also increase and are no longer conductive. It becomes sensorineural or mixed in over 60 years, suggesting a time-dependent hearing loss.

A5882. Cochlear Implant: Breakthrough in the Number of Surgeries Performed in Brazil between 2008 and 2015
Amanda Sampaio Almeida, Marcus Miranda Lessa, Edson Bastos Freitas, Cristina Salles, Jennifer de Santana Dantas
Universidade Federal da Bahia, Salvador, BA, Brazil

Introduction: In Brazil, 5.2% of the population have hearing disabilities. The use of cochlear implants (CI) is essential to provide hearing rehabilitation and subsequent hearing and language development. Nevertheless, currently a limited number of people have access to CI. It is essential to know the situation of the procedure in Brazil to improve accessibility.

Objectives: To quantify the number of procedures of CI between 2008 and 2015.

Methods: Descriptive study, conducted with secondary data using as source SUS Hospital Information System (SIH-SUS), available on the Department of SUS Information site (DATASUS). Data analysis concerning Cochlear Implant procedure was performed considering the period of 2008 to 2015.

Results: There was progressive variation of 104.7% in the number of cochlear implant surgeries performed in Brazil between 2008 and 2015. During this period, there were 5543 registered surgeries. Of this total, 63% were accounted in public sector, while 34% were in private sector. Southeast region had highest numbers totaling 3.642, followed by Northeast with 1.204 and South with 468. North and Midwest regions accounted for only 4.13% of the total, with null data in 2008 or less than 10 in 2009 and 2010.

Conclusion: Cochlear implant procedure had a progressive increase during the period, but still find obstacles that make them inaccessible to part of the population. As the number of hearing impaired increases in Brazil, it is necessary the implementation of new public policies to ensure effective treatment and optimize financial resources.

Keywords: cochlear implant, Brazil, surgery, hearing.

A6098. The Impact of Dizziness on Daily Activities in Patients with Temporomandibular Dysfunction
Rubianne Ligório de Lima, Vinicius Ribas Fonseca, Bianca Simone Zeigelboim
Universidade Tuituí do Paraná, Curitiba, PR, Brazil

Introduction: Temporomandibular disorders (TMD) are characterized by a series of clinical signs and symptoms such as: muscle aches, headache, difficulty and limitation in mandibular movements, tinnitus, earache, vertigo, dizziness, and hearing loss. Some authors correlate these symptoms with temporomandibular joint disorders (TMJ) due to anatomical and structural proximity to the middle and inner ear. Dizziness interference in the daily activities can be assessed by validated questionnaires. Among the existing instruments, we
highlight the Dizziness Handicap Inventory (DHI) and the specific Balance Confidence Scale (ABC).

**Objective:** The objective of the study was to evaluate the impact of dizziness on the performance of daily practices in TMD patients using the ABC and DHI protocols.

**Methods:** We evaluated 20 women with a mean age of 52.3 years from February 2014 to July 2015. The following were carried out: anamnesis, ENT examination, vestibular examination, and application of DHI and ABC protocols.

**Results:** a) Alterations were observed with a prevalence of peripheral vestibular deficit dysfunction independent of the affected side and dizziness for the emotional domain in the DHI; b) the ABC confidence scale showed less confidence for questions 15 and 16; c) there was no significant correlation between the ABC confidence scale and the vestibular examination results or the symptom of dizziness.

**Conclusions:** Based on the obtained results, it is noted that the applied DHI and ABC protocols showed sensitivity in quantifying the level of perception for balance disorders in patients and therefore the results may assist in choosing the most appropriate intervention.

**A6131. Audiological Evaluation of Children with Infection by Congenital Zika Virus**

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**Introduction:** In 2015, Brazil recorded a 15-fold increase in the number of cases of microcephaly in the state of Pernambuco, and on November 28, a correlation has been confirmed between this congenital malformation and infection Zika virus, leading to believe that there is a transplacental transmission. The possibility of this infection results in impairment of the auditory system, as well as other virus causing congenital syndromes such as rubella and CMV led to this study.

**Objectives:** Evaluate possible hearing disorders in children with congenital infection Zika virus.

**Methods:** It is a cross-sectional, observational study. 50 children from 0 to 9 months of age with microcephaly by congenital Zika infection were evaluated at Hospital Agamenon. These patients had diagnosis of microcephaly established by Fenton curve and imaging, as well as serologic evidence of infection by Zika virus. Hearing screening was performed by auditory evoked potential test of short brainstem latencies (ABRc) with click stimulus intensity of 35 dB. Those who failed this examination were re-tested and then evaluated by the otorhinolaryngologist and made ABR test specific frequency for diagnostic confirmation.

**Results:** The frequency of failure in the first evaluation with ABRc was 24% (n = 12 patients), but after retesting, this figure fell to 8% (n = 4 patients). The diagnosis was established through the ABR PE, identifying 8%, with standard conductive hearing loss and 1 bilateral profound sensorineural.

**Conclusion:** Congenital infection Zika virus in patients with microcephaly has a low frequency hearing loss as compared to other viral congenital infections, only on 8% of the population studied.

**A6172. Degree of Tinnitus Improvement with Stapes Surgery - A Systematic Review**

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**Introduction:** Otospongiosis is temporal bone osteodystrophy, characterized by disordered bone resorption and newformation in genetically predisposed individuals. All the otic capsule may be involved, although the area close to the fissura ante fenestram (anterior to the oval window) is the most common affected site. Clinically, otospongiosis is characterized by progressive conductive and/or mixed hearing loss and by tinnitus (40 to 90% - average of 75%). Sensorineural hearing loss, aural fullness and vertigo may eventually occur.

**Objectives:** To Demonstrate the result of a systematic review of the last 20 years of publications that report the degree of tinnitus improvement with stapes surgery (Stapedectomy/ stapedotomy)

**Data Synthesis:** There are about 125 articles published in the last 20 years mentioning the relationship between otosclerosis and tinnitus. Literature has always shown that the hearing improvement after stapes surgery was the main result sought and found. However, recent articles has reinforced the need for surgery for the tinnitus improvement. The ideal time to assess tinnitus through different scales is in the sixth month post-operative. The estimated average hearing improvement is 93% and tinnitus is 77%.

**Conclusion:** We conclude that stapes surgery is quite effective for the treatment of tinnitus, (average is 77%), and hearing improvement (average is 93%). When deciding about the surgical indication in patients with otosclerosis, the tinnitus should be considered as well as the level of hearing.

**Keywords:** Otosclerosis; tinnitus; stapedotomy.

**A6341. Polysomnography applied to patients with tinnitus: a systematic review**

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**Introduction:** Tinnitus has been defined as an auditory phantom perception meaning that tinnitus results from an abnormal activity within the nervous system, in the absence of any internal or external acoustical stimulation. About 10 to 15% of the adult population is affected by tinnitus, and a relevant percentage of tinnitus sufferers experience severe symptoms sufficient to affect quality of life significantly, including sleep disturbances, work impairment, and in some cases, psychiatric distress. Self-rated complaints about tinnitus focus on emotional distress, auditory perceptual difficulties, and sleep disturbances.

**Objectives:** Evaluate the work that show sleep disorders in patients with tinnitus, and sleep disorders assessed by polysomnography.

**Data Synthesis:** They found three studies with polysomnography to assess sleep disorders in patients with tinnitus. The first evaluated 80 patients' military personnel without major psychiatric disturbance and their tinnitus was associated with noise-induced permanent hearing. The second was a prospective, case-control, nonrandomized study, 18 patients affected by chronic tinnitus were compared with a homogeneous control group consisting of 15 healthy subjects. The last
work-evaluated questionnaires were mailed to patients before their initial appointment at the Oregon Health Sciences University Tinnitus Clinic between 1994 and 1997. These questionnaires requested information pertaining to insomnia, tinnitus severity, and loudness. Follow-up questionnaires were mailed to 350 patients 1 to 4 years (mean 5.23 yr) after their initial appointment at the clinic.

**Conclusion:** There are few studies with polysomnography for evaluation of patients with tinnitus sleep. This shows the need for more studies on.

**A5977. The Role of Flexible Fiberoptic Laryngoscopy in Robin Sequence: A Systematic Review**
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**Objective:** Systematically search literature for exible fiberoptic laryngoscopy (FFL) application practice in Robin Sequence (RS) patients, on diverse clinical scenarios.

**Data Sources:** PubMed, LILACS and SCIELO.

**Review Methods:** Systematic review using a sensitive search strategy focused on RS patients and FFL, with no language or study design limits.

**Results:** There were 48 full text articles included in this systematic review. No summary meta-analytic measurement could be calculated due to heterogeneity of interventions and outcomes. FFL approaches were grouped in five topics, as follows: Endoscopic classification: no evidence on superiority of awake over light sedation and correlation of grading scales with symptoms severity. Airway abnormalities: high incidence of concomitant lesions besides glossoptosis. Swallowing evaluation: no validation against uoroscopy (gold standard) yet. Intubation aid for mechanical ventilation: ultra-thin bronchoscopes improve success rates of intubation. Treatment outcome monitoring: no consensus on ideal parameters to be checked.

**Conclusion:** Some approaches have their roles already well established in the management of RS patients, like the evaluation of glossoptosis and associated lesions and as an intubation assistance tool, while others urge to be subject of further research, like the exact method of evaluation, its association with clinical manifestations, its role in swallowing investigation and as a postoperative success predictor.

**A5997. High School Teachers’ Vocal Health Analysis and Comparison with Dysphonia**
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**Introduction:** Teachers have voice as one of their main tools and they hold the highest attendance rates with vocal complaints.

**Objectives:** Evaluate high school teachers’ vocal health from Pouso Alegre, MG - Brazil, through a functional anatomical study.

**Methods:** Descriptive analytical cross-sectional study in forty-one high school teachers from Pouso Alegre - MG, Brazil. It was applied the patients evaluation protocol with dysphonia of UNICAMP otorhinolaryngology occupational ambulatory, which consists of a few questions and take that laryngoscope with video that was performed with exible nasolaryngoscope with 3.2 mm diameter. For the statistical analysis it was constructed a database analyzing using Epi-info program from public domain. The results were presented in the graphs and table form, considering a significance value of p < 0.05.

**Results:** There was a strong significance relationship in the prevalence of vocal complaints in females. The main complaint as periodically dysphonia.

**Conclusion:** There was a significance statistically relationship between teachers’ length of service with their complaints and vocal alterations and major prevalence in females. The study reaffirms the vocal health programs importance and necessity and the inclusion of disciplines relating to vocal health promotion in the teachers formation.

**Keywords:** faculty, dysphonia, laryngoscopy.

**A6011. Factors Related to Non-Performance of the Newborn Hearing Screening in a Basic Health Unit in the City of Rio de Janeiro**
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Hearing plays a key role in a child’s development, especially in language and speech. All newborns should perform the Hearing Screening, in order to speed up diagnosis and treatment, improving the outcomes. This study aimed to identify factors in uencing the non-compliance of the newborn Hearing Screening in a public basic health unit. It was an observational, cross-sectional, descriptive study, conducted from March to April 2016. A number of 152 interviews occurred with guardians of children up to 5-years-old in a Basic Health Unit in Rio de Janeiro west zone. Student's t and Chi-square tests were used for variables associated with the outcome with significance level of 0.05. Parent’s mid age was 29-years-old (17 to 44) and children’s mid age was 1-year-old (5 days to 5 years old). In 152 children, 40.79% were not screened and 58.55% of parents did not know about the test. Within the 59.21% who were screened, 21.11% used private services and 78.88% public services, 71.83% had it done in their birth maternity ward. Within the 40.79% not screened, in 80.64% of the cases the maternity did not warn about the test. The risk of the child not being screened increases with the lower mother’s education level. Among the total, 12.5% of the children had risk factors for hearing loss, of which 42.10% required further examination. The lack of professional guidance about the importance of newborns’ Hearing Screening increases the chance of non-compliance, being this the only statistically significant variable in this analysis.

**Keywords:** hearing; screening; preventive health.

**A6029. Evaluation of Teachers’ Vocal Health of Elementary and High School from Pouso Alegre – MG**
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**Introduction:** Considered dependent on vocalization to carry out their work, teachers are professionals who suffer most vocal changes arising from their profession.

**Objectives:** This study aims to analyze the voice of teachers and the impact of dysphonia in their quality of life and association with sinonasal symptoms.

**Methods:** A cross-sectional study of 41 elementary and high schoolteachers of private and public schools. A questionnaire was used to assess the socio-demographic data, the criterion of economic classification Brazil version
2014 and the SNOT-22 questionnaire. Data were organized and tabulated in a database built from Microsoft Excel 2013 program and analyzed using SPSS 18 (statistical package for the social sciences).

Results: Among the results did not show any statistical significance like smoking (p = 0.06), intake of alcoholic beverages (p = 0.15), quality of health (p = 0.059), occurrence of chronic disease (p = 0.41), physical exercise (p = 0.08), using chalk/brush (p = 0.42), quality of the air/ventilation of the work (w = 0.85), voice alteration (p = 0.58) and SNOT-22 form (p = 0.36). All data were analyzed and based on the national and international literature as the probable cause of dysphonia.

Conclusion: Assessed the likely dysphonia factors were not observed any statistical significance with the vocal health of teachers and not with sinonasal changes. The conclusion is the need to increase the N of this study because dysphonia is a constant occurrence in the lives of teachers.

Keywords: faculty, dysphonia, rhinitis.

A6032. Comparative Study of Polysomnographic Findings Correlating BMI and Sex of Patients Treated at Otorhinolaryngology Department
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Introduction: The prevalence of apnea/hypopnea sleep has increased in recent decades. Even if there is a greater recognition of this problem by physicians, most affected individuals remain undiagnosed. The diagnosis of this sleep disorder requires attention, given their impact on a range of neurocognitive disorders.

Objective: To correlate the variables BMI, AHI, sex and SA02.

Methods: it is a retrospective cohort study. 549 records were retrospectively evaluated at the Hospital of Otorhinolaryngology service Our Lady of Lourdes, São Paulo, in the 2011-2013 period.

Results: The selected sample consisted of 549 patients, 226 (41.2%) females and 323 gender (58.8%) were male. Unlike the group of men that the higher the BMI the severity of OSAS, the women’s BMI was statistically the same among the categories of OSAHS. Correlation between the SaO2 and IAH, only in the male group was detected significant correlation. The results of the comparison of SaO2 levels between categories of OSAHS revealed that the SaO2 of women was statistically the same among the categories of OSAHS.

Conclusion: We can see this study as the similarity statistic between men and women that the incidence of the disease indicates that OSAS is being underdiagnosed especially in females. We hope this study will help to understand the challenges still to be faced as the approach, and to understand the variables affected by the syndrome, suggesting better results and knowledge of the disease population.

Keywords: polysomnography; OSAHS; obesity.

A6041. The Relationship between the Dizziness Handicap Inventory (DHI), Vestibular Activities of Living Scale (VADL), Vestibular Exam, and Otoneurological Complaints in Patients with Temporomandibular Dysfunction
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Introduction: Individuals with temporomandibular disorders (TMDs) may presents several otoneurological symptoms.

Objective: Relate results from the Dizziness Handicap Inventory (DHI) and the Vestibular Disorders Activities of Daily Living Scale (VADL) protocols with vestibular exam, symptoms of dizziness, and tinnitus in patients with unilateral and bilateral TMD.

Method: Descriptive transverse cohort study was conducted devaluating 20 female patients between 26 and 72 years old (mean of 52 years) in 17 months. Procedures: anamnesis, detailed physical examination, and the application of the DHI/VADL protocols.

Results: A prevalence of peripheral vestibular deficit disorder was observed independent of the side affected; dizziness for the DHI emotional sub-scale and tinnitus for the DHI functional sub-scale. The VADL revealed greater difficulty on the functional sub-scale for activity F5, on the ambulation sub-scale for activity L15, and on the instrumental sub-scale for activity L22. In the correlation between the results of the vestibular exam and the VADL scale with the most prevalent symptoms, dizziness had a significant effect on activity F5. The correlation between VADL activities with aspects of the DHI, there was significance to the physical aspect of DHI for the functional activities (F8, F9, L20, L21) of VADL and functional aspect of the DHI for activities (F2, F9, L15, L16) of VADL.

Conclusions: the correlation in cochlea vestibular symptoms for patients with TMD is evident. It was demonstrated that the applied DHI and VADL protocols were sensitive in capturing the impact of dizziness on daily activities for TMD patients.

Keywords: temporomandibular joint, dizziness, labyrinth diseases.

A6085. Severity of Clinical Manifestations Predicted by Glossoptosis Classification in Robin Sequence Patients
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Objective: The goal of this study was to demonstrate the importance of sleep endoscopy in the evaluation of RS patients, analyzing the association between the glossoptosis classifications and the severity of symptoms.

Methods: All patients newly diagnosed as RS were included. They were divided as isolated RS, RS-plus and syndromic RS. Symptom severity was quantified as defined by Cole. The images of sleep endoscopy were classified according to Yellon and de Sousa grading systems. Distribution of patients demonstrating severe symptoms were verified along different glossoptosis levels.

Results: A total of 58 patients were enrolled. Median age was 52.5days and 60.3% were male. From this sample, 22 patients were classified as grade 1 by Cole grading system (37.9%); 14 patients, as grade two (24.1%), and 22 patients, as grade three (37.9%). Cole grade 3 patients were more frequent in 2/3 Yellon classification and moderate/severe de Sousa classification than in milder levels (P= 0.03 and P= 0.02,
respectively). Twenty-four patients were identified as isolated RS (41.4%); 20 patients as RS-plus (32.7%); and 15 patients had well defined syndromes (25.9%). Concomitant airway anomalies were found in 18 patients (31%). For those patients with isolated RS, 17.4% had associated lesions; in RS-plus, 55.6%, and in the syndromic group, 28.6% (P = 0.03).

Conclusion: Airway obstruction graded by Yellon and de Sousa through sleep endoscopy seem to discern adequately patients with higher probability of more severe clinical presentation. Moreover, syndromic RS and RS-plus have a significant higher frequency of airway anomalies other than glossoptosis in sleep endoscopy than isolated RS patients.

A6094. Neurotological Findings Prevalent in Hereditary Ataxias
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Introduction: Spinocerebellar ataxias (SCAs) are a group of neurodegenerative diseases that are characterized by the presence of progressive cerebellar ataxia. The gene product derived from the mutation is a protein defined as ataxin in dominant SCAs and Frataxin in recessive SCAs of the Friedreich type.

Objectives: The aim of this study was to describe and compare the vestibular findings most evident among the hereditary ataxias, as well as correlate their clinical aspects to the study of the nervous structures affected in this disease.

Methods: The study had a retrospective cross-sectional design. 76 patients with ataxia were evaluated, 57 with SCAD and 19 SCAR of the Friedreich type. The diagnosis of ataxia was performed by analysis of clinical and genetic tests using Polymerase Chain Reaction (PCR). The patients were subjected the procedures: anamnesis, ENT evaluation, vestibular assessment (the patients were subjected to the following tests that make up the vestibular examination: vertigo and positional nystagmus, spontaneous and semi-spontaneous).

Results: The most frequent complaints in the anamnesis were: gait imbalance, dysarthria, dizziness and dysphagia. In the application of the difference proportions of testing, it was shown that there was no significant difference in the proportions of patients in both hereditary ataxias for the most common symptoms: gait imbalance (p = 0.1253), dysarthria (p = 0.3546), dizziness (p = 0.2933) and dysphagia (p = 1.0000).

Conclusion: The most evident neurotological symptoms were gait disturbances, dizziness, dysarthria and dysphagia. Alterations in vestibular examinations occurred in 85.5% of patients, mostly in the caloric test (77.6%).

A6169. Comparative of Glottal Area Waveform using High-Speed Digital Imaging in Patients with and without Voice Disorders
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Introduction: Glottal area waveform is the analysis of relative glottal area through representative glottal cycle and objectifies vibratory characteristics.

Objectives: This article presents an analysis comparative of glottal area waveform in patients with normal vocal fold and with vocal nodules.

Method: The vibrations of the vocal folds were recorded using high-speed (KayPentax® model 9710) imaging from 20 females (age 18-55 year), including 10 women with vocal nodules and 10 normophonic females. Using a computer program, Kips®, the glottal area waveform was segmented out and then we report minimum and maximum area, minimum and maximum opening at mid-point of glottis, minimum and maximum area rate of change, in the region and speed quotient (COEP approved number 4484115.0.0000.5149).

Results: There were variations in the pattern of opening and closing of the vocal fold margin in patients with and without voice disorders.

Conclusion: The glottal area waveform with high-speed imaging is usefully to truly quantitative vocal fold vibratory capability and intracycle behavior becoming effective parameter for differentiation normal vocal fold and with pathological conditions.

Keywords: voice pathology, voice analysis, high-speed digital imaging, glottal area waveform.

A6206. Telehealth at Reouvir’s Redesigning our Protocols
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Introduction: Real-Ear Insertion Gain (REIG) delivers to audiologists elements to investigate in situ which might affect patients perceived benefits. Telehealth embraces applications diagonally the full spectrum of the health sciences to promote health in different layers. A subjective assessment to weight the benefits of HA user is a questionnaire, e.g. Satisfaction with Amplification in a Daily Life (SADL). Reouvir always had promoted fittings based on functional gain but in 2015 onward, it is experiencing a progressive implementation of REIG in tandem with SADL through Telehealth.

Objectives: Demonstrate the new outcomes of more prolific approach on fitting HA based on REIG and SADL.

Methods: A remote audiologist from the HA manufacturer does her efforts to best fitting with the help with local audiologist. A local audiologist performs REIG (REIG1) by herself. Patients gives their imprints through SADL (SADL1). Patient went home and return 2-week later on to attend REIG (REIG2) and SADL (SADL2) once more. Ensuring HAs are running good they have to pass through Hearing Aid Test System in order to cross its specs with datasheet. Both SADLs get comparison to give light what patients tasted better.

Results: An improvement over 20% in terms of satisfaction is found when crossed SADL1 with SADL2.

Conclusion: This new protocol is in progress to increase patients satisfaction, to slim return rate to Reouvir for adjustments. We understand it a step forward in terms of public policies.

Keywords: hearing aids, telehealth, questionnaires, patient satisfaction, public policies.
A5881. Thyroid Cancer Mortality in Brazil during 21st Century
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Introduction: Thyroid cancer is the most common neoplasm of head and neck region. Currently, there is an increase of incidence and mortality rates. It is essential to define a national profile of patients affected by this cancer.

Objectives: To evaluate thyroid cancer mortality in Brazil during XXI century and to establish a national epidemiological profile.

Methods: Epidemiological study using secondary data from Mortality Information System of Brazil’s Unified Health System (SIM-SUS), available on Information Technology Department of the Public Health Care System (DATASUS). Thyroid cancer is classified by the code C73 of 10th International Classification of Disease (CID-10).

Results: Between 2001 and 2013, 7,223 deaths attributed to thyroid cancer were accounted in Brazil. Southeast concentrated highest total numbers, while South had highest mortality rates. There was female gender preponderance (ratio 2.09:1). The age group with the highest absolute death numbers was 70-79 years old and the highest mortality rate was found in 80 or more years old. Regarding race, 60.79% were white people.

Conclusion: The number of deaths attributed to thyroid cancer increased during 2001 to 2013. The prevalent national profile was female gender, white color, 70-79 years old. The variability of rates between Brazilian regions may be related to an unequal distribution of diagnostic and therapeutic resources. The cancer mortality rate is configured as descriptive indicator of health and contributes to provide restructuring of resources to improve the management of these patients.

Keywords: thyroid cancer, mortality, Brazil, epidemiological profile.

A5878. Evaluation of the Effects of Ascorbic Acid in Different Concentrations in Myofibroblasts Proliferation in the Process of Cicatrization: An Experimental Study in Rats
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Introduction: Ascorbic acid is an abundant vitamin in the daily diet and has an important participation in collagen synthesis. In medical practice, it is widely used for the treatment of wrinkles and spots on skin, but have evidence that topical application have cicatrization effect.

Objectives: To investigate the long-term effects of ascorbic acid on skin, and its antiaging properties.

Methods: In our study, we use three concentrations of ascorbic acid at 10%, 30%, 50%, and a control group, which represented the daily diet. The ascorbic acid was divided into 4 groups of 21 animals and subsequently divided into three groups of 7 animals. The ascorbic acid was used in concentrations of 10%, 30%, 50%, and a control group, which represented the daily diet. The ascorbic acid was used in concentrations of 10%, 30%, 50%, and a control group, which represented the daily diet.

Results: There was no significant difference in the inflammatory process compared the different groups. There was 100% transformation to acute wounds chronic between 3 and 14 in E30% (p = 0.001). In all groups, there was an increase of collagen I and III decreased with each passing day. When observed the collagen percentage curves, it is clear that the E50% group showed more symmetrical curves and more constant behavior.

Conclusion: There is a probably superiority of ascorbic acid at 50%, which cannot be proved because of the reduced number of animals in each subgroup.

A6160. Physical Therapy for Benign Paroxysmal Positional Vertigo: Long-Term Effect and Recurrence: A Systematic Review
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Benign Paroxysmal Positional Vertigo (BPPV) is the most common cause of vertigo, which is characterized by episodes of vertigo roundabout when the head is moved.

Objectives: To evaluate the effectiveness of vestibular rehabilitation (VR) in patients with BPPV and the rate of recurrence of symptoms.

Methods: A systematic review was performed using PubMed scientific databases. This review included studies published in English in the last five years: Clinical studies in adults with emphasis on the diagnosis and treatment of BPPV.

Results: A total of 38 studies were identified, of which only 12 met the inclusion criteria. The majority of the studies stated that vestibular rehabilitation is effective in decreasing the symptoms and recurrence rate.

Conclusion: In this review, different papers show the beneficial effect of the maneuvers for treatment of BPPV and its long-term effectiveness. This strengthens the conclusion that this treatment is effective in resolving symptoms and decreasing recurrences.
A6195. Comparison between Subjective and Objective Methods for Evaluation of Patients undergoing Nasal Functional Surgery
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**Introduction:** It has been estimated that the prevalence of nasal obstruction is about 30% in urban centers. It has been observed in recent years, an increase in this prevalence, especially in older age groups and in low and middle-income countries. Septoplasty and turbinectomy are functional nasal surgeries aimed at relieving nasal obstruction when drug treatment was unsuccessful.

**Objective:** To compare the subjective methods with the objective method of assessment of nasal obstruction in patients undergoing nasal functional surgery and analyze the effectiveness of these surgeries in the short term postoperative period (35-45 days) and long term (six months).

**Methods and materials:** The subjective analyzes were based on patient self-assessment using a visual analog scale (VAS), and through the nasal index score (NIS).

**Results:** There were no significant difference between preoperative and early postoperative, and late postoperative period pre and post early and late operative, compared NIS or VAS with Peak Flow (p ≥ 0.05). There is a significant difference between the responses of evolution of the NIS and VAS (p ≤ 0.05). The development of NIS is significantly higher than that of VAS. Comparison of developments in NIS, VAS and Peak Flow individually showed a significant difference (p ≤ 0.05).

**Conclusion:** There is a considerable relationship between subjective methods (NIS and VAS) and objective (Peak Flow) for the evaluation of nasal obstruction. The results showed a significant efficacy of nasal functional surgery in patients with nasal obstruction in the early postoperative period (35-45 days) and long term (six months).

A6236. Visualizing How a Deviated Septum Affects the Nasal Air Flow
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**Introduction:** Common methods used to visualize nasal air flow pattern requires complex experiment set-ups and are time consuming. Therefore, these methods are not feasible for the clinical practice and are restricted to the research field. Computational fluid dynamics is a method used in the aerospace industry to predicted air flow behavior in order to improve airplanes design. This method also allows a patient-specific study of nasal air flow when combined with accurate three-dimensional models of the nasal cavity based on computed tomography scans.

**Objective:** The aim of this study is to visualize the interaction between nasal air flow and septum deviation using computational fluid dynamics.

**Methods:** Computed tomography scans of three patients suffering from nasal airway obstruction were used to reconstruct nasal cavities models. Computational fluid dynamics technique was applied to all models.

**Results:** Air flow allocation, streamlines and velocity profile was visualized. It was observed some common features to all cavities such as vortex formation downstream the nasal valve. Patient specific air flow patterns, as retrograde flow close to septum deviation, were also observed.

**Conclusion:** Nasal air flow presents some common features among different individuals. Nevertheless, patient-specific nasal anatomy may produces a patient-specific air flow pattern. It was demonstrated that air flow allocation predicted solely on airway area, observed from computed tomography scans, and may produce misleading conclusions. Computational fluid dynamics allows a non-invasive approach to nasal air flow investigation and has potential to be a state-of-the-art method for nasal obstruction evaluation during the Otorhinolaryngology’s daily practice.

**Keywords:** nasal air flow, numerical simulation, air flow.
in the aerospace industry to accurately predicted airflow related variables.

**Objective:** The aim of this study is to describe the methodology used to calculate nasal resistance using computational fluid dynamics and to visualize pressure distribution over the nasal cavity.

**Methods:** Ten anatomically correct three-dimensional models of the nasal cavity were reconstructed using computed tomography scan of five patients suffering from nasal airway obstruction. Computational fluid dynamics was applied to all cavities and resistance distribution was visualized.

**Results:** The four steps required to apply computational fluid dynamics technique to nasal cavity is described in detail: 1. segmentation 2. geometry creation 3. numerical simulation and 4. post processing. Resistance distribution was visualized using a color scale. The contribution of nasal regions and structures on resistance is described for each nasal cavity.

**Conclusion:** Virtual rhinomanometry provides detailed information about resistance distribution in the nasal cavity. The broad availability of the computer tomography scan associated with the fast evolution of computational capacity may turn virtual rhinomanometry as part of the otorhinolaryngology practice in the near future.

**Keywords:** rhinomanometry, computational fluid dynamics, nasal resistance.

**Speech, Language and Hearing Sciences**

**A4818. The Efficacy of Auditory Training in Children Underwent Bilateral Myringotomy by Electrophysiological Assessment**

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**Background:** Electrophysiological techniques are widely used in clinical research for assessing the central auditory nervous system and can be used in monitoring auditory training. Investigate the efficacy of auditory training in children underwent bilateral myringotomy by electrophysiological assessment. Was performed in 15 children (8-16 years) underwent bilateral myringotomy in two stages: pre (Group 1) and post (Group 2) auditory training. Electrophysiological evaluation were realized: click ABR, speech ABR, Long Latency Auditory Evoked Potentials (P300). The auditory training program (ATP) was conducted at 8 weekly 50-minute sessions in a soundproof booth by a specialist audiologist.

**Results:** Results showed better latencies for the Group 2 when compared to the Group 1 with significant statistically difference for the wave V (p = 0.001) in the right ear and wave I (p = 0.02) to click ABR. For speech ABR it was observed better latencies with statistical significance for the wave V (p = 0.029), C (p = 0.012), E (p = 0.009), F (p = 0.036) and O (p = 0.029) in the right ear and wave C (p = 0.049) in left ear. Already the results of P300 showed significant statistically difference for the wave N2 (p = 0.049) e P300 (p = 0.13) in the right ear and wave P2 (p = 0.13), N2 (p = 0.032) e P300 (p = 0.004) in left ear.

**Conclusion:** Analyzing the results found that children underwent bilateral myringotomy was benefited from the auditory training program. All electrophysiological procedures were able to identify changes in the neural circuits after auditory training program, therefore be an important procedure for monitoring and effectiveness of the auditory training programs.

**A5848. Vestibular Evaluation in a Neurologic Department**

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**Introduction:** The vestibular system is one of the most important tools for the body balance maintaining. Disorders that compromise the standing up straight ability or perform movements with the body, without oscillations, can create important clinical manifestations such as unbalance, gait deviation, instability, and others, being the vertigo the most common complaint, with high prevalence worldwide.

**Objective:** To identify the epidemiological patients profile treated at a neurological clinic, to characterize the reported complaints and medical diagnosis, as well as analyze the signals and peripheral or central otoneurological symptoms related to the vestibular function.

**Methods:** Patients medical records have been evaluated with dizziness/vertigo complaints, from both genders, were subjected to vestibular examination and a medical history.

**Results:** Of the 200 patients that presented dizziness or vertigo complaints, 70.6% were female and 29.4% were male. The most part of the studied individuals was among the age group of 51 to 70 years old. It can be observed that 45% of the studied population had constant dizziness and 62.2% roundabout dizziness (vertigo). Related to the symptoms duration, the highest incidence time was in minutes (47.66%). The individuals had frequent dizziness (41.45%) and moderate type intensity (49.22%) as the most present. The obtained data allow us to affirm that the most part of individuals presented central vestibular dysfunction, followed by normal vestibular examination.

**Conclusion:** It was concluded that the changes were found in most part of the sample individuals, and as the main change was evidenced the central vestibular dysfunction.

**A5866. Cognitive Auditory Evoked Potentials in Elderly Population**

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**Introduction:** the cognitive auditory evoked potential is an electrophysiological test that evaluates the hearing at the central level. It enables observing brain activity related to attention, discrimination, integration and auditory memory. It is generated voluntarily, actively, during the performance of a specific task. Increased latency of cognitive auditory evoked potential occurs physiologically from 15 years old on, so age should be taken into account on interpreting the values obtained in different age groups.

**Objective:** To analyze the responses obtained in the cognitive auditory evoked potentials in the elderly.

**Methods:** It was evaluated 85 elders, aged between 60 and 70 years old, without hearing loss or with mild sensorineural hearing loss and without neurological changes. All patients underwent tonal and vocal audiologic evaluation, acoustic impedance and cognitive auditory evoked potential. The potential of the record was done while the individual was focused on a mental activity. The subject had to tell the difference between two sounds presented.

**Results:** The latency values showed a significant tendency to raise as age increased. The linear regression model showed a significant increase of 2.16 ms per year of age in the study group. Regarding amplitude, an inverse correlation was observed, which means the wave amplitude decreased with the increasing of age.
Conclusion: Increasing age is accompanied by a statistically significant increase of latency in cognitive auditory evoked potential starting at 60 years of age.

Keywords: Evoked Potentials; Evoked Potentials, Auditory; Electrophysiology, Aging.

A5880. Magnitude of the Vestibule-Spinal Reflex as a Marker of the Relationship between Hearing and Movement
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Introduction: The integration between sensory stimuli (auditory, visual and proprioceptive) and motor commands (articulatory, respiratory and coordination of members) takes place during the musical performance.

Objectives: To verify the influence of formal musical training and dance practice in the magnitude of the vestibulo-spinal reflex.

Methods: Protocol approved by the Research Ethics Committee (CEP) number CAAE 20907713.5.0000.5505. The sample consisted of 92 subjects, aged between 18 and 35 years, being 31 ballet dancers; 31 professional musicians and 30 controls matched for gender, age and years of schooling; with normal hearing sensitivity, with no history of hearing and/or vestibular disorders. The record of cVEMP was performed with active electrode in the upper half of the saccule and utricle, ear, postural balance, sensory-motor integration and assessment of saccular macula, vestibular nerve, and roads lobby spinal descendants and muscle motorneurons sternocleidomastoid. Due to having a higher vestibular ability demand, it is likely that dancers show better balance skills than non-dancers.

Results: The formal musical training as well as the dance practice provides lower latencies to record the vestibular evoked potentials in dancers adults, 2 males and 9 females. The inclusion criteria for Group 1 were: to dance more than 4 hours per week, not present change of balance, have normal hearing and aged between 18 and 29 years. The cervical vestibular evoked myogenic potential was done with MASBE ATC Plus equipment, Contronic®. The stimuli were presented 5.1 seconds with frequency 500Hz, alternating polarity. The intensity was 118dBNA. It was used band-pass filter of 5Hz to 1000Hz, with noise limit of 90% to 100%.

Conclusions: This study showed statistically significant differences between dancers and non-dancers without vestibular complaints.

Keywords: Saccule and utricle, ear, postural balance, vestibular evoked myogenic potential.

A6003. Vestibular Evoked Myogenic Potential in Dancers
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Introduction: Cervical Vestibular Evoked Myogenic Potential consists of a group of stimuli and data captured by surface electrodes that through sound stimulation cause activation and assessment of saccular macula, vestibular nerve, and roads lobby spinal descendants and muscle motorneurons sternocleidomastoid. Due to having a higher vestibular ability demand, it is likely that dancers show better balance skills than non-dancers.

Methods: An evaluation was performed with 11 dancers adults, 2 males and 9 females. The inclusion criteria were: to dance more than 4 hours per week, not present change of balance, have normal hearing and aged between 18 and 29 years. The cervical vestibular evoked myogenic potential was done with MASBE ATC Plus equipment, Contronic®. The stimuli were presented 5.1 seconds with frequency 500Hz, alternating polarity. The intensity was 118dBNA. It was used band-pass filter of 5Hz to 1000Hz, with noise limit of 90% to 100%.

Results: The mean latency of P13 and N23 waves on dancers were, respectively, 15.1 ms and 22.2 ms, with amplitude of 10.4±14V. In the analysis of latencies statistically significant differences were not found in dancers and non-dancers (p = 0.097). Regarding the amplitude, it was not observed statistical difference between groups (p = 0.105), although it was found higher amplitudes in the group of dancers.

Conclusions: This study showed statistically significant differences between dancers and non-dancers.

Keywords: Dancers; Vestibular Evoked Myogenic Potential; Evoked Potentials, Auditory; Electrophysiology.
Objective: To identify the auditory effects of music exposure in young musicians of a philharmonic band.

Method: The study was observational and cross-sectional. The sample was conducted with 22 musicians of a philharmonic band of the city of Lagarto, Sergipe. The procedures include otoscopy, middle ear analysis, pure tone audiometry, Transient Evoked Otoacoustic Emission (TEOAE) and Distortion Product (DPOAE).

Results: The study included 22 male musicians, aged from 13 to 24 years old. The most frequent auditory complaints were intolerance to loud sounds, communication difficulties and tinnitus. All the subjects presented auditory thresholds within normal patterns. However, were observed audiometric notches in both ears. In general, the TEOAE and DPOAE were present; however, two musicians had an absence of TEOAE in the right ear in at least one of the frequency bands and, in the left ear, this fact occurred in four musicians. In the DPOAE, it was found an absence response in six musicians in, at least, one frequency in both ears.

Conclusion: Despite the young sample and normal hearing thresholds, there was a high incidence of auditory complaints, changes of responses in otoacoustic emissions and audiometric notches; demonstrating the importance of research with musicians in this age group.

Keywords: Hearing; Music; Speech, Language and Hearing Sciences.

A6207. Evaluation of the Main Indications of the Brain Evoked Response Audiometry
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Introduction: The ear consists of an essential organ for human communication and the first three years of life are critical for the acquisition and development of speech and language. Hearing loss can be detected by the Brain Evoked Response Audiometry, which evaluates the integrity of the auditory pathway to the brainstem and research the electrophysiological threshold of hearing. The ENT service of Policlinica de Botafogo performs this examination, under sedation, in the city of Rio de Janeiro and therefore receives a large demand for this exam.

Purpose: Enumerate the main clinical indications, for the other experts, justifying the realization of the potential evoked auditory brainstem in pediatric patients at our ENT service.

Methods: Medical records of patients treated at the Electrophysiology Clinic of Hearing from January 2015 to June 2015, collected the case histories and evaluated indications.

Results: 173 tests were performed in pediatric patients, and the most frequent indication for the examination consisted in delayed development of language patients (52.5%), followed by complaints of hearing loss (24.5%) change in tests such as otoacoustic emissions (11.5%) and autism differential diagnosis (11.5%).

Conclusion: The evaluation of the peripheral and central auditory system performed by the Brain Evoked Response Audiometry, had the main indication the delay in cognitive development of children, providing early identification of hearing loss.

A6208. Otoacoustic Emissions and high Frequency Audiometry in Music Students
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Introduction: Musicians are often exposed to high sound pressure levels during rehearsals and performances. Early detection of hearing loss is essential in this common people.

Objectives: To investigate thresholds of pure tones of high frequency and amplitude of evoked otoacoustic emissions in music students.

Methods: The sample was composed by 23 music students and 23 not musicians or music students (control group) and they were matched for age and sex. High-frequency audiometry (9, 10, 11.2, 12, 14, 16, 18, 20 kHz); transient otoacoustic emissions (TEOAE) and distortion product (DPOAE) were performed. The data was processed by SPSS 21.0 software (Student Test or Mann-Whitney test).

Results: Music students had lower pure tone thresholds at 9, 18 e 20 kHz (p value as 0.009; 0.05 e 0.001 respectively) and their TEOAE were lower in 2 and 4 kHz frequencies as in 3kHz frequency in DPOAE, once compared with control group (p < 0.005).

Conclusion: Music students have a special skill to detect pure tones of high frequencies (9, 18 and 20 kHz); however, the outer hair cells had reduced range in otoacoustic emissions, so the EOA exam is an important tool to follow up this population to prevent hearing loss.

A6217. The Efficiency of Auditory Training in Elderly Hearing Aids Users
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Background: Auditory disorders bring difficulties on communication, which can be diminished through the adaptation of hearing aids and auditory training.

Objective: The objective of this study was to verify the efficacy of rehabilitation of the auditory processing in elderly users of hearing aids.

Method: It was selected 30 elderly people with auditory neurosensorial disability in a slight or even a moderate level. Their ages were between 60 to 80 years old, all of them were users of bilateral hearing aids. The participants were separate in two groups at random: Study Group (SG) and Control Group (CG). The Study Group was submitted to an auditory training program during eight sessions. Both groups were evaluated with speech in noise tests and SSW in Portuguese at two moments: The Control Group accomplished the evaluation and after 4 weeks the re-evaluation process, the Study Group accomplished the evaluation before the auditory training and after the auditory training accomplished the re-evaluation.

Results: After the auditory training, there was a big improvement on tests applied. The most statistically significance was in speech in noise test, which the variability was, in control group 42.80 to 43.46, and study group 29.20 to 55.70.

Conclusion: The rehabilitation program in auditory processing, which include auditory training, benefits elderly users of hearing aids and modifies their auditory behavior.
A6223. The Impact of Tinnitus in Patients Treated in a Clinic-School Outpatient Facility of Otoneurology

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Introduction: Tinnitus is described as the perception of a sound, in the absence of it in the environment, equivalent to a certain sensation as illusory, which may have characteristics similar to various sounds, such as noise of the sea, whistles, hisses, pulse and others. The impact of tinnitus on the quality of life can be characterized and quantified by the Tinnitus Handicap Inventory (THI), it is important to monitor the therapeutic process.

Objective: Measuring the impact of tinnitus on the quality of life patients treated at the audiology outpatient facility of the speech therapy clinic-school of the Federal University of Sergipe-Campus in Lagarto.

Method: The survey, Tinnitus Handicap Inventory (THI), is composed of 25 questions, divided into three scales (functional, emotional and catastrophic). Tinnitus can be classified as: negligible (0-16%), mild (18-36%), moderate (38-56%), severe (58-76%) or catastrophic (78-100%). This survey was administered to 10 patients in the otoneurology outpatient facility of the speech therapy Clinic-School at the Federal University of Sergipe.

Results: of the 10 (100%) patients questioned, the buzz of the subjects were classified as follows: 11.1% negligible; 11.1% light; 22.2% moderate; 44.5% severe and 11.1% catastrophic.

Conclusion: Most patients have what we consider severe tinnitus, interfering with their quality of life, which led to the demand for treatment for tinnitus.

A6245. Masking Level Difference in children

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Introduction: The selective attention implies to attend one activity over another and the Masking Level Difference (MLD) test can be used to evaluate it.

Objective: To compare values from MLD test in infants with existing reference values.

Method: Children from schools of Rio Grande do Sul were invited to participate. The eligibility criteria were: ages between seven and 11 years old; normal auditory thresholds; do not present any neurologic or psychiatric alterations; do not make use of drugs that may interfere with the attention and performance of the tests; not having presented school failure; be right-handed; present normal Dichotic Digits Test (DDT) results; presence of acoustic re execs; do not present middle ear alterations; do not have experience with musical instruments; do not be bilingual and do not present speech impairments. The entire sample held anamnesis, visual inspection of the external acoustic meatus, pure-tone threshold Instruments; do not be bilingual and do not present speech impairments. The entire sample, obtained a mean MLD value of 7.95 dB. In relation to gender, the male presented mean threshold for MLD of 9 dB and the female of 7.56 dB.

Conclusion: The values founded in infants are smaller than those founded in adults, highlighting the need for reference values to pediatric population, which is one of the main aims oh this study in its completion.

A6293. The Influence of the Implantation’s Age in the Auditory Performance of Children with Cochlear Implant

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Introduction: The cochlear implant (CI) is a great improvement for hearing loss treatment, mainly when performed in the first years of life.

Objective: To verify the influence of implantation’s age in the auditory performance of children with CI concerning the abilities of auditory recognition in closed set and auditory comprehension.

Methods: Retrospective longitudinal study on the data of 180 children operated with CI up to 36 months of age and with at least 60 months of use. The abilities of auditory recognition in closed set and auditory comprehension were analyzed using the Glendonald Auditory Screening Procedure (GASP) in the first nine follow-up returns. To investigate the age in influence at the implantation, the children were divided into three groups: implanted before 18 months (G1), between 19 and 24 months (G2) and between 25 and 36 months (G3). For comparative analysis, Kruskal-Wallis test was applied.

Results: The children developed the auditory abilities gradually within the first 5 years of CI use. There was no statistically significant difference in the groups performances comparison (p > 0.05). Therefore, no influence of the child’s age in the moment of the implantation was observed on GASP results.

Conclusion: The absence of statistically significant differences between groups can be justified since all the children were implanted before 36 months of age, that is, during the longest period of the central auditory system neuroplasticity. However, the importance of early implantation is highlighted so there is exposure of the child to the incidental language.

Keywords: Cochlear Implantation. Hearing Loss. Speech Perception.

A6305. Auditory Monitoring on Newborn with Risk Indicators for Hearing Loss

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Hearing impairment in childhood causes a major impact on the child’s overall development. The Law n° 12303 / 2010 and the Brazilian Guidelines for Neonatal Hearing Screening guidance to execute Universal Newborn Hearing Screening and newborns hearing monitoring with risk indicator for hearing loss, by three years old. The importance of monitoring is justified by the possibility of the emergence progressive hearing loss or late.

Objectives: determine the prevalence of risk factors and quantify adherence to auditory monitoring program.


Results: 40% held the first monitoring, 17% the second, 7% the third and only 3% had completed the monitoring program. Concerning the prevalence of risk indicator for hearing loss: Heredity 37%, ICU stay 37%, prematurity 30%
A6311. Ocular Motility and their Relationship to the Difficulty in Reading and Writing
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Introduction: Reading and writing are complex activities composed by multiple processes that involve motor and cognitive abilities. For the act of reading and writing occur effectively visomotor behaviors characterized by saccadic, pendular tracking and fixations eye movements should occur.

Purpose: Identify if the oculomotor abnormalities is related to the difficulty in reading and writing in children.

Method: A systematic literature review was realized by library research, between 2003 and 2014, index in the Scielo, Lilacs, PubMed and Medline databases. Using oculomotoric and reading and writing descriptors, 20 articles were selected, but only 5 were selected by submitting the aspects: have children as subjects of the study and have control group.

Results: The current study revealed children with difficulties in reading and writing have changes in test oculomotor saccades and pendular tracking.

Conclusion: It restricted the number of publications on that theme, with the need to expand the studies and consider further research on speech therapy.

Keywords: Ocular motility, difficulty, reading; writing.

A6312. Mismatch Negativity in Normal Hearing Children in Free Field: Preliminary Results
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The long latency auditory evoked potential mismatch negativity can provide information about memory process, attention and hearing discrimination. The use of this procedure in normal hearing had the aim to establish normative data in free field for this age range, for application in hearing aid and cochlear implant users, once these potentials are essential to objectively predict results with implants, and improve the device programming. The objective was to verify the values of latency, amplitude and wave area of the mismatch negativity in normal hearing children in free field. It was an observational and cross-sectional study. Subjects were five normal hearing children between 5 and 7 years old. The subjects underwent pure tone audiometry, impedanciometr and mismatch negativity. The tracings were recorded through Smart EP (Intelligent Hearing Systems) two channels equipment. Subjects were tested seated in a comfortable chair, and were oriented do no pay attention to the stimuli, while watching a cartoon. The active electrode was placed on Fpz, with the reference electrode on A1 and the ground on A2. Stimuli were presented at 70dBNA from a speaker using an oddball paradigm which a deviant stimulus 2000Hz with a probability of occurrence of 20%, were presented in a series of 1000Hz standard stimulus, in a total of 750 stimulus with a rate of 1,9 stimulus/second. The mean values of latency, amplitude and area of the MMN were respectively: 202ms, 2,29µV e 135,5µVs. Were observed values of latency, amplitude and area of MMN similar to those found on international literature.

A6337. Auditory Processing Profile of Patients seen at an Outpatient Clinic of the Health System. Preliminary Study
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Introduction: There are few reports of the profile of people seeking care for disorders of auditory processing (DPA).

Objective: Evaluate the profile of patients seen in an auditory processing outpatient Health System of São Paulo capital.

Method: A retrospective cross-sectional study, which was raised central auditory processing assessments last year (2015) in the neuroaudiology clinic of UNIFESP. The survey was conducted by completing a questionnaire containing 16 questions. The questions were divided into 3 areas a) general data; b) previous history of the disease and c) peripheral and central auditory pathways.

Results: We analyzed 70 assessments conducted in 2015. The average age was 9.7 years and mostly male, coursing on average the fifth grade of elementary school. The demand for care by learning difficulties and difficulty in reading and writing was 78.5%. The speech therapy sector accounted for 46.4% of referrals, followed by Otolaryngologist (21.4%). The hearing ability of figure-ground for verbal sounds in dichotic hearing was abnormal in 83% of cases, followed by the temporal resolution ability (54.5%) and both components of decoding.

Conclusion: Auditory processing disorder is still little known by different specialties of health. The analysis of the auditory skills reveals greater difficulty in recognizing the sounds of the language and its representation as a symbol, which matches the complaint of difficulty in reading and writing of the majority of people seeking care.

A4842. The Influence of the Choice of Vowels on Hypernasality
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Hypernasality is typical of cleft palate speech. The speech assessment of individuals with cleft palate should be carried out by experienced speech pathologists and therapists. Even with early surgical repair, most cleft palate patients present typical articulation errors. Studies usually analyze consonants and syllables, rather than vowel production.

Objective: The purpose of this study was to determine the order in which vowels should be introduced in the nasofibroscopy and in rehabilitation in order to minimize hypernasality.

Data Synthesis: 13 patients after cleft palate repair and in receiving speech therapy treatment were selected. The statistical analysis of the results showed that 80% of the individuals presented more hypernasality when producing [i] and [u] than other vowels.

Conclusion: The study has showed the importance of starting with the open vowels [a, , ] then introducing close-
mid [i, e, o] and finally the closed [i, u] in the nasofibroscopy and in the therapy sessions over a period of 3 to 6 months.

**Keywords:** Velopharyngeal Insufficiency; Cleft palate; Speech, Language and Hearing Sciences; Articulation Disorders

### A5854. Speech Therapist’s Findings in Hospitalized Patients in a Hospital of Porto Alegre
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**Introduction:** Dysphagia is a neurological or anatomical disorder of swallowing which may result in malnutrition and dehydration.

**Objectives:** To describe the speech therapists findings of patients that were referred for evaluation to the bedside.

**Methods:** Retrospective study, approved by the hospital’s ethics committee under No. 41,354, through database review. Seventy nine patients with age between 28 and 97 years were evaluated from January to November 2014. Patients underwent sensory-motor-orofacial evaluation and the Gugging Swallowing Screen (GSS) protocol.

**Results:** The mean age was 64 years, showing equivalence between genders (40 women). The prevalent diagnoses were stroke, affecting 15 patients (18.98%) and neoplasia, affecting 13 (16.45%). In the sensorimotor-orofacial evaluation 45 patients (56.96%) had abnormal mobility of the lips and 41 (51.89%) in the strength of the tongue; 43 (54.43%) in the sensation of the tongue, 8 (10.12%) in the strength of the jaw and 17 (21.51%) in the sensibility of the tongue, 8 (10.12%) showed changes in face sensitivity and 55 (69.62%) had abnormal jaw mobility. Regarding dysphagia, 7 patients (8.86%) presented normal swallowing, 23 (21.51%) a moderate dysphagia, 15 (18.98%) a severe dysphagia, 11 (13.92%) a functional swallowing and 6 (7.59%) could not perform the swallowing test. Four (5.06%) patients showed no information on the degree of dysphagia.

**Conclusion:** The profile of the studied patients was similar regarding gender, averaging 64 years; there was prevalence of cerebrovascular disease and cancers of various etiologies. It has been observed significant frequency swallowing changes in the different diseases identified.

**Keywords:** Speech, Swallowing Disorders, Swallowing.

### A5857. Oral Feeding Skills in Premature Infants Stimulated by Swallowing Technical Training
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**Introduction:** Prematurity is one of the main factors of risk and neonatal complications, it may affect the proper development of the newborn.

**Objective:** To evaluate the performance for oral feeding in premature newborns stimulated by the technical of Swallowing Training.

**Methods:** The research was conducted in a Neonatal Intensive Care Unit from March to August 2015. This is a Quasi-experimental Single-group Interrupted Time-Series Design with 14 preterm infants with corrected age between 30-36 weeks. Preterm newborn readiness for oral feeding assessment protocol was applied (before and after Swallowing Training). The Swallowing Training occurred once daily and averaged for 6 consecutive days.

**Results:** There was a post-stimulation significant improvement, comparing data from protocol before and after Swallowing Training. As for the infants oral feeding skills levels: 35.7% premature were classified as level 1; 14.3% level 2; 50% level 4. The oral feeding was initiated on average one day after the Swallowing Training; food probe was removed on average 7 days after the start of oral feeding. There was a borderline inverse association between the improvement in readiness score and time alternative way of transition to total oral feeding. There was a significant inverse association between the improvement in readiness score and the corrected age.

**Conclusion:** Intervention with Swallowing Training to an improvement in the infants oral feeding skills in 50% of the sample, start the oral feeding and obtaining the exclusive oral feeding in short period of time, with readiness to oral feeding in early corrected age.

**Keywords:** newborn; premature; deglutition.

### A5868. Three-Dimensional Assessment of Facial Morphology in Dentofacial Deformities
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**Introduction:** In subjects with dentofacial deformities, the skeletal relationships are unfavorable and might be related to the impaired occlusion. The three-dimensional investigative approach is the one that has the advantage of assessing facial morphology in all three planes of space. Therefore, it is considered a reliable and necessary source to provide specific data for a full assessment in dentofacial deformity.

**Objectives:** To analyze three-dimensional facial morphology in dentofacial deformities class II and class III compared to a control group.

**Methods:** 51 adults were selected for the study. They were separated in two groups, no dentofacial deformity, the control group (n = 17), and with dentofacial deformity. This was subdivided according to the deformity classification, respectively class II (n = 14) and class III (n = 20). The participants underwent a three-dimensional facial evaluation by an optical scanner. A specific protocol with anthropometric points and facial proportions was made to reference. The linear measurements of facial proportions obtained by three-dimensional evaluation were compared by Analysis of Variance (ANOVA) and Tukey post test (p ≤ 0.05).

**Results:** There was a statistically significant difference (p = 0.04) for the facial middle third related to the lower third of the control group (102.64%) and class II (94.78%) and for maxilo mandibular relationship (p = 0.0001) between the control group (88.63%), class II (92.60%) and III (81.19%).

**Conclusion:** The three-dimensional morphology of facial soft tissue showed specific and distinct relationships in terms of facial proportions between the control group, class II and III.

**Keywords:** facial morphology, dentofacial deformity, surface laser scanner.
A5869. Nasalance in Different Dentofacial Deformities
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Introduction: maxillary growth deficiency is a common characteristic in dentofacial deformities, mainly in skeletal class III. One of the factors in the literature that can influence nasalance is the size of the nasal cavity.

Objectives: to analyze nasalance scores of subjects with dentofacial deformities class II, class III and subjects without deformities (controls) and to observe the differences between them.

Methods: it was evaluated the nasalance of 18 subjects with dentofacial deformity class II (mean age 29 years), 25 with dentofacial deformity class III (mean age 27 years) and 36 control subjects (mean age 24 years) using the instrumental Nasometer II model 6400 (Kay PENTAX) by reading two texts (nasal and oral). Subjects were diagnosed by orthodontists of Integrated Center of Study of Facial Deformities of Ribeirão Preto Medical School - USP. Statistical test used was Analysis of Variance (ANOVA one way) and Tukey post-test (p < 0.05).

Results: the mean of nasalance scores for the groups class II, class III and control were, respectively, 48%, 42%, 49% for nasal text and 14%, 10%, 12% for oral text. Statistical analysis comparing the average of the three groups showed a significant difference between control subjects and class III dentofacial deformity in nasal text.

Conclusion: the type of dentofacial deformity did not seem to influence the normal value of nasalance. However, despite being in normal standards the subjects with dentofacial deformity class III showed lower nasalance values, which can be explained by the maxillary growth deficiency.

Keywords: nasalance; dentofacial deformities; maxillary deficiency

A5893. Using the Scale of Auditory Behavior in monitoring the effect of the Auditory Training
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Introduction: The application of questionnaires related to auditory perception provides information about everyday situations, correlated with changes in auditory processing. The Auditory Behavior Scale questionnaire includes 12 questions, assigning values from one to four points, as the patient's response, whose sum shows characteristics of the auditory behavior.

Objective: To evaluate the effect of auditory training in children with auditory processing disorders by comparing the scores of Scale of Auditory in pre and post-auditory training.

Methods: Six children with Auditory Processing Disorder participated in this study, with a mean age of 11 years. The proposed therapeutic intervention was twelve sessions of Auditory Training, being two subjects submitted to Computerized auditory training and to four Formal auditory training. The questionnaire Scale of Auditory Behavior was applied in pre and post intervention. It was performed Test T of Student for statistical analysis with Statistica software 7.0 with a significance value of p < 0.05.

Results: An average of 35 points (minimum 23 and maximum 47) pre-training in the questionnaire and 43.5 (minimum 36 and maximum 53) post-training was observed, revealing a significant difference of p = 0.008. In the sample, there was a visible improvement mainly to listen or understand in noisy environment.

Conclusion: There was difference between the scores of the Scale of Auditory Behavior pre- and post-auditory training, showing improvement in students auditory perception of the sample with the chosen intervention.

Keywords: Auditory perception; Acoustic stimulation, Auditory Perceptual Disorders, Speech therapy.

A5918. Lee Silverman Voice Treatment in Parkinson’s Disease: A Systematic Review of Clinical Trials
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Introduction: Parkinson’s disease (PD) is a neurodegenerative disorder with specific vocal and speech impairments that affect this population. Therefore, it is necessary to use specific methodologies for these problems, as the Lee Silverman Voice Treatment (LSVT), a vocal treatment method developed especially for people with PD.

Objective: To systematically review the effects of LSVT in PD patients.

Data Synthesis: It was conducted an exploratory systematic review in the databases Medline (via PubMed), SCOPUS, Lilacs, Cochrane Library and EMBASE using the following search strategy: “Parkinson’s disease” AND “Voice” and its synonyms. Studies were included without date or language restrictions to assess the effect of LSVT in PD patients. The titles, abstracts, and full text were analyzed by three independent and blinded reviewers. The initial electronic search showed 186 publications, which were analyzed by their title and abstract. 23 studies were fully read and, after selection by predetermined inclusion/exclusion criteria, six studies remained. Although the included studies are heterogeneous as to the methods and evaluation groups, it is possible to identify promising overall results.

Conclusion: It was observed increase in the vocal sound pressure levels, in the maximum /θ/ extension and an improvement in roughness and breathiness parameters, as well as benefits in speech tasks. There is a lack of studies using this method, being necessary more researches about it.

Keywords: Parkinson’s disease; Voice; Systematic review.

A6069. Effectiveness of Transcutaneous Electrical Nerve Stimulation in the Voice Therapy of Dysphonic Women: Control, Randomized and Double Blind Clinical Trial
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Introduction: The literature indicates options for hyperfunctional dysphonia such as indirect and direct therapy, medical treatment, and surgery for secondary organic lesions. The laryngeal relaxation is recommended for individuals with hyperfunctional dysphonia, thus, the application of transcutaneous electrical nerve stimulation may be an effective therapeutic tool.

Objective: to evaluate the effects of transcutaneous electrical nerve stimulation with vocal exercises on larynx and acoustic parameters in dysphonic women.
Methods: 27 women with vocal nodules, aged 18-45, participated, randomly divided into Experimental Group (13 subjects), with 12 sessions of transcutaneous electrical nerve stimulation (pulse:200 microseconds, frequency:10 Hz, in motor threshold), with electrodes placed on the trapezius muscle and submandibular area, bilaterally, for 20 minutes followed by 30-minutes vocal exercises, and Control Group (14 subjects), with 12 sessions of the placebo transcutaneous electrical nerve stimulation (as with the Experimental Group, but with no electrical current stimulus), followed by 30-minutes vocal exercises. Their larynx and vocal acoustics were assessed before treatment, immediately and after one month. All assessments were compared through the Likelihood Ratio Test and ANOVA (p < 0.05).

Results: Immediately after treatment and one month later, a reduction was seen in lesion size on the vocal folds, only in the Experimental Group, however, a decrease in the Soft Phonation Index acoustic parameter, was seen in both groups.

Conclusions: The low frequency of the electrical nerve stimulation associated with vocal therapy was effective in reducing the lesion size on the vocal folds and the noise measure related to vocal breathiness in dysphonic women.

A6088. Association between Swallowing Scales with Video uoroscopic Analysis
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Introduction: Dysphagia is a symptom clinically detectable in about 50% of patients in post-stroke acute phase. It is important to note that is the major cause of death after stroke, as it is responsible for complications associated with long hospital stays. The rating scales of the degree of involvement of oropharyngeal dysphagia are instruments used in the diagnostic process of this symptom in clinical and objective assessments of swallowing. These scales have been proposed in several studies and do not always use agreed standards.

Objectives: The aim of this study was to investigate the association between the results of functionality scales and dysphagia severity determined from video-uoroscopy exams in post-stroke patients.

Methods: A retrospective study of 109 uoroscopy exams analysis of swallowing post-stroke patients. From the exams were collected information on the diagnosis of severity of dysphagia and evaluated concerning the swallowing functionality in an independent way by two evaluators.

Results: A high number of mild dysphagia was observed. In one third of dysphagic patients was noticed the presence of tracheal aspiration. There was a significant association between the scores of Functional Oral Intake Scale and Dysphagia Outcome and Severity Scale scores in post-stroke patients it means when the swallowing is high compromised the level of intake by mouth will be small according to the evaluators analysis (p < 0.001).

Conclusion: There is an association between the scales and can be used as evaluative benchmarks and in the management of clinical speech therapy intervention.

A6125. Vocal Health and Hygiene Questionnaire – VHHQ: Development, Validation, and Cutoff Value
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Introduction: Knowledge in vocal hygiene is an important tool in voice therapy and cannot be derived instinctively.

Objective: To develop and validate an instrument about health and vocal hygiene knowledge evaluation.

Methods: 1007 adults, three studies: 1- 866 individuals dysphonic and non-dysphonic answered an initial survey about positive and negative voice aspects; 2- 41 voice specialists classified these vocal aspects as positive, no influence or negative; 3- 50 dysphonic and 50 non-dysphonic subjects answered the initial version of the Vocal Health and Hygiene Questionnaire – VHHQ. The VHHQ was submitted to psychometric measures.

Results: 5260 answers were organized into 365 voice aspects. Most common positive aspects: water and apple; most negative: smoking and shouting. The items had inter-rater reliability above 0.950 formed an initial version of VHHQ was obtained: 9 of the 40 final items did not differentiate the subjects and were excluded. Dysphonic subjects have self-evaluated their voices as being worse, had lower score for the VHHQ and greater vocal handicap. Higher internal consistency value (Cronbach’s alpha = 0.881) and excellent test-retest reproducibility (p = 0.804) were achieved. Dysphonic subjects had an average of 17.84 points and non-dysphonic of 29.12 (p < 0.001). The VHHQ cutoff value was 23 points.

Conclusions: The instrument was proved to be a responsive and reliable protocol for evaluation of knowledge in health and vocal hygiene; dysphonic subjects have fewer knowledge regarding vocal aspects. The instrument was considered an accurate diagnostic classifier able to separate dysphonic from non-dysphonic subjects.

Keywords: Voice; Dysphonia; Surveys and Questionnaires; Knowledge; Validation Studies.

A6139. Speech Language Intervention in a Case of Brainstem Lesion by Listeria Bacterium Infection
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Introduction: Vocal and swallowing disorders, as well as facial palsy are frequent symptoms and sequelae in lesions of the central nervous system. In such cases, a multiprofessional assessment and intervention are necessary.

Objectives: To describe the clinical findings and speech-language therapeutic processes of a case with a rare lesion of the brainstem.

Resumed report: Female patient, 67 years of age, presenting brainstem lesion by Listeria bacterium. Patient developed peripheral facial palsy, vocal chords palsy, left-side tongue hemiparesis, dysphonia and dysphagia. After hospital discharge, the patient underwent speech-language therapy emphasizing vocal exercises, maximization of swallowing phases and progression of food consistency. A flexible fiberoptic laryngoscopy was used to assess swallowing in order to confirm clinical findings and to observe the presence of pharyngeal myoclonus. For the analysis of the facial muscles and the diagnosis of the facial palsy phase, a surface electromyography assessment was conducted. The same resource was used in the swallowing tests with electrodes in the suprahyoid muscles. The myofunctional therapy involved
A6158. Vocal Fatigue in Teachers and its Relation to General Fatigue throughout the School Year
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Introduction: Teachers have vocal fatigue risk.
Objectives: To understand vocal fatigue in teachers throughout one school year.

Methods: 102 teachers, 48 with and 54 without vocal complaints, evaluated in 4 moments: first February week-E1, last June week-E2, first August week-E3 and first December week-E4. Procedures: vocal self-assessment; Signal and Symptoms Vocal List; Vocal Fatigue Index–VFI, Chalder Fatigue Questionnaire and sustained vowel for perceptual auditory analysis.

Results: Teachers presented better vocal self-assessment and less vocal signs and symptoms during E3. Voices presented mild to moderate deviation with no changes during the year. There was no difference on the vocal fatigue across the evaluations. General fatigue presented variations throughout the year, with low values. Teachers with vocal complaints had higher vocal and general fatigue in the 1st semester. Vocal deviation degree for all evaluations and mental fatigue for E3 had not correlated with vocal fatigue.

Conclusion: Teachers do not realize vocal fatigue variations throughout the year, although they have changes on vocal self-assessment and vocal signs and symptoms. Clinical voice assessment showed overall mild to moderate deviation, with no changes over the year. Teachers presented low scores in Chalder Questionnaire, with variations throughout the year. Teachers with vocal complaints had higher vocal and general fatigue in the 1st semester. Vocal deviation correlates positively with vocal self-assessment, signs and symptoms and general fatigue for all evaluation moments, with the exception of the mental fatigue after June and vocal deviation for all evaluations.

Keywords: Voice; Dysphonia; Fatigue; Questionnaires; Protocols.

A6159. Speech-Language Pathology’s Actions in the Education in a State Southern Brazil
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Introduction: Speech-language pathology has attempting to the construction of their professional identity with an educational interface. Historically, their actions had a focus on rehabilitation and detection of disorders. Although, the creation a new specialization, called Speech Therapy Educational, and changes in the paradigms of health and education became possible other practices.

Objectives: To know the actions of the speech therapist in education.

Methods: The research was conducted by sending a questionnaire through mailing to the Regional Council of Speech Language Pathology of the 7th region to the 2,102 speech language pathology subscribers.

Results: It was obtained 47 individuals linked to the Education who agreed to participate. The major was female gender, aged between 30–39 years and related to the public service. The majority of respondents work with prevention of communication disorders and pedagogical support. Speech-language pathology refer a good relationship with the schools, however, it still necessary knowledge of other professionals about the speech-language pathology work. The largest demand in schools is related to rehabilitation, about oral language and writing.

Conclusion: Through this study, it was possible to know the actions developed by speech-language pathology in education in the state of Rio Grande do Sul. It is necessary, even with difficulties, a better insertion of this professional, as well as a better understanding about the work process of the professional members of the school staff, so they can act integrated with objective to promote school health and learning.

Keywords: Speech-Language Pathology; Professional Practice; Health in Education.

A6179. Vocal Tract Adjustments of Dysphonic and non-Dysphonic Women Pre and Post Resonance Tube in Water Exercise - A quantitative MRI study
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Objective: To compare vocal tract (VT) adjustments of dysphonic and non-dysphonic women before and after resonance tube in water exercise (RTWE) at rest position and during phonation using magnetic resonance images-MRI.

Methods: Twenty women, 20–40 years old, ten dysphonic with vocal nodules (VNG) and ten controls (CG), were submitted to MRI. Four sets of sagittal VT were obtained: 1.At rest position Pre-RTWE; 2.Phonation of vowel /ɛ/ Pre-RTWE; 3.Phonation Post-RTWE; 4.At rest position Post-RTWE. They performed three minutes of exercise. Nine parameters at rest and eighteen during phonation were compared in these groups.

Results: Eight significant differences were found Pre-RTWE, three at rest and five in phonation: 1.At rest Pre-RTWE - laryngeal vestibule area (p = 0.026), epiglottis to pharyngeal posterior wall (PPW) distance (p = 0.011) and interarytenoid complex length (p < 0.001) were smaller in VNG; 2. Phonation Pre-RTWE : laryngeal vestibule area (p = 0.010), angle between PPW and vocal fold (VF) (p = 0.002), epiglottis to PPW (p = 0.034) and anterior commissure of the glottis to laryngeal posterior wall (p = 0.009) distance were smaller in VNG; tongue area was larger in VNG (p = 0.028). Only three differences were found Post-RTWE, two in phonation and one at rest: 3. Phonation Post-RTWE: angle between PPW and VF (p = 0.028) and the membranous portion of the VF length (p = 0.08) were smaller in VNG; 4.At rest Post-RTWE - epiglottis to PPW distance was smaller in VNG (p = 0.028).

Conclusions: These findings suggest that patients with vocal nodules may present distinct laryngeal behavior, which relies on the VT articulators interaction, and RTWE can promote corrective strategies in these patients.
A6197. Vocal and Laryngeal Aspects of Call Center Operators with Vocal Fatigue Complaints
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Introduction: Call center operators are voice professionals exposed to risk of developing voice disorders due to their intense voice use.

Objective: Characterize the vocal and laryngeal aspects of operators in a call center service with symptoms and complaints of vocal fatigue.

Method: Cross-sectional study, sample with 37 operators between 18 and 35 years old, with vocal fatigue symptoms. Data were collected immediately after the subjects’ workday. An adapted version of the Voice Symptom Scale and a questionnaire created for this research were employed. Speech samples and maximum phonation times were collected from the subjects. The voice perceptual-auditory assessment was analyzed by three blinded judges using the GRBASI scale and videonasolaryngoscopy was performed.

Results: Changes in the Voice Symptom Scale in the limitation, physical, and emotional domains. Maximum phonation times were shortened in 62.2% of the sample. 56.76% of the subjects had changes in the overall voice quality level according to the GRBASI scale, while 32.43% had changes in the otorhinolaryngology exam.

Conclusion: Call center operators show vocal symptoms pertaining to the limitation, emotional, and physical domains, shortened maximum phonation times, and changes in vocal-fold tissue. In addition, the perceptual-auditory analysis of their voices shows slight-to-moderate changes. It is found that the intense vocal demand among voice professionals is one of the factors related to vocal fatigue, which also extends to call center operators.

Keywords: Voice; Vocal fatigue; Voice disorders; Voice Quality; Larynx.

A6198. Correlation Analysis of the Visual Analogue Scale and the Craniofacial Dysfunction Index in the State School Teachers from the City of Londrina - Paraná
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Introduction: The functional disturbance of craniofacial region is one of the most common musculoskeletal impairments, affecting up to 50% of the population at some stage of adulthood. Specifically in teachers, the frequency of neck pain can be even higher as a result of their work activities and high workload. The Visual Analogue Scale is a subjective instrument that measures the intensity of the symptoms of craniofacial dysfunction, however, is a superficial assessment that can be influenced by cultural and psychological aspects. The Craniofacial Dysfunction Index is a tool that evaluates the craniofacial changes objectively by inspection, palpation, eximetry and analysis of cervical posture.

Objective: To analyze the correlation between Visual Analogue Scale and Craniofacial Dysfunction Index in teachers.

Method: The evaluation instruments were applied to 30 teachers. This study was approved by the Research Ethics Committee and the participants signed informed consent. The correlation analysis was obtained through the Spearman correlation test.

Result: Compared to participants who reported neck pain at Visual Analogue Scale score, 84.21% had Craniofacial Dysfunction Index. In accordance with the Spearman correlation coefficient, we observed a significant correlation between Visual Analogue Scale and Craniofacial Dysfunction Index ($r = 0.518, p = 0.003$).

Conclusion: The Craniofacial Dysfunction Index has a statistically significant correlation when compared to Visual Analogue Scale, which showed that the higher the Visual Analogue Scale score, higher the severity of Craniofacial Dysfunction Index. The use of Craniofacial Dysfunction Index in symptomatic individuals can make early diagnosis of craniofacial dysfunction in asymptomatic population.

A6200. Rehabilitation Speech Therapist in Child with Congenital Cardiopathy Post Stroke
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Introduction: Individuals with heart disease, especially presenting arrhythmias, are at risk for stroke, because it causes irregular blood flow facilitating the formation of clots within the heart and can reach the brain, reducing blood flow and causing a stroke. Among the professionals who can work in stroke rehabilitation is the speech therapist.

Objective: Describe develop intervention in children with post stroke congenital heart disease.

Case Report: Boy, 1 year and 7 months, with transposition of the great vessels fixed at 3 days of life and postsurgical arrhythmia. He was taken to the emergency room with complaints motor and speech, receiving a diagnosis of ischemic stroke, with hypotension area. Requested clinical assessment, still held in the emergency. Boy with speech therapy diagnosis of oropharyngeal dysphagia for liquids and facial paralysis. Among the therapeutic measures proposed were reduction therapy was performed for and guidance to parents about the child’s placement during feeding. Exercises were performed to tone and mobility articulators in a playful manner. After 8 treatments and clinical improvement in 11 days reevaluated the supply of liquid in glass with three holes toe, being checked normal swallowing. Approved by the ethics committee of the institution.

Conclusion: Speech therapy rehabilitation process contributed to the resolution of oropharyngeal dysphagia in the case and shows the importance of the speech therapist’s role in the acute phase of the disease, in order to propose techniques to ensure safety during feeding.

Keywords: speech therapist; heart disease; child.

A6203. Acquired Subglottic Stenosis in Children: A Video Uroscopy Evaluation
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Introduction: Subglottic Stenosis is defined as a narrow of the laryngeal region between the true vocal folds and the lower margin of the cricoid cartilage, this could be congenital or acquired. There are some predictor factors to the formation of acquired stenosis like a traumatic or prolonged intubation, excessive number of intubations, inadequate size of the tracheal tube.

Objectives: Describe findings in a video uroscopic evaluation in children with subglottic stenosis at a hospital.
**A6222. Newborn Hearing Screening: Prospective Longitudinal Study about Time of Evaluation**

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**Introduction:** When hearing loss is detected soon, its impact can be softened with early intervention, preventing some difficulties during child development. As a result, Brazilian government became mandatory the Newborn Hearing Screening (NHS) be executed during the first month of life starting at the first 24 hours.

**Objectives:** To analyze and compare the NHS results in babies without risk indicators for hearing loss at different moments (12, 24 and 36 hours); to characterize sociodemographic indicators; and to verify possible associations between them and NHS results.

**Methods:** Longitudinal and prospective study in a South Brazilian public hospital in which 113 mothers and their babies have participated. Babies were evaluated through Otoacoustic Emissions.

**Results:** With 12 hours of life, 80.5% of babies failed and 19.5% passed in NHS; with 24 hours, 47.8% failed and 52.2% passed; while with 36 hours, 27.4% failed and 72.6% passed. With respect to mothers, the median number of children was 2. Among them, 3.5% reported unemployment, 15% mentioned the use of psychoactive drugs and 5.3% of alcohol during pregnancy. Mothers’ unemployment and numbers of children were associated with babies retest. Babies whose mothers reported the use of alcohol and psychoactive drugs during pregnancy presented higher indices of retests.

**Conclusions:** Higher approval rate in NHS in babies with 36 hours of life raises a question about the length of hospital stay after delivery, to obtain better results in the first test. The borderline result for psychoactive drugs exposure and babies retest indicated the importance of sociodemographic investigation.

**Keywords:** Neonatal Hearing Screening; Age Factors; Time of Evaluation; Risk Factors.

**A6255. Tongue-Trills Exercise Period of Training Proposal Effect on Voice Quality of Women with Healthy Voices**

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**Introduction:** Physical training is repetitive and systematic process composed by progressive exercises. Overload is the principle of interval training, increasing intensity and volume in physiology exercise.

**Purpose:** to assess the Voice Training Proposal effect using tongue-trills exercises in women with healthy voices.

**Methods:** Randomized controlled trial study (Ethic in Research Committee # 1’998/624). Participated 30 women, ages from 18 up to 39 years old, with healthy voices, divided into two groups: experimental and control. All received six sessions of voice therapy, three times per week, 12 minutes each. Experimental group (15 women) tried the Voice Training Proposal (overload principle): tongue-trills exercise with intensity control and rest. Control group (15 women) had the traditional voice therapy: tongue trill exercise, without intensity/rest control. All volunteers were assessed before, after and after 30 days. Usual loudness, jitter, shimmer, amplitude variation (vAm), frequency variation (vf0), and soft phonation index (SPI) were assessed. The data were analyzed using ANOVA and Tuckey tests (p < 0.05).

**Results:** Just the experimental group had increase in voice loudness after (p = 0.000), and after 30 days (p = 0.008); decrease in jitter (p = 0.008) and frequency variation (p = 0.027) after 30 days, which did not happen to control group. On the other hand, the control group had significant improvement in soft phonation index only after traditional voice therapy (p = 0.034).

**Conclusion:** The Voice Training Proposal, using tongue trills exercise, was capable of producing effects on usual voice loudness, frequency variation and jitter in women with healthy voices.

**A6307. Equivalence of Two Scales of Assessment Oral Intake in Post Stroke Patients**

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**Introduction:** the use of scales helps clinical evaluation to determine the changes and the severity of dysphagia indicate better consistency for food, plan appropriate therapeutical interventions and monitoring treatment outcomes.

**Objectives:** assess the equivalence between scales Functional Oral Intake Scale (FOIS) and Functional Communication Measures - Swallowing (FCM/Swallowing) in the indication of oral intake for post dysphagia patients stroke and compare these scales with the severity of dysphagia.

**Methods:** a comparative cross-sectional study. The patients were evaluated with the Gugging Swallowing Screen Protocol (GUSS). After that, was selected the level of oral intake that fit within the FOIS and FCM/Swallowing scales, both were presented by seven levels.

**Results:** 48 (90.6%) patients had ischemic stroke and 5 (9.4%) hemorrhagic. The comparison of results between the scales indicates a statistically significant correlation between these assessing methods of the level of oral intake (kappa = 0.66). Differences were identified between three and five levels, and 4 patients scored four in the FOIS scale and three in FCM/Swallowing scale. Combining the severity of dysphagia...
GUSS) with the scales showed that for both a statistically significant association: FOIS (rs = 0.796) and FCM/Swallowing (rs = 0.791) indicating that the higher the degree of dysphagia, the worse the level of intake oral.

**Conclusion:** FOIS and FCM/Swallowing scales showed equivalence between them, although there is some distinction between levels of the scales. Moreover, it is observed association between the worst levels of oral ingestion and severity of dysphagia.

**Keywords:** stroke; swallowing disorders; scales.

**A6054. Different Stimulators of Hearing: A Literature Review of Performance Comparison**

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**Introduction:** The performance of hearing aids electric or acoustic stimulation are very variable. Factors involving the variability of results should be added to the different possibilities of existing technological devices on the market. The diversity of prostheses, that are made for different types of hearing loss, when combined can have a better perform of certain environmental conditions or listening skills.

**Objectives:** Set the best results obtained in the literature by different auditory stimuli associated: sound localization, sound condition and speech understanding.

**Data Synthesis:** Found articles 41 and of these, 30 were used in this study. The inclusion criteria of the articles were published in PubMed texts in English, the last five years in research with humans. The aspects analyzed were sound localization, sound condition of silence and noise and speech understanding.

**Conclusion:** Best sound localization performance was the bilateral implantation and bimodal stimulation compared to unilateral implant or amplification device. The bilateral implantation was superior compared with the bimodal stimulation. Best performance in speech understanding were the bilateral implant and bimodal stimulus users compared to unilateral devices. O stimulation of bilateral implant was superior of the bimodal stimuli. Best performance in sound condition was the combined devices compared to unilateral. Bilateral implants performed better in noisy environments and situation of the bimodal stimulation in situations environments with diffuse noise.

**Keywords:** Cochlear implant, bilateral, bimodal.
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A5919. Congenital Stenosis of the Larynx: A Case Report
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Introduction: Subglottic stenosis may be considered congenital or acquired and can be classified according to the Myer-Cotton system. The symptoms are similar to and involve mild dysphonia to episodes of apnea. The diagnosis is made with nasal endoscopy and treatment is determined by stenosis involving expectant pipelines, expansion, and tracheostomy.

Objective: The objective of this study is to report a case of congenital stenosis of the larynx, a rare and successful diagnosis in the diagnosis and treatment with symptom improvement.

Case Report: B.P.W.L, male, 5 months old, premature without neonatal resuscitation, ICU or intubation. In the first five days of life, he started with mild stridor. At 10 days of life, it was carried out nasofibrolaryngoscopy, which showed a posterior subglottic stenosis of 70% without nasofibroscope progression of 2.4 mm. A series of dilatation balloon was then performed. The patient still had symptoms, but softer. At 2 months and 18 days, he underwent a new procedure that showed subglottic stenosis in greater wedge the cricoid level of 50%. We opted for clinical management and expectation because the patient showed improvement of symptoms and not have more gains with new dilations.

Conclusion: Congenital stenosis of the larynx is a rare differential diagnosis of the various causes of stridor in children. The diagnosis is made with fiberoptic laryngoscopy, which allows us to see stenosis and classify it as congenital when we have a patient without previous episode of endotracheal intubation. Treatment varies management need to wait for the expansion or tracheostomy.

A5945. Cyst of Epiglottis in Males: A Case Report
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Introduction: The laryngeal cysts are rare, without predominance of sex and more prevalent between the 5th and 6th decades of life. Symptoms reach from hoarseness, globus, pain and dysphagia in adults, to airway obstruction, stridor and dyspnea in children.

Objective: The objective of this article is to report a case of epiglottis cyst in male, its symptoms, diagnosis and treatment performed.

Case Report: Patient 48 years old, male, complain of globus two months ago and night awakenings due to gagging. Refers mobility injury to swallow and nausea associated. It also presents phonation changes such as hoarseness and nasal voice. The exam is in oral cavity a simple cyst in valecule. It was performed a videolaryngoscopy for diagnostic confirmation and subsequent excision in surgical center.

Conclusion: Laryngeal cysts are rare, present, most of the time, a benign course and affect mainly people between the 5th and 6th decades. It is a generally asymptomatic disease whose diagnosis is clinical and confirmed by imaging exam. The treatment of choice is endoscopic excision.

A5950. Lingual Osteoma: Case Report and Literature Review
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Introduction: Lingual osteoma is a very rare clinical entity. There are less than 100 cases reported in the literature. It is a benign lesion with a yet unknown pathogenesis. It is usually a slow-growing tumor that is accidentally detected after physical and radiological examination. Clinically they are often asymptomatic, but some patients may refer some foreign body sensation on the throat. Treatment of choice is surgical excision and definitive diagnosis is confirmed by histopathological analysis.

Objective: Report a rare case of lingual osteoma and review the present literature about this entity.

Resumed Report: A 9-year-old boy was referred to our department with complaints of nasal obstruction, mouth breathing and rhonchi. On oropharyngeal examination, a brownish indurated tumor was accidentally detected on the posterior third of the base of the tongue. This had no influence on patient’s symptoms. The patient underwent surgical treatment, which consisted in excision of the tumor. Histopathological exam revealed findings consistent with osteoma. No signs of recurrence are seen on his follow up.

Conclusion: Osteoma of the base of the tongue is a rare benign tumor, which is even more unusual in males. Its etiology and pathophysiology has not been fully understood yet. The main treatment is surgical excision, which should be done cautiously to preserve tongue function. No recurrences have been reported.

Keywords: osteoma; tongue; osseous choristoma.

A5951. Obstructive Granulation Tissue after Adenoidectomy: A Rare Complication
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Introduction: Adenoidectomy with or without tonsillectomy is one of the oldest and most common procedures used to treat adenoid hypertrophy, which is one of the most typical etiologies of upper airway obstruction in children. Most procedures occur without complications. Adenoid can regrow if some tissue remains after surgery. The formation of granulation tissue is a normal stage on wound healing, but the emergence of a granulation tissue that blocks the airway is a surgical complication not yet described in the literature.

Objective: Describe a never reported case of a post-adenoidectomy granulation tissue obstruction and discuss its importance for clinical practice.

Resumed Report: A 9-year-old boy presented airway obstructive symptoms (nasal obstruction, mouth breathing and rhonchi) and evidences of adenoid hypertrophy on physical exam. He was submitted to a videobrassoscopy adenoidectomy. After histopathological analysis of the tissue, a reactive lymphoid hypertrophy was described. Three months later, the patient had a recurrence of the symptoms due to an obstructive mass on his nasooropharynx seen on videonasoscopy and CT. Transoral curettage of the mass was performed and the findings on histopathological analysis were consistent as granulation tissue, without malignancy or lymphoid tissue. The patient has no signs of upper airway obstruction on follow up.
Conclusion: The occurrence of an obstructive granulation tissue mass as a complication of adenoidectomy has never been reported on literature. It can be solved by simply excision of the mass.

Keywords: adenoidectomy; complications; granulation tissue.

A6075. Tonsillitis as an Oral Manifestation of Secondary Syphilis: A Review
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Introduction: Syphilis is a chronic disease caused by Treponema pallidum, transmitted by congenital or sexual contact, which can be divided in primary, secondary and tertiary stage. Oral manifestations of syphilis can be founded in all stages of the infection. The tonsillitis in secondary syphilis is a rare manifestation, particularly in the absence of other typical features, with few published case reports.

Objective: Illustrate the importance of considering the diagnosis of syphilis in patients with unusual and refractory tonsillitis.

Data Synthesis: Secondary syphilis manifestations are usually presented as cutaneous lesions, with or without genital involvement. However, 22 per cent of all cases have oral involvement, which can be more variable than those of the primary disease. Tonsillitis is the less common manifestation in secondary syphilis. These patients present bilateral or unilateral tonsillar hypertrophy and painful tonsillar ulceration. Unilateral disease may lead to a suspicious appearance mimicking malignancies such as squamous cell carcinoma of the tonsil and lymphoma. In addition to that, primary HIV infection, orogenital herpes simplex, pharyngeal gonorrhea and chlamydia infections can also be present with tonsillar involvement, showing an important differential diagnosis.

Conclusion: Cases of syphilitic tonsillitis have been described in patients with secondary disease. The absence of classical features, combined with the ability of syphilis to mimic other pathologies, may pose diagnostic difficulties. That is why physians may be aware of the atypical manifestations to make the right diagnosis and the adequate treatment.

Keywords: secondary syphilis, tonsillitis, oral manifestations.

A6086. Warthin Tumor: A Case Report
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Introduction: Papillary lymphomatous cystadenoma or Warthin’s tumor is the second most common cause of benign tumor of the parotid behind only pleomorphic adenoma. Its genesis is related to the presence of glandular remnant heterotopic within intraparotid or periparotid lymph nodes. Usually it presents as nodules parotid asymptomatic and slow growing. Despite its benign pattern, the lymphoid and epithelial origin leads to doubts about its histogenesis.

Objective: To present the case of a patient with Warthin tumor.


Conclusion: Warthin tumor is most common in elderly, smokers and Caucasian men. Histologically, Warthin’s tumor is an epithelial oncocytic forming projections and papillary cystic structures together with a benign lymphoid component. The diagnosis can be performed safely by fine needle aspiration biopsy. The preoperative diagnosis by cytology may be useful in the conduct decision in very elderly patients with multiple co-morbidities, as it allows the patient to be monitored without surgery. Imaging tests are not essential, but in some cases may be helpful. Rarely has malignant. Nevertheless, the treatment of choice remains partial Parotidectomy. Relapses of cystadenomas are rare and correspond often a secondary and multifocal development. The recurrence factors are multicentric and incomplete resection.

Keywords: warthin tumor, benign tumor, smoking.
A5981. Bilateral Vallecular Cyst: Case Report
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Introduction: Laryngeal cysts are rare benign lesions, which can be asymptomatic or present with symptoms of dysphagia, dysphonia, sensation of a foreign body in the throat and stridor. In many cases, they are identified during endoscopic examination or during autopsy.

Objectives: To present a case of a bilateral vallecular cyst in a 54-year-old male patient, previously diagnosed with paracoccidioidomycosis and who was submitted to autopsy.

Resumed Report: The examination at diagnosis was normal and the patient had no respiratory, digestive or vocal symptoms. Death occurred at age 54, the primary cause being dysphagia and node located near sternal furcula. Neck and chest Computed Tomography revealed expansive lesion in mediastinal region. Videolaryngoscopy showed left hemilarynx paralysis; anatomopathologic studies confirmed poorly differentiated carcinoma thymic. Patient underwent to cervicalotomy for lesion resection. However, the tumor was considered unresectable due to close contact with brachiocephalic vessels. He was referred to oncology and radiotherapy teams, and underwent to chemotherapy cycles and radiotherapy sessions with total tumoral mass reduction, with no necessity of further surgical approach.

Conclusions: Dysphonia can be the first clinical manifestation in thymic disorders; therefore, otorhinolaringologists must pay attention to this differential diagnoses. The main treatment of thymic tumors is surgical resection, but radiotherapy in addition to chemotherapy may be a good option for unresectable tumors.

Keywords: vallecular cyst, dysphagia, dysphonia.

A6220. Thymic Poorly Differentiated Carcinoma Firstly Expressing as Dysphonia: A Case Report
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Introduction: Thymic carcinoma is a rare condition, with no prevalence by sex or age. They are characterized by cytologic atypia and architectural, high mitotic activity and necrosis. One third are asymptomatic; remaining features local symptoms. Diagnosis is made by imaging and histopathology. Surgery is the first-line treatment, and the radiotherapy and chemotherapy also have their role, as seen in the case. The main prognostic factors are staging and histologic type.

Conclusions: Thymic carcinoma corresponds only to 0.06% of all thymic pathology and hardly ever, it firstly clinically manifests as dysphonia. Although surgical treatment is considered the main treatment, in this case chemotherapy associated with radiotherapy advanced with cure with no necessity of further surgical approach.

Conclusions: Dysphonia can be the first clinical manifestation in thymic disorders; therefore, otorrhinolaringologists must pay attention to this differential diagnoses. The main treatment of thymic tumors is surgical resection, but radiotherapy in addition to chemotherapy may be a good option for unresectable tumors.

Keywords: Thymic carcinoma, Dysphonia.
indentation of its posterior aspect. The patient was therefore submitted to open surgical repair of the congenital abnormality. After 2 months, no symptoms were present.

**Conclusion:** This case report illustrates the need to investigate congenital heart abnormalities in adult patients with dysphasia or dysphagia, regardless of the recent onset of symptoms.

**A5867. Epley Maneuver Effectiveness in Treating Patients with Benign Positional Paroxysmal Vertigo in Hospital in Ceará**

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**Introduction:** The benign positional paroxysmal vertigo (BPPV) is one of the most common causes of dizziness with peripheral vestibular origin. The highest incidence of BPPV is due to the involvement of the posterior semicircular canals.

**Objectives:** Identify patients with BPPV consequent to the involvement of the posterior semicircular canals. Analyze the effectiveness of the Epley maneuver as treatment of the disease

**Data Synthesis:** Retrospective study, based on data collection from medical records of patients from a hospital in Ceará. Medical records were obtained in the period from March-December 2014. Medical records with suggestive diagnosis of BPPV caused by the involvement of the posterior semicircular canals were selected. Diagnosis obtained by the Dix Hallpike maneuver. All patients underwent Epley maneuver. There were 33 patients who underwent Dix Hallpike test, 22 patients were selected, mostly composed of women 40-50 years old. Of the selected patients, 18 (51.8%) of them reported relief from symptoms after undergoing 1 Epley maneuver. 4 patients (18.2%) reported partial improvement of symptoms. They were carried out new maneuvers, observing clinical improvement. As therapeutic success was established: Dix Hallpike Test negative; clinical improvement reported by the patient. Patients were followed for period of 9 months

**Conclusion:** There was a higher prevalence of BPPV in women. The results showed early efficacy of Epley maneuver in the treatment of BPPV.

**Keywords:** vertigo; maneuver; benign.

**A5891. Gradenigo's Syndrome**

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The Gradenigo syndrome, a rare complication of otitis media, is characterized by suppurrative otitis, abducens nerve palsy and pain in the innervation area of the trigeminal nerve. Its occurrence is related to the involvement of the apex of the temporal bone and surrounding structures to this area.

JMNR, 64, presented dizziness, hearing loss, facial paralysis, facial pain, ear pain and difficulty to abduct the eye, all symptoms related to the right side. After antibiotic therapy and surgical treatment of otomastoiditis, there was significant clinical improvement, persisting only facial paralysis, mild facial paresthesia and hearing loss.

The triad of otitis media complicated with purulent otorrhea, pain in the innervation area of the first or second trigeminal nerve branch and paralysis of the abducens are findings of Gradenigo syndrome. Its cause may be explained by the spread of the infection by contiguity of the middle ear to the apex of the petrous part of the temporal bone through their aerated bone cells, located near the area of passage of the abducens and trigeminal nerves. In this case, there was no otorrhea, but the ear pain associated with aural fullness and otoscopy with hypervascular eardrum and yellowish retro- tympanic content suggest otitis media.

With the advent of antibiotics, complications of otitis media are becoming rare. The Gradenigo syndrome fits that profile. The early identification and therapeutic approach of otitis media prevent these complications.

**A5900. Deafness Post Traumatic Brain Injury**

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Traumatic brain injury (TBI's) are currently very frequent, especially in the temporal region, with potentially serious injuries. Can cause lesions of the facial nerve, middle ear, inner ear and brain. It is estimated that 30 to 75% of TEC's in adults involve time trauma.

FAG, female, 59, had sudden hearing loss left with slight dizziness, immediately after TBI by motorcycle fall two years ago. Since then, persists with hearing loss the left, and hyposmia emerged in the post-trauma. The pure tone audiometry shows profound sensorineural deafness left and take the right (from 4 kHz). CT of the temporal bone: Transverse bone fracture line in the pyramid petrosal left and gliosis area / enchephalomalacia the left frontobasal region. All other normal tests.

Transverse temporal bone fractures are less common than the longitudinal, 30% of the total. The fracture may cross the optical capsule or the structures of the inner ear canal, causing severe sensorineural deafness deep (especially at high frequencies), vestibular disorders and even facial paralysis. The olfactory posttraumatic is explained by the disorder CT evidence of left frontobasal gliosis, in view of the olfactory bulb is located at the top of the cribriform plate, the frontal cortex basis. In addition, the afferent postsynaptic neurons in the olfactory area converge in the cortical region of the frontal lobe, justifying hyposmia.

Several post-TBI sequelae may compromise the quality of life, causing loss of vital functions such as hearing. In this context, public awareness and preventive policies should be valued and encouraged.

**A5912. Case Report of Necrotizing External Otitis in Immunosuppressed Patient for Myelodysplastic Syndrome**

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**Introduction:** Necrotizing external otitis, an invasive disease, begins in the external auditory canal and can progress to the surrounding tissue, middle ear, parotid, mastoid and skull base. It is usually caused by Pseudomonas aeruginosa's infection. The treatment is based on anti-pseudomonal quinolones for prolonged durations. It classically affects elderly diabetic patients. Most case reports of patients with immunodeficiency refer to patients with acquired
immunodeficiency syndrome and other kinds of immunosuppression, remain rare.

**Objectives:** Describe Necrotizing External Otitis case in immunosuppressed patient.

**Resumed Report:** FRRA, 58 years old woman, with immunosuppression by myelodysplastic syndrome, hospitalized for decompensation of this disease, evolved with right ear otorrhea, hearing loss, peri auricular pain, edema, abundant crumblu secretion and stenosus of the external auditory canal. Computed tomography of mastoid, showed swelling of external auditory canal soft tissue, reducing its lumen, middle ear padding for hypodense materials and veiling of mastoid cells. 99m-technetium scintigraphy suggested osteoblastic process involving temporal bone’s mastoid portion. The audiometry showed conductive hearing loss bilaterally. Glicemia, hepatic and acute in ammation markers were unchanged and the blood count showed severe pancytopenia. Treatment with 1,5mg/day of intravenous ciprofl oxacin for 6 weeks was initiated and significant clinical and otoscopic improvement was observed. The patient remains in outpatient treatment with orally Cipro oxacin 1,5mg/day with six weeks forecast.

**Conclusion:** It is necessary to suspect necrotizing external otitis in immunocompromised patients with external otitis because they can possibly have a fatal outcome if they do not receive proper treatment.

**Keywords:** immunosuppressed, necrotizing external otitis, myelodysplastic syndrome.

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**A5920. Necrotizing External Otitis in Diabetic Patient**


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**Introduction:** Necrotizing External Otitis is a potentially lethal infection that usually starts in the external auditory canal and extends to the skull base occurs, primarily, in elderly diabetic patients and that even with prolonged antibiotic therapy, is associated with morbidity and mortality.

**Objectives:** Report a case of necrotizing external otitis in an elderly patient with metabolic syndrome, treated in the Emergency of the Base Hospital of the Federal District.

**Resumed Report:** Patient female, 79-year-old, carrier of Hypertension, Diabetes Mellitus and Dyslipidemia, with otalgia in the left ear for 2 months before admission. In addition, she had severe otorrhea and swelling of the external ear canal. Intravenous antibiotic treatment was started with Cipro oxacin and Clindamycin, replaced by the team of infectious diseases after performing scintigraphy with moderate uptake in the left mastoid region, indicating osteomyelitis. Then, it started Vancomycin and Tazocin. Due to changes in renal function, Vancomycin was replaced by Linezolid. Patient showed significant improvement in otologic picture with the institution of intravenous antibiotic therapy, with no more earache or otorrhea. There remains only to collapse of the external acoustic meatus without edema. During hospitalization showed instability of cardiac and renal involvement, evolving with acute lung swelling and acute kidney injury. Clinical support therapy was instituted together with Cardiology and Nephrology.

**Conclusion:** Necrotizing external otitis has considerable morbidity and mortality, mainly associated with skull base osteomyelitis. Therefore, aggressive medical therapy is needed.
Conclusion: Despite representing a benign tumor, its invasive pattern can affect cranial nerves IX to XII, and the facial nerve in its intratympanic path. The surgical approach is the treatment of choice, but the patient needs to be aware of possible complications due to the location and size of the tumor. Incomplete removal of the tumor in some cases requires radiotherapy.

Keywords: paraganglioma; jugular foramen; pulsatile tinnitus.

A5934. Tuberculous Otitis Media
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Introduction: Tuberculous Otitis Media is a rare condition, but results in important morbidity when occurs. It is one of Tuberculosis’ most common presentation seen by Otolaryngologists, together with laryngeal disease.

Objectives: Report a case of Tuberculous Otitis Media diagnosed in the Base Hospital of the Federal District.

Resumed Report: 31 years old patient with no comorbidities, presented with acute suppurative otitis media treated with Amoxicillin. Patient had significant improvement of otalgia, but otorrhea persisted. After 3 weeks, attended at the Emergency oh the Base Hospital of the Federal District with facial nerve paralysis, grade 6 injury according to House-Brackmann Classification. Clindamycin and prednisolone were prescribed. The patient had no improvement in facial paralysis, persisted with otitis media and remittent otalgia. It was seen multiple perforations of the tympanic membrane at otoscopic examination. Because of the multiple perforations, tuberculosis was thought to be the cause of the infection. CT scan of mastoid bones showed opacification of mastoid and tympanic cavity, CT scan of the thorax showed a pulmonary cavity formation. Treatment with Isoniazid, Rifampin, Pyrazinamide and Ethambutol was started.

Conclusion: The diagnosis of tuberculous otitis media is essential to start proper treatment and avoid complications, such as hearing loss and intracranial extension of the disease.

Keywords: otitis, tuberculous, perforations, tympanic membrane.

A5940. Spontaneous Involution of Vestibular Schwannoma: Case Report
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Introduction: Vestibulocochlear schwannomas are the most common benign tumors found in the cerebellopontine angle; however, its natural history is not yet fully understood. Most have slow growth and can remain asymptomatic throughout their lives or lead to symptoms such as ipsilateral hearing loss.

Objectives: To report a case of spontaneous involucrion of vestibular schwannoma.

Resumed Report: Female, 57, white. Reports hearing loss asymptomatic about seven years. The audiometry revealed hearing loss severe / profound in the right ear and the left ear is normal. Magnetic resonance imaging showed solid structure with anomalous enhancement in cochlear nerve right at the bottom of the internal auditory canal and cochlea, probably perineural origin, consistent with schwannoma. After one year, the clinical picture of the patient remained and the new MRI was normal, setting the spontaneous tumor involucrion.

Conclusion: The involution of neuromas is already a known fact and it is reported that up to 16% of cases there is a reduction of its dimensions spontaneously. MRI is the “gold standard” for the diagnosis and, currently, it is possible to identify tumors measuring only a few millimeters. From this case, we can confirm that the voluntary regression of acoustic neuroma is a fact as possible in the natural history of the disease.

A5949. Profile of Patients Submitted to Tympanoplasty Surgery in a Medical Residency Program in Otorhinolaryngology
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Introduction: Tympanoplasty is a surgical procedure for chronic perforation closure of the tympanic membrane or ossicular chain reconstruction. The size and location of the drilling depend on the infectious agent, the severity of the infection and its chronicity.

Objectives: This study aims to evaluate the postoperative results and complications in patients undergoing tympanoplasty in a medical service of otorhinolaryngology residency.

Methods: A study was conducted prospectively with patients submitted to tympanoplasty in Otorrinos Hospital in Feira de Santana, Bahia, during the period from 2010 to 2015. The study included patients with chronic otitis media and tympanic membrane perforation, indicating for surgical correction. Patients were followed postoperatively for eight months. Those who not attending the return visits were excluded.

Results: We analyzed 144 patients, aged between 10-75 years. Of these, 89 (62%) were female and 4 had wound infection. Regarding the integrity of the tympanic membrane, 46 (32%) had residual perforation and 21 (15%) reported worsening of hearing at the end of follow-up.

Conclusion: Chronic otitis media is associated with significant reduction in quality of life in patients with perforation in the tympanic membrane by intermittent frames of otorrhea, however, tympanoplasty surgery is still associated with high complication rate. This depends on the surgeon’s skill and use of appropriate techniques, and good follow-up postoperatively.

Keywords: complications; otorrhea; tympanoplasty.

A6007. Language Delay by Congenital Cholesteatoma
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Introduction: The Congenital cholesteatoma results from embryological inclusion of epidermal debris behind the intact tympanic membrane, is rare and usually presents as an otoscopic or surgical findings. They account for about 30% of cholesteatomas of childhood and should be remembered as a cause of recurrent ear infections and language delays.
Objectives: To call attention to differential diagnosis of middle ear cholesteatoma including the impact these diseases can cause.

Resumed Report: J.V.R., 2 years and 1 month, male with medical report of recurrent fetid otorrhea in the left ear and delayed psychosocial development. First episode after 9 months of age, with a mean of 7 episodes a year. Otoemissions absent in neonatal screening of the 1st month, changes in tympanometry and in psychotherapy and speech therapy since the 3rd month. Treated by pediatric for 2 months as gastroesophageal reflux and with different antibiotics by the otorhinolaryngologist without success, suspecting the presence of chronic otitis. The exam showed fetid otorrhea and left ear polyp. Computed tomography showed cholesteatoma. Indicated and performed mastoidectomy classical radical to remove the disease.

Conclusion: During the infectious processes of the middle ear, the child receives distorted sound stimuli, explaining the phonetic errors. The first years of life are critical to the development of children’s language, the hearing loss even no permanent, can lead to cognitive and social backwardness. Proper treatment in the first three years of life is very important because this is the stage for further development of the language.

**A6030. Cylindroma of the Auditory Pavilion**

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**Introduction:** Cylindromas are benign tumors originated from apocrine glands. 90% are usually located on the scalp, head and neck (6% of these on the ear). They are more common in white females between the 5th and 8th decades. Malignant transformation is very rare.

**Objectives:** To describe a case of cylindroma of the auditory pavilion.

**Resumed Report:** 67 year-old female, presented with a lesion on the concha of the left auditory pavilion. It had been removed eight years prior but returned two years before the consult. At palpation, the lesion was smooth and not painful with about 4 cm in diameter. Mastoid computed tomography showed a well-delimited, homogeneous lesion in the left concha, without invading nearby structures. It was surgically removed and pathological analysis revealed cylindroma.

**Conclusion:** Cylindromas are relatively rare tumors with slow growth, but depending on the location may cause mass effect and other functional symptoms. Surgical extraction is the only known effective treatment, but it does not stop recurrence after a few years.

**A6036. Metastasis in Internal Auditory Canal: A Case Report**

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**Introduction:** Metastasis in internal auditory canal (IAC) is a rare, accounting for 0.3% of the cerebellopontine angle lesions. The most common sites of primary tumors with metastasis to the CAI, in decreasing order, breast, lung and kidney. There is high probability of bilateral implantation, as well as the involvement of other cranial nerves.

**Objective:** To report a case of patient seen in a University Hospital with suspected renal carcinoma metastasis to the internal auditory canal.

**Case Report:** MAF, male, 56 years old, with a history of left facial palsy 5 months ago, followed by onset of hearing loss and non-pulsatile tinnitus ipsilateral. Also with dry cough and dysphonia. He was subjected to radical nephrectomy for kidney cancer, currently in chemotherapy with sunitinib. Physical examination shows left peripheral facial palsy, hemi tongue atrophy and nasofibrolaryngoscopy left velopatine failure and left vocal palsy. Audiometry showed anacusis left. Skull MRI lesion measuring 1.7 x 1 cm in left CAI and another discontinuous lesion 1.3 cm involving complex IX, X and XI to the left. Patient did not undergo biopsy injury in CAI for lack of clinical conditions for performing surgery.

**Conclusion:** Clinical facial palsy and primary tumor location in breast, lung or kidney increase the suspicion of malignancy. Despite the appearance of the lesion on MRI resemble the vestibular schwannoma, this facial paralysis occurs late.

**Keywords:** metastasis, internal auditory canal, kidney cancer.

**A6047. Interesting Case Report: Inner Ear Lipoma**

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**Introduction:** Inner ear Lipoma belongs to a group of rare benign pathologies of the cerebellopontine angle 0.15%. More frequent in Caucasians between the 3rd and 5th decade of life. Clinical and audiological resembles other tumors of this region as vestibular schwannoma frequently in 90% of cases. Its management is conservative and surgical treatment only in cases of severe symptoms.

**Objectives:** Present an interesting case report about a rare otologic condition.

**Resumed Report:** Female patient, 52, came to the otolaryngology clinic complaining of bilateral ear fullness, worse in left ear for 05 months. In the treatment of asthma and hypertension in regular treatment with Losartan, salbutamol, budesonide and Omeprazole. Otoscopy was visualized a yellow mass in the posterior superior quadrant and presence of retraction in accid portion of the tympanic membrane of the left ear, the rest of the physical examination no visible significant changes. Audiometry with mild sensorineural hearing loss in the right ear, and loss of moderate mixed type in left EAR; Tympanometry curve type “A” EAR right and type “B” in the left EAR. Mastoid tomography showed the presence of the soft parts in the left ear. It was then requested resonance mastoid with suggestive of lipoma in the left inner ear. The patient was then referred for neurosurgical evaluation determined that expectant management with annual control.

**Conclusion:** Thinking about the pathologies of the inner ear, do not forget the possibility of lipoma.

**Keywords:** LIPOMA, EAR PLENIITUDE, OTOLOGIC
A6058. Otogenic Skull Base Osteomyelitis by Candida sp
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Introduction: Skull base osteomyelitis is a life-threatening disease defined as an osteitis of the temporal bone and the skull base. It most originates from in amutation of the external auditory canal as the most origin by bacterial infections, witst Pseudomonas aeruginosa the most common. Fungal pathogens are rare, with Aspergillus the most common. This disease usually occurs in diabetic patients and or any immunosuppression.

Objectives: Report a fatal case of otitis with progression to skull base osteomyelitis by Candida sp, a rare etiology for this disease.

Resumed Report: A 70-years-old woman, diabetic and hypertensive, was admitted to hospital having suffered from earache, ototrea, hear loss and lock-jaw at left side for three months. She had treated with orally antibiotic unsuccessfully previously. There was edema at left external auditory meatus and pain when palpating temporomandibular joint. She was hospitalized for intravascular antibiotic treatment on suspicion of skull base osteomyelitis. Computed tomography showed infiltrative appearance in the petrous part and skull base with signs of bilateral bone erosion, more intense at left side. Magnetic resonance added that the infiltration through the foramen magnum, occupying the left intervertebral foramen to C2, involving temporomandibular joint at left side. It was performed a biopsy, that revealed the presence of Candida sp. Although the use of amphotericinB and uconazol, the patient had no improvement and dyed after 91 days of hospitalization.

Conclusion: Skull base osteomyelitis is a serious disease, should be suspected in patient with chronic earache and diabetes, and discover its etiology for the best treatment.

A6109. Progressive Hearing Loss and Cochlear Implant in a Patient with MNGIE Disease: Case Report
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Introduction: MNGIE (Mitochondrial Neurogastrointestinal Encephalopathy) is a genetic disease that affects especially the digestive system and the nervous system. The signs and symptoms often begin at age of 20. Among changes in the nervous system, we found symptoms of peripheral neuropathy, ptosis, ophthalmoplegia, and hearing loss at different levels of severity.

Objectives: To report a case of rapidly progressive hearing loss and cochlear implant in a patient with MNGIE syndrome, a rare disease and little reported in the literature.

Resumed Report: Patient R.C.C., 23, daughter of consanguineous parents, arrived at the Hearing Health Service of the Hospital Universitário de Brasília in October 2013, with a history of progressive hearing loss for five months, insidiously, without other otoplogic symptoms associated. She denied significant ENT antecedents. She had been Lipoatrophic Diabtes associated with hypertriglyceridemia and hypogonadotropic-hypogonadism, and steatohepatitis/gastritis with significant weight loss. Her audiometry in January 2014, which showed moderately severe sensorineural hearing loss at right and severe at left ear. BERA demonstrates the absence of waves. MRI suggesting leukodystrophy of metabolic origin. However, the patient developed rapidly progressive hearing worsens, and after 6 months led to profound bilateral loss. The Cochlear implant had been contraindicated by Neurology Service. In March 2016 the patient returns with diagnosis of MNGIE.

Conclusion: As there are successful cases of cochlear implants in the literature and no absolute contraindication, was chosen to restart the Cochlear Implant program for the patient. This was established on April 2016 on his right ear, successfully.

Keywords: MNGIE, Hearing loss, Cochlear Implant.

A6132. Coexistence of Superior Semicircular Canal Dehiscence and Signs of Fenestral Otosclerosis in Patients with Conductive Hearing Loss: Case Report
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Introduction: The syndrome caused by superior semicircular canal dehiscence (SSCD) and otosclerosis have overlapping clinical manifestations, making their differentiation often times quite difficult. The coexistence of these two pathologies is rare.

Objectives: This study seeks to document a case of simultaneity of these diseases and to emphasize the importance of considering this fact before a stapedectomy.

Resume Report: Male, 39 years old, with hearing loss on right side since four months ago. No history of medium otitis, vertigo or tinnitus. Family history of otosclerosis. Audiogram shows mild hearing loss on right side in low frequencies and lack of bilateral acoustic re exes. CT scan of the temporal bone shows fenestral otosclerosis and SSCD on the right side.

Conclusion: Otosclerosis is an osseus dyscrasia limited to the temporal bone with clinical incidence of approximately 1% and 10% histologically. Mostly, there is a conductive hearing loss and absent acoustic re exes. The definite diagnosis is made intraoperatively with confirmation of stapes fixation on the oval window. SSCD is characterized by bone loss in the superior portion of the canal by CT scan of the temporal bone in the Pöschl plane. SSCD syndrome is rare and clinical manifestations are due to the existence of a pathologic third window. Also occurs with conductive hearing loss in low frequencies, but with the presence of acoustic re ex, among other symptoms. It is possible that in the coexistence of these conditions, the third window phenomenon does not occur and the stapedectomy shows the SSCD syndrome, causing hearing deterioration.

A6144. Unilateral Progressive Deafness as Single Sign of the Acoustic Neuroma
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Introduction: Vestibular schwannoma or acoustic neuroma is a benign tumor that grows from Schwann cells involving the vestibulocochlear nerve (pair VIII) in the cerebellopontine angle and internal acoustic meatus. It is the most common tumor of the cerebellopontine angle, corresponding to nearly 70% of cases in this location. Its incidence is around 1
Case per year for each 100,000 inhabitants. The clinical manifestations vary with the location and size of the tumor; hearing loss, tinnitus and vertigo are associated to the location intracanalicular segments. In cases of compression of the brainstem, can occur pain, paresthesia or facial paralysis.

**Objective:** To report a case of a patient with acoustic neuroma whose only symptom was unilateral hypoacusis.

**Case Report:** O.M.N.F., 56 years, male, complaining of progressive hypoacusis in left ear three years ago. Denies appearance of tinnitus, vertigo or neurological complaints. The otoscopy in left ear has tympanosclerosis posterior and anterior neotimpano area. The audiometry showing profound sensorineural hearing loss to the left. MRI of the skull showing expansive formation in the cerebellopontine cistern and inside the internal auditory meatus to the left, with signal intensity and heterogeneous enhancement (2 × 1, 7 × 1, 4 cm).

**Conclusion:** The Acoustic schwannoma, although one of the most common tumors of the cerebellopontine angle, presents a low incidence in the general population. This being so, it is important that we know also their atypical forms of presentation, as in this case.

A6162. Lesion of the Petrous Apex with Nasal Extension: Case Report

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**Introduction:** The diagnosis of petrous apex lesions may depend on the condition growing stage. Its signs and symptoms are due to involvement of adjacent neurovascular structures and can be nonspecific in its course.

**Objective:** To Report a case of unusual behavior of lesions in the petrous apex.

**Resumed Report:** D.M.R, 44 years, female, began framework facial pain in frontal and temporal associated with nasal obstruction. She received treatment for sinusitis, with improvement. One month later, she complained of right ear fullness, and had diagnosis of Acutis Otitis Media. She was treated treated with antibiotics, with partial improvement. Mastoid tomography demonstrated chronic otomastoiditis on the right side and bone destruction outbreaks of petrous apex, adjacent to the carotid canal. Furthermore, the ears Resonance showed solid lesion in the right petrous apex extending to the middle ear and nasopharynx. PET-CT showed lytic hypermetabolic injury in the petrous apex on the right side. The biopsy by tympanotomy showed no conclusive results. Three months later, she developed worsening of fullness, tinnitus and pulsation in the right ear. She underwent to tympanomastoidectomy and biopsy clear out the nasal cavity. The histopathology of the middle ear material and the nasal mucosa concluded to nonspecific chronic in ammation.

**Conclusion:** The diagnosis of petrous apex lesions depends on the, computed tomography and magnetic resonance imaging of temporal bone. The combination of the findings of these procedures, in addition to the physical examination help diagnose and guide the conduct.

A6191. Osteoma of the Middle Ear and Otosclerosis: Case Report  
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**Introduction:** Osteoma is a benign bone tumor of rare location in the middle ear. Here we present a case of this tumor as intraoperative incidental finding during surgical for treatment of otosclerosis.

**Objective:** To present the case of middle ear osteoma in-patient with otosclerosis.

**Resumed Report:** Female patient of 39 years with bilateral conductive hearing loss due to otosclerosis. First, she was treated surgically in the left ear 4 years ago. The patient developed worsening of hearing in the right ear during pregnancy and was submit stapes surgery, when it was accidentally found osteoma on ipsilateral middle ear.

**Conclusion:** Osteoma may occur in the middle ear of young woman with otosclerosis.

A6198. Greater Superficial Petrosal Nerve Schwannoma: Case Report and Literature Review  
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**Introduction:** Greater superficial petrosal nerve schwannoma is a very rare type of facial nerve schwannoma. Patients could have complain of hearing loss, tinnitus, facial palsy, headaches, and redness of eye and decreased tear secretion.

**Objective and Methods:** Here we present a case of a 35 years old man with tinnitus and progressive hearing loss in the left ear. Examination revealed normal otoscopy and facial mimics. The patient had no complaint of xerophthalmia. Audiometry showed mild sensorineural hearing loss in the left ear, BERA with prolonged latency of wave V at the same ear, Vectoetronistagmography with periphery deficitary vestibular dysfunction in the left side. MRI showed a solid mass with 2.1 × 1.8 cm in the left middle cranial fossa, over the superior edge of petrous bone with local erosion and extension to the Internal Auditory Canal. Computed Tomography revealed additional erosion of the tegmen tympani with invasion to the tympanic cavity. The patient underwent complete removal via subtemporal intra and extradural approach combined with transmastoid approach. The lesion seemed to origin in the Glasscock triangle, from Greater Superficial Petrosal Nerve, a branch of Facial Nerve. Histology revealed delineation of Verocay bodies and immunohistochemistry was compatible with Schwannoma. The postoperative course was without complications, patient had no facial palsy or xerophthalmia, just occurred a little worsening in hearing thresholds in left ear.

**Discussion:** Only 0.8% of petrous mass lesions are facial schwannomas. There are only 25 cases reported in literature. This tumor can involve any segment of the nerve...
A6219. Malignant Otitis Externa with Skull Base Complication: Case Report
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Introduction: Chandler (1968) have described “Malignant otitis externa” (MOE) due to its increasingly aggressive behavior and its ability to not be restricted to the external auditory canal (EAC), sometimes affecting the middle ear and skull base.

Case Presentation: Male, 66, diabetic, complaining of intense ear pain and left otorrhea for 20 days. Facial expression preserved and granuloma in CAE. Granuloma culture showed Pseudomonas aeruginosa sensitive to cipro oxacin. Patient hospitalized, initiated oral cipro oxacin and otologic drop according to antibiogram. ESR (erythrocyte sedimentation rate) 28. Other biochemical tests results are normal, except glucose. Patient left hospital asymptomatic with oral antibiotics. After a couple of weeks, the patient presented intense ear pain and facial paralysis, House-Brackman grade IV. Performed facial nerve decompression with partial response (paralysis grade III). He remained stable for four months, and then returned with poor general condition, vomiting, bedridden, dysphagia and dysarthria. Otolaryngologic and clinical scan were done and evidenced leukocytosis, high blood glucose, VHS 120 and fever. Absence of otorrhea and otalgia. CSF negative. Mastoid CT showed retropharyngeal collection dissecting to danger space with continuity on the left mastoid. CT scan were done and evidenced leukocytosis, high blood glucose, VHS 120 and fever. Absence of otorrhea and otalgia. CSF negative. Mastoid CT showed retropharyngeal collection dissecting to danger space with continuity on the left mastoid. Highlight in clivus topography. MRI of the brain with contrast scan were done and evidenced leukocytosis, high blood glucose, VHS 120 and fever. Absence of otorrhea and otalgia. CSF negative. Mastoid CT showed retropharyngeal collection dissecting to danger space with continuity on the left mastoid. CSF negative. Mastoid CT showed retropharyngeal collection dissecting to danger space with continuity on the left mastoid. CSF negative. Mastoid CT showed retropharyngeal collection dissecting to danger space with continuity on the left mastoid. CSF negative. Mastoid CT showed retropharyngeal collection dissecting to danger space with continuity on the left mastoid.

Results: Patient left hospital asymptomatic with oral antibiotics. After a couple of weeks, the patient presented intense ear pain and facial paralysis, House-Brackman grade IV. Performed facial nerve decompression with partial response (paralysis grade III). He remained stable for four months, and then returned with poor general condition, vomiting, bedridden, dysphagia and dysarthria. Otolaryngologic and clinical scan were done and evidenced leukocytosis, high blood glucose, VHS 120 and fever. Absence of otorrhea and otalgia. CSF negative. Mastoid CT showed retropharyngeal collection dissecting to danger space with continuity on the left mastoid. CT scan were done and evidenced leukocytosis, high blood glucose, VHS 120 and fever. Absence of otorrhea and otalgia. CSF negative. Mastoid CT showed retropharyngeal collection dissecting to danger space with continuity on the left mastoid.

Final Comments: Patients with MOE must have an adequate clinical follow-up and long-term treatment for early diagnosis of complications and rehabilitation of the sequelae.

A6241. Bone-Anchored Hearing Aid in Children under 5 Years: A Case Report
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Introduction: The bone-anchored hearing aid is an amplification system based on bone conduction. It transmits sound directly into the inner ear, transposing the impedance of the skin and subcutaneous tissue. In Brazil, it is authorized for children over 5 years old with mixed, conductive and/or unilateral sensorineural hearing loss.

Objective: Describe two patients with 2 and 3 years of age who underwent the BAHA surgery and test the security of the procedure and hearing abilities of these two children.

Method: Analytical and prospective case series study. The questionnaires ITMAIS and MUSS, adapted for Brazilian Portuguese, were applied in the subjects' families before and after the surgical implant. Hearing assessment and imaging tests were performed.

Results: Significant differences were found in the questionnaire results after three months of implant activation. Patient 1 presented the following results: ITMAIS 70% (before) and 85% (after); MUSS 55% (before) and 70% (after). Patient 2: ITMAIS 87.5% (before) and 100% (after); MUSS 85% (before) and 90% (after). Both patients were activated with the BAHA system (Bone Anchored Hearing Aid) and had adequate osseointegration of the implant.

Conclusion: BAHA surgery in these two cases were both safe and effective, promoting improvements in the language and hearing abilities of these children.

A6256. Petrified Ear - Case Report
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Introduction: Petrified ear is a rare condition in which ears become stone-hard. Generally, patients are asymptomatic, and present metabolic disorders that lead to hypercalcemia and ectopic calcification or, less common, ossification.

Objectives: To report a case of petrified ear due to a possible metabolic disorder and provide the awareness of importance in the investigation of subclinical diseases in this pathology.

Resumed Report: An 82-year-old man sought medical help referring a stiffening of his left auricle 1 year ago. His other complaint was hearing loss even though he was using individual amplification device. No history of: local trauma, tinnitus, earache, otorrhea, vertigo. Clinical examination of the left ear revealed that the antihelix of the pinna was rigid, with normal configuration, no phlogistic sign, painless to manipulation. No other changes on the rest of examination. The CT scan of ear and mastoid revealed bilateral calcification on pinna, more evident on the left side, with no other changes. Laboratory investigation indicated high level of TSH (38.72mu/ml), with no other variation. The biopsy was not performed on this patient. He was referred to endocrinology service for clinical follow-up, but didn’t have any improvement on his condition yet.

Conclusion: Although its etiology is unclear, the calcification of auricular cartilage is a very rare condition that can be linked to metabolic or endocrine disorder. Therefore, it is essential investigate subclinical diseases in the presence of this pathology.

Keywords: petrified ear, calcification, cartilage.

A6260. Bilateral Sudden Deafness as Initial Expressions of Neurosyphilis
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Introduction: The involvement of the central nervous system caused by Treponema pallidum can lead to neurosyphilis. Meningeal invasion by the treponema is early, 12 to 18 months after infection, but disappears in 70% of cases without treatment. Neurosyphilis can be classified according to chronological criteria (early and late) or clinical (asymptomatic and symptomatic forms). Among the symptomatic forms of NS, we found two large groups: parenchymal and meningoencephalitis. The meningoencephalitis forms manifest most often as subacute meningitis affecting the cranial nerves, causing arthralgia, wasting, and progressive myelopathy.

Objectives: Report a case of bilateral sudden deafness as a first neurosyphilis symptom.

Resumed Report: A male patient, 29 years old, complaining of bilateral hearing loss of sudden onset for about two months. He denied associated symptoms of dizziness and tinnitus. He denied association with febrile infections. He
had a history of having had self-limiting skin rash, about 6 months ago, that lasted a few days. In addition, reported having used illicit drugs in recent months. Physical examination was normal. The audiometry performed on the initial consultation showed bilateral Cofosis. The patient underwent various laboratory tests for hematological, metabolic, rheumatologic, immunologic and infectious evaluation. The results were positive for HIV infection type 1 and the VDRL was positive with 1/1024, confirming the diagnosis of AIDS and neurosyphilis. Temporal bone CT scan revealed no alterations.

Conclusion: Although rare, neurosyphilis can cause sensorineural hearing loss, many times irreversible. Careful anamnesis and laboratory tests may allow rapid diagnosis and treatment of this serious disease.

A6263. Characterization of Acute Tinnitus in Patients with Sudden Hearing Loss Treated with Intratympanic Steroid
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Introduction: Tinnitus is a symptom caused by various diseases, including sudden deafness and can severely affect quality of life.

Objective: Characterize the acute tinnitus in patients with idiopathic sudden hearing loss treated with intratympanic steroid.

Methods: Analytical, prospective and longitudinal study with 38 subjects evaluated by audiometry, otocoustic emission, Tinnitus Handicap Inventory (THI) and Visual Analog-Scale (VAS) before treatment and after three months.

Results: The annoyance due to tinnitus mean results were respectively for Oral Steroids-Group 1: VAS (7.69 - 5.15); THI (64.77 - 49.92); and for Rescue Therapy-Group 2: VAS (8.30 - 6.00); THI (72.20 - 51.60). The results showed significant improvement in both groups with significant differences intra groups before and after, but not between the groups.

Conclusion: Acute tinnitus associated with idiopathic sudden hearing loss after treatment showed improvement in 74% of the patients on THI and 70% on VAS. There was no additional benefit on treating these patients with intratympanic steroids on rescue.

A6277. Ramsay Hunt Syndrome: Case report and Literature Review
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Introduction: Described in 1907 by James Ramsay Hunt, it is defined as Ramsay Hunt Syndrome (RHS) a peripheral facial paralysis accompanied by erythematous and vesicular rash on the ear pavilion or mouth, caused by varicella-zoster virus (VZV), being the second cause of atraumatic facial paralysis.

Objectives: Authors describe a case of RHS, treatment and literature review.

Resumed Report: G.R.N., 11 years-old-male, Caucasian, born and resident in Bom Jardim-MA sought the Otorhinolaryngology Service, ORL-Bosaipo, referring ache and vesicles in the right ear, for 4 days. Two days after the onset, the symptoms were associated with eye pain and facial paralysis. Treatment was initiated with analgesics, ocular lubricant, prednisone (60, 40, 20mg each 5days) and acyclovir (10days). There was a significant improvement of symptoms within 7 days, and regression of facial paralysis on the 10th day of treatment.

Conclusions: Earache, ear vesicles and facial paralysis are the most common manifestations, other signs and symptoms are tinnitus, hypoacusis, nausea, vomiting, dizziness and nystagmus. Usually occurs in elderly and immunosuppressed, less frequent and severe in children. The pathophysiology is attributed to the reactivation of VZV in the geniculate ganglion of facial nerve. Diagnosis is clinical, doubtful cases must recur to serology. Treatment with acyclovir, corticosteroids, symptomatic and ocular protectors are recommended and should be initiated within 72 hours. RHS paralysis is more severe compared to Bell's paralysis and hardly achieves total recovery. The prognosis is variable, depending on the severity of the initial symptoms and treatment precocity.

A6284. Vestibular Evoked Myogenic Potential: Its Use in Sudden Sensorineural Hearing Loss
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Introduction: Sudden sensorineural hearing loss (SHL) has uncertain origin and evolution. Vestibular evoked myogenic potential (VEMP) estimates of the vestibular path-way that cannot be analyzed by the other entrance examinations, which can be helpful in diagnosing the extent of hearing damage in these patients.

Objectives: To investigate the clinical applicability of VEMP in patients with SHL.

Data Synthesis: This is a systematic review. Searches were conducted in the databases PubMed/Medline, SciELO and LILACS. Data were tabulated. We found 45 articles, 15 of these made up the study by fitting either the inclusion factors. The objective of 60% of the studies was to determine whether the VEMP could be used as predictive hearing recovery.

Conclusion: VEMP may be useful as hearing recovery predictor in patients with sudden sensorineural hearing loss, justifying the implementation of such examination in this population.

A6297. Adenocarcinoma of the Endolymphatic Sac: Case Report
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Introduction: Endolymphatic sac tumors are rare tumors of the temporal bone. They are slow growing and locally invasive low-grade adenocarcinomas, and, due to their location, surgical resection often requires the combined action of the otolaryngologist and the neurosurgeon.

Objective: The objective of this report is to describe a case of adenocarcinoma of the endolymphatic sac and reinforce the importance of considering this diagnosis when facing a tumor on the temporal bone.

Resumed Report: Female patient, 34 years old, presented with headache, vertigo and severe hearing loss for 15 months. In addition, she presented episodes of intracranial hypertension and underwent a ventricular peritoneal shunt. The imaging tests revealed hypervascular massive lesion in the left temporal bone extending to the posterior fossa and tympanic cavity. A complete resection of the lesion was attempted but was unsuccessful due to intense bleeding. The histopathological report revealed the diagnosis of adenocarcinoma of the endolymphatic sac. The patient underwent

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embolization for new surgery. The tumor was resected in the posterior fossa, the meninges, temporal bone and tympanic cavity.

**Conclusion:** Adenocarcinoma of the endolymphatic sac was first described in 1984 and only few cases have been reported in the literature, although it is suspected that this disease is underdiagnosed. The most accepted current treatment is surgical resection without radiotherapy. Therefore, for proper management, it is important to know this neoplasia and entertain the possibility of this diagnosis when faced with a suspected case.

**Keywords:** adenocarcinoma; endolymphatic sac tumors; temporal bone.

**A6300. Chronic Otitis Media, Myiasis and Facial Paralysis - A Systematic Review and a Case Report**

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**Introduction:** Otitis media (OM) is considered a potentially severe disease due to the risk of complications. The evolution of chronic otitis media results in otosrhea, very often fetid. This fact can attract, by the smell, flies into the canal and give rise to myiasis.

**Objectives:** It is intended to report a case of myiasis in the ear of a patient with chronic otitis media, culminating in complete peripheral facial paralysis, and make a literature review about the subject.

**Data Synthesis:** In JASO, 26 years, bearer of cholesteatoma chronic otitis media in the right ear, underwent tympanomastoidectomy open cavity. He presented otorrhoea on the same side, not seeking medical attention for treatment of frame. It was observed myiasis framework of this ear, progressing to peripheral facial palsy grade V. To the literature review, it was found two articles related to Myiasis and Chronic Otitis Media, both showing how important is care and hygiene standards in order to decrease the incidence of these infestations. On the issue Chronic Otitis Media and Facial paralysis Peripheral, there were 10 articles, all showing how rare is the combination described above, but showing the importance of diagnosis and rapid intervention.

**Conclusion:** Peripheral facial palsy (PPP) may result from chronic otitis media. Nerve insult can occur from by bone erosion caused by granulation tissue.

**A6317. Postoperative Complications of Cochlear Implant in a Patient with Mondini Dysplasia - Case Report**

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**Introduction:** Mondini dysplasia, described in 1791 by Carlo Mondini, is morphologically characterized by a helical cavitation of the otic mesenchyme, which leads to the abnormal development of the cochlea in which the only basal turn is clearly identified, while the remaining turns show variable degrees of development but never reach normal proportions.

**Objective:** To report the case of a 3 years and 4 months old girl referred to our hospital with clinical presentation of deafness and no development of speech, having failed the test of otoacoustic emissions bilaterally and presented absence of responses in Brainstem Evoked Response Audiometry (BERA).

**Resume Report:** The diagnoses of Mondini Dysplasia was established by means of clinical history and temporal bone high resolutive CT scan, which showed characteristic abnormal changes in both inner ears. After clinical discussion, we opted to perform cochlear implant in the patients right ear. During the procedure, there was abundant drainage of peri-lymph from the oval and round windows, which was corrected by placement of fat and fascia. However, the patient developed multiple episodes of bacterial meningitis in subsequent years, which culminated in the surgical removal of the implant after three years of use.

**Conclusion:** The case bring to light the discussion of congenital cochlear malformations and their radiological classification in the framework of its applicability in surgical planning of cochlear implants and prevention of its possible postoperative complications.

**Keywords:** Mondini, hearing loss, congenital malformation.

**A6327. Tuberculous Otitis Media: Case Report of Two Atypical Cases**

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**Introduction:** Chronic otitis media with or without discharge, disproportionate hearing loss and computed tomography showing pneumatized mastoid is strongly suspected of tuberculosis. However, there are atypical cases in which a thorough investigation should be made.

**Objectives:** Describe two cases of atypical tuberculous otitis media with normal chest x-ray and comment the diagnosis and treatment of these ear infections.


**Conclusion:** Tuberculous otitis media should be included in the differential diagnosis of chronic supplicative otitis media that respond poorly to medical and surgical treatments.

**Keywords:** Koch’s disease; tuberculous otitis media; otologic tuberculosis.
A6334. Unusual Clinical Presentations of Vestibular Schwannomas
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Vestibular schwannomas (VS) are tumors derived from Schwann cells that usually arise from the vestibular portion of the eighth cranial nerve. They account for approximately 8% of intracranial tumors in adults and 80-90% of tumors of the cerebellopontine angle. The most common form of presentation for vestibular neurinomas is progressive unilateral hearing loss, associated with tinnitus. However, there are some patients with VS who do not present with these typical symptoms.

RMSA, female, 77 years and 11 months, presented sudden hearing loss and tinnitus on the left, associated with postural instability. After five days progressed with peripheral facial paralysis (PPF) to the left. With 22 days of evolution seek an otolaryngologist, maintaining hearing loss and tinnitus picture left PPF left and postural instability. In audiometry showed mixed hearing loss sharply downward sloping in the right ear and bilateral mixed hearing loss. In MRI, there was the presence of solid mass lesion with low signal intensity on T1 is intermediate signal located T2 in the cistern of the cerebellopontine left with component extending into the corresponding internal auditory meatus to its most lateral wall, measuring about 1.9 x 0.7 x 0.5 cm, determining vagueness of the VII and VIII cranial nerves ipsilateral.

One small percentage of patients is able to demonstrate normal hearing or even asymmetrical sensorineural hearing loss, thus hindering the diagnostic suspicion of acoustic neurinomas. Thus, it is important to understand the more atypical forms of presentation of VS, so as to allow the early diagnosis of this tumor.

A6335. Otoneurological Findings in Patients with Meniere’s Disease Analyzed by the Caloric Test and Vestibular Evoked Myogenic Potentials
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Introduction: Meniere’s disease is one of the most frequent causes of vestibular disorders. The diagnosis of Meniere’s disease is clinical, based on the presence of characteristics symptoms. Tests such as Vectoelectronystagmography and Vestibular Evoked Myogenic Potentials, which assess vestibular disorders aid in research and monitoring of this disease.

Objectives: Evaluate and describe the results of the caloric test of Vectoelectronystagmography and Vestibular Evoked Myogenic Potentials in patients with Ménière’s disease.

Methods: It is about an analytical cross-sectional study. The sample consisted of patients seen in a tertiary hospital, who had a clinical diagnosis of Ménière’s disease, according to the Hearing and Balance Committee (1995). Patients were submitted to Vectoelectronystagmography and Vestibular Evoked Myogenic Potentials.

Results: The sample was consisted of 17 patients and the data analysis was done by ear. The average age was 53.4 years, ranging 33-66 years. Regarding gender, there was prevalence of females (76.5%). Considering the findings of the caloric test, there was 50% of altered results, including hypore exia and hyperre exia. In the Vestibular Evoked Myogenic Potentials, 53.9% of the ears showed abnormal results, such as the absence of biphasic waveform and increased absolute latencies of p13 and n23 waves. In this study, it can be seen that when applying the two test results the percentage of change is 79.4%, statistically significant when performing only one.

Conclusion: The tests studied are complementary and provide information about the vestibular system, assisting in monitoring and evolution of Meniere’s disease.

A6342. No Benign Paroxismal Positional Vertigo - Case Report
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Summary: Cerebellopontine angle tumors account for 10% of all intracranial tumors, the meningioma the second most common type of tumor originating in that region, is a tumor that usually arises from the posterior surface of the petrous portion of the temporal bone and reaches major before causing auditory and vestibular symptoms. RN is the test of choice for suspected APC pathology.

Case Report: LGM, female, 72 years of dizziness story about 5 years ago. Notes that dizziness type vertigo of short duration and high intensity and denies association with auditory symptoms and Autonomic. Reports nasal obstruction and sleep apnea. On examination: Maneuver bilateral positive Dix with suggestive torsional nystagmus of posterior canal VPPB and Head impulse to bilateral corrective balcony. After examination was shown, performing Epley maneuvers. During the maneuvers, the patient had bilateral nystagmus and no fatigability of it and is therefore requested an MRI of the brain with contrast, which was evidenced presence of expansive lesion solid and heterogeneous aspect, with foci of calcification, enhanced by contrast, suggestive of meningioma.

Conclusion: Given the presence of prolonged nystagmus or even absence of fatigability in patients with dizziness, it is essential that the professional ask imaging and perform differential diagnosis of VPPB, because although these tumors are not malignant, can be fatal for the patient.

A5872. Case Report - Eagle Syndrome
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Introduction: Eagle syndrome is characterized by cervical pain, dysphagia, sore throat and earache caused by stretching of the styloid process or calcification of the styloid ligament. The styloid apophysis is a projection of the styloid process or calcification caused by stretching of the styloid process or calcification of the style - hyoid ligament. The styloid apophysis is a projection of the temporal bone, elongated, cylindrical, pointed that originates anteromedially to the mastoid process. It was later located the pharynx between the external and internal carotid artery. Its etiology remains unknown with a higher incidence in females, with no predisposition to unilateral or bilateral.

Objective: To report a rare case of Eagle syndrome in our institution.

Resumed Report: E.V.A.S, 53 years, woman, and native of Machacalis-MG. She had for 42 years a clinical condition of neck pain and holocranial headache. History pretreatment with analgesics and anti-inflammatories, no relief of symptoms. Computed tomography confirmed the clinical suspicion of Eagle’s syndrome. Subsequently, a 3D reconstruction was required for the best surgical guidance. The patient underwent surgical treatment with intraoral access through
tonsillectomy and fragment excision styloid process of apophysis on the left side about 04 cm uneventfully.

**Conclusion:** The diagnostic test by imaging confirms suspicion and avoids the delay of appropriate treatment for the case. The established surgical treatment promoted regression of symptoms, demonstrating that clinical suspicion of Eagle syndrome should be part of the differential diagnosis of neck pain, thus avoiding delay proper treatment.

**A5873. Case Report - Acinar Cell Carcinoma**

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Acinar cell carcinoma is a rare salivary gland epithelial neoplasm, accounting for only 1% to 5% of total salivary gland tumors. They affect mainly the 40-60 year of life but are uncommon in adults. The major salivary glands, parotid and submandibular occurrence are the main sites. The main clinical signs are the very swelling of the affected gland associated with subsequent compressive symptoms to glandular increase.

**Objective:** Report a rare case of acinar cell carcinoma in our institution.

**Resumed Report:** A.D.N, 58, male, Caucasian, with tumor in pre auricular and parotid region for 02 months. Evolving with mild facial paralysis ipsilateral, which required the need to seek specialist. Former smokers - smoking history 10 pack / year. Oroscopy: without significant changes. The Sthen duct ostium was patent. It had solid mass presence of hard consistency, with reduced mobility, adhered to deep planes. He also presented facial palsy grade II Rating Scale House and Brackmann. It was referred to the operating room for resection of parotid tumor and subsequent pathological analysis of the piece. The pathology department ratified the diagnosis of acinar cell carcinoma. Patient is in monthly monitoring with gradual improvement of facial signs and symptoms.

**Conclusion:** The acinar cell carcinoma is a rare tumor in the case of glandular epithelial tumors. Treatment and follow-up are much discussed. Some authors advocate surgical treatment, with no association with radiotherapy. The patient continues to follow in our service and has good clinical evolution does not require adjuvant treatment after surgery.

**A5876. Bilateral Peritonsillar Abscess with Left Para pharyngeal Abscess**

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**Introduction:** Peritonsillar abscess is a common diagnosis in otorhinolaryngology practice, characterized by accumulation of pus between the capsule of the palate tonsils and the constrictor muscles of pharynx. It is usually unilateral, and in rare cases of bilateralism may present as diagnostic challenge and lead to serious consequences, as other neck spaces spreading, such as Para pharyngeal, accumulating rapidly secretions that obstruct the airway.

**Objectives:** We report a case of bilateral peritonsillar abscess and left Para pharyngeal abscess.

**Resumed Report:** Male patient, 23, without comorbidities, with intense odynophagia, dysphagia and hyporexia 3 days ago. Upon examination, toxemia, fever, tachy dyspnea, SpO2 90% on room air, with drooling and sustained mouth opening. Oroscopy: edema and hyperemia of both anterior tonsillar pillars. After Oxygen installed under nasal catheter and improvement of the saturation, CT scan with contrast of the neck was performed, showing hypodense and multiloculated collection bilaterally in peritonsillar region and left Para pharyngeal space. Immediately sent to the operating room, where he underwent general anesthesia and tracheal intubation for “hot” tonsillectomy, with bilateral peritonsillar and left Para pharyngeal space drainage. He remained in hospital for 72 hours with antibiotic therapy (ceftriaxone and clindamycin), corticosteroids and laboratory parameters monitoring. He presented with complete remission.

**Conclusion:** The incidence of bilateral peritonsillar abscess is reported to reach 4.5%. In cervical abscesses, ensure patent airway and good oxygenation should be the first measure adopted. Its approach with exploration and surgical drainage is required in almost all cases and should be instituted early.

**Keywords:** abscess; peritonsillar; Para pharyngeal.

**A5894. Case Report - Carcinoma Squamous Basaloid in Nasal Cavity**

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**Introduction:** Basaloid squamous cell carcinoma is a rare and aggressive variant of squamous cell carcinoma, especially seen in upper aero digestive tract. Several types of treatment are reported, including surgical excision supplemented with radiotherapy chemotherapy / adjuvant.

**Objective:** To report a case of Squamous Cell Carcinoma of nasal cavity basaloid in patient complaining of unilateral nasal obstruction and lesion suggestive of polyps nasal at nasal endoscopy but of unilateral involvement.

**Case Report:** H.B.P., 63, male, complaining of nasal obstruction to the left started 3 months ago. He denied smoking. Rhinoscopy: septal deviation to the left. Nasal endoscopy: appearance of polypoid lesion in left nasal cavity. Magnetic Resonance and Computed Tomography of the paranasal sinuses showed opacification of the left maxillary sinus and soft tissue density occupying the nasopharynx, may correspond to rhinosinusopathy polypoid or expansive formation originating from the nasal cavities. Performed endoscopic removal of the lesion with frozen biopsy, which showed Carcinoma Squamous basaloid. It was referred to radiotherapy.

**Conclusion:** Nasal polypsis is a disease with bilateral involvement. When unilateral, attention should be paid to possible differential diagnoses, such as inverted papilloma and malignant neoplasms. In case, the complaint of recent onset of unilateral nasal obstruction associated with the finding of unilateral polypoid aspect of injury at nasal endoscopy pointed to the need to complement with imaging and histopathological analysis, which confirmed the diagnosis of Carcinoma Squamous basaloid in left nasal cavity.

**Keywords:** nasal polypsis; basaloid squamous carcinoma, nasal obstruction.

**A5895. Rathke’s Pouch Cyst**

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**Introduction:** Rathke’s pouch was first described in the 16th century by Johann Rathke. It is a small diverticulum that forms during the development of the embryo, between the 3rd and 4th weeks of gestation. During this period, the buccopharyngeal membrane begins to regress, and it is through this process that Rathke’s pouch forms. The pouch is located in the sphenoid bone, anterior to the sella turcica, and it normally regresses during fetal development. In cases where it fails to regress, a Rathke’s pouch cyst can develop. These cysts are rare and typically present in patients in their 20s and 30s. They can cause symptoms such as headaches, vision changes, and endocrine abnormalities.

**Case Report:** A 30-year-old female presented with a 2-month history of intermittent headaches. Upon examination, she was found to have a small parafalcine meningioma, which was removed via a transphenoidal approach. Postoperatively, she was found to have a Rathke’s pouch cyst in the pituitary fossa. She underwent transsphenoidal resection of the cyst and was discharged from the hospital the same day. She has been symptom-free since surgery.

**Conclusion:** Rathke’s pouch cysts are rare lesions that can cause significant symptoms if left untreated. They are typically managed with transsphenoidal resection, which is a minimally invasive procedure that allows for complete removal of the cyst and preservation of pituitary function. With proper management, patients can expect a good outcome and resolution of symptoms.

**Keywords:** Rathke’s pouch cyst, transsphenoidal resection, endocrine abnormalities.
**Introduction:** Cystic lesions intrasellar are rare and among them, the craniopharyngioma is one of the possibilities. They originate from squamous cell debris from the craniopharyngion duct (1). The Rathke’s pouch cyst is a craniopharyngion subtype. This cyst occurs predominantly in women and is usually asymptomatic (2), however, it may cause visual loss, headache and / or amenorrhea. Despite advances in imaging, the diagnosis is made during surgery, however, the pathological examination is indispensable.

**Objective:** Present a rare case of Rathke’s pouch cyst in a male patient and its approach transnasal endoscopic.

**Resumed Report:** 37 year-old male presented visual change 1 month ago with significant worsening for one day and left amaurosis. He had no other complaints. In the magnetic resonance, there was a lesion with cystic characteristic in sellar region. It was made surgical access transnasal with de- ation of the net content without complications. Right after, the closure of the fistula was done with retail nasal septum. The patient had no need of intensive care unit stay and overall improvement of vision.

**Conclusion:** The diagnosis of Rathke’s pouch cyst has been increasing in recent years due to the higher resolving power of imaging, it optimized the indication, and the choice of the best surgical technique for the resolution of cases, the transsphenoidal approach are less invasive and leave no external scar and does not require intensive care unit admission, so it is a safe and effective procedure for most patients (3).

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**A5896. Fungal Sinusitis Frontal Sinus**

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**Introduction:** Fungal sinusitis paranasal sinuses is a noninvasive infection that is characterized by its chronicity. The frequency of fungal rhinosinusitis, although uncommon, has increased in recent decades (1). The main etiologic agent is Aspergillus spp. Computed tomography (CT) has radiological well-defined characteristics, which suggest the diagnosis, but the confirmation comes through histopathology. The gold standard treatment is endoscopic sinus surgery.

**Objective:** To report an unusual case of fungal rhinosinusitis frontal sinus and the form of surgical treatment by endoscopic endonasal access.

**Resumed Report:** Female patient, 58 years with frontal headache complaints, postnasal drip and longtime cacosmia. The Computed tomography scan of the sinuses showed opacification in the right frontal sinus compatible with fungal sinusitis. She was submitted to endonasal endoscopic surgical procedure with direct access to the frontal sinus. Removed the contents of the frontal sinus uneventful and complete.

**Conclusion:** The imaging test of choice for the diagnosis of fungal sinusitis is Computed tomography. The most common finding in this survey is the opacification of the frontal sinus. Microcalcifications or spots with metallic density are also found in about one third of cases of opacification of a sinus (2). The best treatment of mycetoma of the paranasal sinus is surgery, since antifungal drugs, topical or systemic, are not indicated (3), except in cases of immunosuppression, in which some authors recommend adjuvant treatment with systemic antifungal drugs asitraconazole (4).

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**A5901. Manifestations Late Post-Tuberculosis Laryngeal**

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The laryngeal obstruction is presented with clinically hoarseness, progressive dyspnea, laryngeal stridor, and in severe cases, acute respiratory failure. Early diagnosis prevent complications. The impact of commitment in laryngeal tuberculosis (TB) is from 3 to 22%. The clinical features of TB laryngeal generally are late.

OPC, 56 years, ex-smoker, TB story laryngeal is 6 years introducing hoarseness, voice breathy, voltage and instability vocal, since then. Regards dyspnea progressive 1 year ago, with the efforts worse. Videolaryngoscopy rigidity evidence and atrophy of diffuse vocal folds, disturb the glottal closure, balanced bands ventricular medialize; subglottic stenosis severe, concentric, blocking 90% of the tracheal lumen, ring first down. Initially carried tracheostomy. Second removal of tissue fibrotic time surgically, getting results is satisfactory.

TB laryngeal is the disease granulomatous more common larynx. In the beginning there edema diffuse and erythema vocal folds, may confuse with carcinoma glottal. The progress, observe injuries nodular and ulceration, and thereafter perichondritis / chondrite. There can be paralysis used vocal for involvement of muscle interarytenoid or fixing joint cricoarytenoid. If not treated properly, the chondrite and necrosis lead to destruction laryngeal with extensive fibrosis and stenosis. The symptomatology related subglottic stenosis post-TB usually is early, and this one presentation atypical this complication.

Diseases granulomatous may generate serious after-effects. TB laryngeal is, perhaps, the most important of them and may limit the quality of life and even carry a patient death when not treated.

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**A5911. Pemphigus Vulgaris: Initial and Recurrent Lesions in the Larynx**

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**Introduction:** Pemphigus vulgaris is a bullous disease, autoimmune, which affects the skin and mucous membranes, and potentially fatal. It affects both sexes and preferably occurs between the fourth and sixth decade of life. It focuses on the population from 1 to 5 cases per million people.

**Objective:** To follow the evolution of a patient with pemphigus in laryngeal mucosa.

**Resumed Report:** Female patient, 55, sent to the service with complaints of sore throat and intermittent dysphonia long and ulcerated lesions in the oropharynx. Held videolaryngoscopy, which showed whitish injury lingual surface of the epiglottis, and small vegetating lesion on freeboard right vocal fold, which was diffusely reddened. They were made oral and laryngeal biopsies, and histologically diagnosed pemphigus vulgaris. Proton pump inhibitors were prescribed and corticosteroids beyond dermatological monitoring. She returned after a year, with worsening symptoms and skin lesions. A new survey showed epiglottis with hypochromic spots and whitish injuries in middle third of freeboard of both vocal folds. The patient developed dysphagia for solids, with little improvement after the use of medication, and then observed in epiglottis hypochromic bullous lesions
of erythematous edges on the lingual surfaces and larynx and vocal folds without changes. Follows in attendance at the service currently using corticosteroids, immunosuppression with Methylxenate and proton pump inhibitor.

**Conclusion:** The disease can occur in the laryngeal mucosa, predating the skin disease in months. Symptoms such as sore throat, dysphonia and laryngeal discomfort can be found, this initiating the investigation of the patient.

**Keywords:** pemphigus, laryngeal, dysphagia.

### A5924. Right Middle Meatus Obstruction due to Inflammatory Pseudotumor: Case Report

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**Introduction:** In inflammatory pseudotumor is a term used to describe any expanding chronic inflammatory lesion. It has a variety of histological presentations and a wide array of terms used in the descriptions. These masses are sorted by pathologists as Pseudo neoplastic due to its origin: idiopathic, regenerative / post-traumatic, developmental (embryological), functional (endocrine), iatrogenic and infectious. These lesions often lead to a nasal obstruction, which may be accompanied by other symptoms such as constant epistaxis, purulent rhinorrhea and cacosma.

**Objectives:** In inflammatory pseudotumor are chronic in inflammatory lesions and have unknown origin. There are no detectable common cause, making the diagnosis as difficult as it differentiation of cancer. This case report aims to assist in the diagnosis of these lesions.

**Resumed Report:** A.F.L.G. male patient, 48 years old, born and resident Piranguinho - MG, on 08/04/2015 came to the Otorhinolaryngology service due to an intense and constant epistaxis complaint, along with odor complain. Patient reports that practice contact sports (jiu-jitsu) and denies other previous drug allergies and diseases. As complementary tests for diagnosis, it was made computed tomography and nasofibroscopy. Computed tomography shows an expansive lesion in right middle meatus. Surgery was indicated after diagnosis, which follows the classical approach by endoscopic endonasal surgery. A bleeding polypoid structure was extracted from the right middle meatus.

**Conclusion:** In inflammatory pseudotumor has aggressive aspect and therefore is a diagnostic challenge. Neoplasia and other conditions must have been excluded before the best treatment be determined, which could be surgical or medical.

**Keywords:** in inflammatory, paranasal sinuses, Nasal Obstruction.

### A5926. Peripheral Facial Paralysis as a Complication of Acute Otitis Media in Elderly


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**Introduction:** Peripheral facial paralysis (PFH) associated with acute otitis media (AOM) is not very common nowadays after the introduction of antibiotics. It is more common in children, because it is the age group most affected by the AOM with an estimated incidence 0.004%. In adults, the occurrence of AOM is not so common, but this age group has up to 10 times more likely to develop PFH as a complication.

**Objective:** Report a case of PFH associated with AOM in elderly patients.

### A5930. Chronic Sinusitis Secondary to Odontoma in Maxillary Sinus: A Case Report

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**Introduction:** Odontomas constitute the most common odontogenic tumors, composed of various dental tissues such as enamel, dentin, pulp, and cementum. Generally they associate with disturbances in tooth eruption and can be classified into complex, when present tissue disorganization, or compound, when the dental tissue present in an organized manner.

**Objectives:** To report a case of chronic rhinosinusitis associated with odontoma maxillary sinus.

**Resumed Report:** This paper reports a case of a female patient of 20 years who sought medical care at the Hospital Otorrinos in Feira de Santana, Bahia. She reported nasal obstruction and hyposmia for long time, as well as headache and nasal allergic symptoms, without improvement after use of nasal corticosteroids and treatment for chronic rhinosinusitis. Performed face tomography, with evidence of veiling in the right maxillary, ethmoid and frontal sinus associated with hyperdense image with bone density in the ipsilateral maxillary sinus, with obstruction of the ostium meatal complex. Underwent nasal endoscopic surgery, with removal of tumor suggestive of compound odontoma in the maxillary sinus, evolving without complications and with improvement of symptoms after surgery.

**Conclusion:** Odontomas are tumors relatively common, but rarely are associated with chronic rhinosinusitis. The absence of symptoms are sometimes diagnosed late as in this case, and can develop with complications. Surgical removal is the best treatment, usually with excellent prognosis and low recurrence rate.

**Keywords:** maxillary sinus; odontoma; rhinosinusitis.
A5932. Renal Adenoid Cystic Carcinoma Secondary to a Primary Tumor of the Submandibular Gland - Case Report

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Introduction: Adenoid cystic carcinoma is a malignant tumor of the salivary gland that presents a slow growth. Distant metastasis is common, particularly late, and the lungs, bones, liver and brain are the most affected sites. Renal involvement is rare.

Objectives: To report a case of a patient with renal adenoid cystic carcinoma secondary to a submandibular gland tumor, which was performed excision ten years before, with its therapeutic and postoperative monitoring aspects.

Resumed Report: Female patient, 49 years, hypertensive, with right lower back pain and recurrent urinary infections. She had a scar in the right inframandibular region regarding a submandibulectomy held ten years ago, however, she did not attended the follow-up after surgical removal. On examination, the patient had pain on the palpation of the lower back region and high blood pressure levels. Computed tomography showed a renal mass on the right. The patient underwent a right nephrectomy with adrenalectomy. The material was sent for histopathologic study that showed secondary adenoid cystic carcinoma. The comparative immunohistochemistry performed between the renal tumor and the submandibular tumor from ten years ago confirmed the identical diagnosis for both sites of adenoid cystic carcinoma.

Conclusion: Its required a systematic control of patients who undergo surgery for adenoid cystic carcinoma in view of the possibility of metastasis, even in the long term, having been described cases of metastases after 23 years of resection of the primary tumor. The immunohistochemically study had an essential diagnostic value.

Keywords: secondary adenoid cystic carcinoma, nephrectomy, submandibulectomy.

A5936. Clinical Epidemiological Profile of Patients with Dysphagia Treated at an University Hospital of Northern Region of the Country

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Introduction: Swallowing disorders, specifically dysphagia, are characterized by impairments in any phase and/or between the phases of swallowing, as a result of neurological, mechanical or psychogenic impairment. It may result in food intake through airway as well as nutritional deficiencies and dehydration, resulting in weight loss, pneumonia, recurrent hospitalization and death.

Objective: To demonstrate the clinical and epidemiological profile of patients with dysphagia treated at an University Hospital of Northern region of the country.

Methods: Cross-sectional observational study conducted with 18 patients with dysphagia and submitted to swallowing videofluoroscopy, attended at the hospital from January 2015 to April 2016.

Results: The mean age of patients was 53.6 years ranging between 9 and 77 years, 38.9% male, 61.1% female and 55.5% elderly. Were from the capital and metropolitan area 72.2% of cases, and 27.8% from the interior of the state. Had neurological etiology in 33.3%. All patients have changes in laryngoscopy: 77.8% early posterior escape for solid and/or pasty; 22.2% slowing in the pharyngeal ejection for pasty and/or solid foods; 16.6% early posterior escape for liquid; 16.6% aspiration; 11% residues in valleculae region and 5.5% laryngeal penetration. Half of the subjects were referred to speech therapy and 16.6% an alternative route for food was introduced.

Conclusion: Dysphagia occurred predominantly in women and the elderly, it is necessary an interdisciplinary team to its evaluation.

Keywords: health profile; deglutition; deglutition disorders; endoscopy.

A5939. Fungus Ball of the Paranasal Sinus: Case Report

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Introduction: The rhinosinusitis can be classified into viral, bacterial, fungal or allergic. The frequency of fungal sinusitis has increased in recent decades and has two types: invasive (acute, granulomatous, chronic) and non-invasive (saprophyte infestation, fungal ball, eosinophilic). The fungal ball is characterized by a tangle of hyphae inside the sinus, which is usually the jaw.

Objective: This study aims to report a case of fungal ball with atypical epidemiological involvement.

Resumed Report: LP, female, 48, teacher, healthy, has been to a hospital in São Paulo complaining of recurrent sinusitis and allergic rhinitis in the last five months. She used oral and topical corticosteroids and two antibiotics in the last three months, with temporary relief of symptoms. On physical and nasal endoscopy examination, it was found septal deviation and polypoid mass in the left middle meatus, with purulent secretion. It was requested a CT scan of the face that showed opacification of the left maxillary sinus and ethmoid with content of soft tissue occupying the nasal fossa. It was indicated septoplasty and sinusotomy jaw with anatamoplastic study. This pointed polypoid lesions of the left nostril and mycetoma. The evolution was uneventful.

Conclusion: The female has a prevalence of 64%, and the average age of onset is 64 years, which was not corroborated by the case. Despite advances in diagnostic methods, the diagnosis of fungal sinusitis remains a challenge. It should be considered in all patients with chronic sinusitis that do not respond to conventional treatment.

Keywords: aspergillus, fungus ball, mycetoma.

A5941. Otitis Externa Granulosa: Case Report

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Introduction: The otitis externa granulosa is defined as a scarification of the tympanic membrane with granulation tissue formation. Sometimes it resembles the early stages of malignant otitis externa.

Objective: This report aims to describe a case of complicated otitis externa granulosa, with atypical evolution.

Resumed Report: PRSL, 37, female, has been to a hospital in São Paulo with a long-standing recurrent ear infection history. Physical examination showed right ear
A5943. Subclavian Steal Syndrome as a Cause of Vertigo
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Introduction: Vertigo is a common complaint of patients at the otolaryngologist office as it has an important impact on the patient's quality of life. It can be present at multiple syndromes such as the subclavian steal syndrome. This syndrome involves a proximal subclavian stenosis and retrograde blood ow in the vertebral artery. It is frequently asymptomatic, but it can cause numerous symptoms such as dizziness or vertigo, syncope and numbness or tingling of the arms and the face.

Objective: Report a case of vertigo caused by subclavian steal syndrome

Resumed Report: A 44-year-old female presented with dizziness for over 10 years. She complained of vertigo lasting seconds when elevating her arms to put her clothes to dry and turning her head to the left when lying down on bed. There was no auditory symptom neither drop-attacks associated. The patient also complained of long time cervicalgia and intermittent numbness of the fingers. Dix-Halpike Maneuver and Head Roll test were negative. Adsons Maneuver was positive. Equal pulse between upper limbs. Normal electroneystagmography. Colored Doppler ultrasound suggested subocclusion/stenosis at the subclavia-axillary area, compatible with subclavian steal syndrome. Computed Tomography scan showed no medullar compression, aneurysm or thrombosis of the subclavian artery. Patient started on vestibular rehabilitation.

Conclusion: As vertigo is a complex symptom it is imperative that it gets proper attention. Frequently patients have multiple complaints associated with dizziness and otolaryngologist's should be careful to expand diagnosis, including rare syndromes such as subclavian steal syndrome.

Keywords: vertigo, subclavian steal syndrome, dizziness.

A5947. Unilateral and Bilateral Nasolabial Cyst: Case Reports
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Introduction: The nasolabial cyst (NLC) is a rare benign lesion in the nasolabial folds, close to the nose alar cartilage, extending to inferior nasal meatus, superior gingival sulcus and vestibule oor nasal. The NLC corresponds 0.7 % of all jaw cysts. Both sexes are affected, with prevalence of females (3: 1). It occurs more in adults, between the fourth and fifth decade of life. The pathogenesis is unknown.

Objectives: Describe two cases of nasolabial cysts.

Case Report: Male, 32 years old, with unilateral nasolabial cyst sought the otorhinolaryngology service of the Red Cross Hospital in Paraná complaining of nasal obstruction, tumor, bulging and aesthetic deformity on the right. The medical history reports that the mass had a progressive increase in a few years, without date. The second patient, female, 51, had bilateral nasolabial cyst frame. He sought the otolaryngology service of Parana Red Cross Hospital complaining of bilateral nasal obstruction and bulging mainly in left nostril. The clinical outcome reports that the mass did not show progressive increase, and that it appeared 20 years ago.

Conclusion: Most patients are asymptomatic and when symptoms present, the most commonly found features in patients with NCL are: partial or total nasal obstruction, increased local volume with edema and locates pain. The diagnosis of CNL is essentially clinical. The treatment of choice is surgical removal of the kind intraoral conservative enucleation.

Keywords: Granulation, otitis externa granulosa, tympanoplasty.
A5972. Otorhinolaryngology Clinical Manifestations in Patients with Mucopolysaccharidosis in a Reference Hospital of Brazil’s Northern Region

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Introduction: Mucopolysaccharidoses are rare genetic diseases, mostly, autosomal recessive character. They belong to the group of lysosomal storage diseases resulting from the deficiency of enzymes involved in the degradation of the extracellular matrix, the glycosaminoglycans. The accumulation of these substances in the body causes multisystemic pathological progressive changes, increasing the risk of ear, nose and throat disorders.

Objectives: To evaluate the clinical manifestations of patients diagnosed with mucopolysaccharidosis attended at the otorhinolaryngology department of the University Hospital Bettina Ferro de Souza.

Methods: We evaluated ear, nose and throat signs and symptoms of ten patients with mucopolysaccharidosis, six male and four female aged 5 and 22, referenced by genetics center.

Results: 90% of patients had more than one complaint. Among the nasal complaints: nasal obstruction (60%), rhinorrhea (30%) and hyposmia (10%). Among the breathing, snoring predominated (60%), followed by dyspnea (50%). Of hearing, tinnitus were seen.

Conclusion: The most prevalent otorhinolaryngology clinical manifestations were hearing loss, nasal obstruction and snoring (60%), which is in line with the current literature. Otorhinolaryngology evaluation is essential for proper treatment, consequently, improve the prognosis, and reduce co-morbidities of patients with mucopolysaccharidosis.

A5975. Dermoid Cyst: Case Report

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Introduction: Dermoid cyst is a common congenital nasal formation of the midline. They usually occur on the nasal dorsum. They may present as solitary cysts or fistulous. Infection can cause recurrent abscesses, osteomalignocystitis or meningitis.


Resumed Report: Male patient, Caucasian, six years old, referred to the Pequeno Príncipe Hospital, Curitiba - Paraná, due to nasal trauma. Radiography showed fracture of the nose bones, without surgical need. After 4 days, returned, he has pain and small abscess in the nasal dorsum. Physical exam found non-pulsatile mass and firm consistency, with approximately 1.5 centimeters, with no increase in size with crying or Valsalva maneuver. Held local drainage and prescribed Cephalexin with resolution. After 6 months, there was a resurgence of the abscess. In the anamnesis, the parents reported that the patient had a hair in the nasal dorsum. It was raised cyst dermoid hypothesis infected after inoculation posttraumatic pathogenic bacteria. After surgical removal, was discharged in 3 days. Pathology confirmed dermoid cyst. After 20 months, the patient is in outpatient treatment for a good outcome and no recurrence.

Keywords: laryngoscopy; larynx; neurofibroma; surgery.

A5976. Pierre Robin Sequence in a Patient with an Interstitial Deletion of Chromosome 18 Long Arm

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Introduction: Pierre Robin sequence (PRS) is characterized by presence of micrognathia, cleft palate and glossoptosis. It can occur alone or associated to other conditions, as Stickler syndrome and 22q11 deletion syndrome.

Objectives: To report the rare case of a patient with an interstitial deletion of the chromosome 18 long arm presenting PRS.

Resumed Report: Female patient with history of respiratory dysfunction and low weight evaluated at 4 months of age. On physical exam, she presented growth retardation, low weight, microcephaly, sparse hair, small and slanting down palpebral fissures, bilateral epicanthal folds, low and broad nasal bridge, thin upper lip, cleft palate, microretrognathia, fifth fingers clinodactyly and overlapping toes. Echocardiography showed persistent foramen ovale and patent ductus arteriosus. Nasal fibrobronchoscopy revealed retropositioned tongue, supraglottic edema and nonconstructive larynx with mucosal projection in Morgagni ventricle were seen.

Conclusion: The chromosomal abnormality observed in our patient is considered rare. In our review, we noted the most frequently characteristics described among these patients consist: intellectual deficit, epilepsy, and craniofacial abnormalities. There are no cases reporting Pierre Robin sequence, as seen in our patient. It is possible that this fact may be related to the small number of patients reported to date.

Keywords: dermoid cyst; recurrent abscesses; nasal dorsum.
A5978. Macrostomia, Abnormal Ears and Mesomelia: A New Syndrome?
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Introduction: Mesomelia refers to a middle segment limb shortening.

Objectives: To report the rare case of a patient with mesomelic shortening of limbs associated to macrostomia and abnormal ears.

Resumed Report: The patient L.H.C.R., male, the first child of young and non-consanguineous parents, was born by cesarean section due to breech presentation. Physical examination revealed at hemangioma on front, macrostomia, and micrognathia, low-set and over folded ears, bilateral cryptorchidism, sacral dimple, and mesomelic shortening of limbs with ulnar deviation of hands, camptodactyly involving 3rd and 4th fingers, fifth fingers clinodactyly, bilateral single palmar crease and clubfeet. Radiological examination revealed absence of ulna and fibula, with shortening and bowing of radius and tibia, bilaterally. Karyotype was normal (46,XY). The patient was re-evaluated at 8 months of age and he had a good neuropsychomotor development.

Conclusion: In our literature review, we found 37 syndromes characterized by mesomelic shortening of limbs. However, in none of them we found the description of macrostomia and ears abnormalities, as observed in this patient. These observations suggest that he can present a new syndrome, not yet described in the literature.

Keywords: mesomelia; macrostomia; micrognathia.

A5982. Lymphoma in Nasopharynx: A Case Report
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Introduction: Tumors on nasopharynx are unusual in general population, corresponding about 0.25% of general tumors and 2% of head and neck tumors. Lymphoma represents about 10–15% of the nasopharynx tumors (1). Usually are tumors of poor prognosis because of the proximity of the skull base and the late diagnosis. Image exams are fundamental for both diagnosis and planning the treatment. Lymphoma is one of the most aggressive tumors that appear in the nasopharynx (2)

Objective: Present an uncommon case of lymphoma in nasopharynx.

Resumed Report: An 87 years old, female, patient was referred to otolaryngologist by fluid in middle ear. In the nasofibroscopy was seen an exophytic tumor that completely occluded the cavum. Computed tomography scan showed no invasion by the tumor of adjacent structures. An excisional biopsy of the tumor was made by endoscopic nasal surgery, with complete resection of the tumor and removal by oral cavity. The anatomical pathology study showed a B Cell Lymphoma. After the diagnosis, she was referred to oncology / hematology for further treatment.

Conclusion: The tumors of nasopharynx are challenging diagnoses due their silent evolution with little to no symptoms until becoming metastatic (3). This led us to the need to have an always high level of suspicion when the patient presents with compatible symptoms, as in this case the hypoaucosis and effusion in middle ear. In addition, the image study and individualized therapeutic is fundamental to achieve the best possible result.

A5991. Laryngeal Amyloidosis: a Case Report
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Introduction: Amyloidosis is a disease defined by extracellular deposits of a proteinaceous nature substance in one or more sites of the organism, and its etiology is unknown. The amyloids can affect any part of the body, but rarely appears in the upper aero digestive tract, the larynx being its main site, representing approximately 1% of the benign tumors. The laryngeal amyloidosis predominates in males, in the fifth decade of life. Dysphonia is the main symptom and histopathological diagnosis is the gold standard. Located disease has a benign behavior, but systemic cases may have poor prognosis.

Objectives: Describe a case of laryngeal amyloidosis and discuss approach and treatment, compared to the literature data.

Resumed Report: Seventy-four years old patient, smoker, female, followed at Hospital Otorrinos - Feira de Santana, Bahia from October/2015 to April/2016 complaining of progressive dysphonia, 2 years evolution, who developed progressive dyspnea and dysphagia in the last year. Videolaryngoscopy showed diffuse, yellowish lesion with a smooth and irregular surface, involving right aryepiglottic fold and arytenoid, almost occluding the glottis, vocal folds were no visualized. Biopsy was performed, and amyloidosis was diagnosed. Patient was submitted to laryngeal microsurgery for partial removal of airway obstruction.

Conclusion: The case aims to demonstrate the clinical diversity of the disease, as well as a warning for the differential diagnosis and follow-up. It emphasizes the need for a high degree of clinical suspicion by the otolaryngologist because the disease has a slow evolution and good prognosis in most cases.

Keywords: laryngeal amyloidosis; dyspnea; dysphonia; videolaryngoscopy.

A5995. Tolosa-Hunt Syndrome Associated with Fungal Rhinosinusitis of the Sphenoid Sinus
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Introduction: The Tolosa-Hunt syndrome is a rare disorder that affects the cranial nerves, especially the third, sixth, fourth and fifth pairs. This syndrome is characterized in hemicrania or periorbital pain associated with painful ophthalmoplegia of one or more cranial nerves caused by a nonspecific granulomatous in amnatory process that affects the cavernous sinus and cavernous portion of the internal carotid artery.

Objective: To report a case of Tolosa-Hunt syndrome triggered by a fungal rhinosinusitis of the sphenoid sinus.

Resumed Report: JVB, 75, began with hemicranial headache associated with visual loss at left. The exam showed decreased eye movements at left (paresis of the III, IV and VI cranial nerves), ptosis at left without meningeal signs. Patient underwent pulse therapy with methylprednisolone, which reported improvement in headache, but there was a recurrence of symptoms, then was referred to the otolaryngology service due to opacification of the image suggestive fungal rhinosinusitis of the sphenoid sinus at left, it underwent an endoscopic sphenoid sinusotomy where a fungi ball was removed and remission of all symptoms.

Conclusion: Tolosa-Hunt syndrome is a rare syndrome in which symptoms are caused by an in amnatory
process of the cavernous sinus. There are few cases reported in the literature that are caused by sphenoid sinusitis. The patient had made numerous treatments including 40 days of hospitalization before to be referred to the otorhinolaryngology service and performed the endoscopic sinusotomy with remission of symptoms.

**Keywords:** Tolosa–Hunt Syndrome, cavernous sinus, sinusitis.

**A5996. Profile of Patients Submitted to Cochlear Implants Surgery in Cuiabá, MT**

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**Introduction:** With the technological evolution, the cochlear implant has shown greater relevance, which is verified by an increase in its usage in large centers specialized in otology for auditory rehabilitation in patients with sensorineural hearing loss.

**Objectives:** Describe the epidemiological profile of patients submitted to cochlear implant surgery in Cuiaba - MT, between 2012 and 2015.

**Methods:** A retrospective statistical analysis study of 17 patients submitted to cochlear implant surgery at Hospital Otorrinolaringologico Cuiaba - MT, between 2012 and 2015, regarding: age, sex, prior usage of hearing aids, etiology and degree of hearing loss, type of deafness in relation to language acquisition (pre- or post-lingual).

**Results:** It was observed that 53% of implanted were aged 0-9 years, of which 44% had bilateral implantation. The most common etiologies observed were congenital and idiopathic in 41.2% of cases, followed by trauma (11.8%) and infectious (5.9%). For language acquisition, 52.9% were pathologic in 41.2% of cases, followed by trauma (11.8%) and aged. Infection occurs in 50% of cases and may cause oronasal fistula. Thus, it becomes necessary to correct diagnosis and careful surgical approach, emphasizing the closure plans intraoral wound.

**Conclusion:** The nasoalveolar cyst is usually unilateral (90%), more common in females (5.5:1), blacks and middle-aged. Infection occurs in 50% of cases and may cause oronasal fistula. It appears that the majority of the implanted patients were children under the age of 9 years old. Furthermore, in most cases, there was prior usage of hearing aids, without significant difference between pre- or post-lingual hearing loss.

**Keywords:** Cochlear implants, hearing aids, pre- and post-lingual hearing loss.

**A5999. Case Report: Bilateral Nasoalveolar Cyst**

Eustáquio Nunes Neves, David Albuquerque Mourão, Lucas Sol da Costa, Ana Luiza Costa Lage, Rayanne Pereira Chalub, Flávia Oliveira Ballesteros

**Introduction:** The nasoalveolar cyst was firstly described by Zuckerkandl in 1882, it is embryonic, non-odontogenic, and origin in the upper lip region. Its occurrence is unusual, with the extremely rare bilateral presentation.

**Objective:** To report a case of bilateral nasoalveolar cyst, with emphasis on proper diagnosis and surgical treatment.

**Case Report:** A.R.D, 44 years old, female, leukoderma, complaining obstruction in both nasal cavities associated with the presence of mass. Without local pain, epistaxis or rhinorrhea. Anterior rhinoscopy showed a cystic aspect of tumor on the side portion and bottom of the nostrils. Intra oral examination the lesions were easily palpable in the gingivalabial bilateral superior sulcus. Paranasal sinus tomography showed a soft-tissue material on the oor of both nostrils, measuring 2cm left and 1.5cm right. Surgical exeresis was indicated, with a linear horizontal incision at the labial gingival superior sulcus, from the right maxillary crest to the left cuspid. The tissues were dissected until the pyriform aperture and the anterior nasal spine was then exposed, after, dissection and removal of lesions followed by hemostasis and suturing by planes using Vicryl 4.0. Histology refers cystic lesion presenting cylindrical pseudostratified epithelium with goblet cells. Good evolution in the postoperative period, no recurrence.

**Conclusion:** The nasoalveolar cyst is usually unilateral (90%), more common in females (5.5:1), blacks and middle-aged. Infection occurs in 50% of cases and may cause oronasal fistula. Cranial Nuclear Magnetic Resonance showed no alterations. It was performed as wall owing video endoscopy that showed reduced movement of tongue base, salivary secretion stasis in hypo pharynx, reduction of soft palate elevation and laryngeal elevation, presence of anterior and posterior early escape of food with food propulsion to hypo pharynx by gravity. The swallow winger - ex was triggered only when the food reached the vallecula. There was penetration and fluid aspiration followed by cough. The patient was referred for neurological evaluation being observed paresis and muscle atrophy of the left sternocleidomastoid and trapezius muscles and phasicmyotatic hyperre exia of deep musculature of the right lower limb. These data, associated with the alterations previously observed, defined the diagnosis of Amyotrophic Lateral Sclerosis with bulbar involvement, which is predominantly clinical.

**Conclusion:** The otorhinolaryngological evaluation can help in the early diagnosis of this pathology.

**A6008. Laryngeal Squamous Cell Carcinoma with Tonsillar Metastasis**

Gabriel Augusto Pinto Barbosa, Ana Carolina Soares Sucua, Rachel Bichara Izai, Thiago Doutor Pelegrine, Carolina da Fonseca Mussel Jones

**Introduction:** Laryngeal cancer is one of the most common forms of head and neck cancer and mostly affects males between 50 to 70 years old. Histologically, the majority
is squamous cell carcinoma (SCC). Smoking is the most important risk factor, followed by chronic heavy alcohol consumption.

**Objectives:** Report a case of SCC of larynx with tonsillar metastasis.

**Resumed Report:** A 63-year-old male, with hypertension, diabetes and a long history of tobacco and alcohol was brought to our otolaryngology outpatient clinics on July 2015 complaining about persistent dysphonia. Video laryngoscopy (VL) revealed a mass and Reinke’s edema on the left true vocal fold indicating the necessity of surgery. Six months later, the VL revealed leukoplakia of vocal folds and tumor on the left vocal fold and anterior commissure. The computerized tomography demonstrated contrast enhancement at left palatine tonsil, left vocal fold and anterior commissure. On February, the patient went through a microsurgery of larynges and a bilateral tonsillectomy. Histopathology revealed a moderately differentiated SCC in larynx, as well as metastases of SCC on left tonsil. On post op follow up, patient was referred to oncology for chemotherapy and radiotherapy, which were not completed. On April, the VL revealed a red, vegetating, mobile and non-bleeding mass smaller than the initial at anterior commissure and left true vocal fold. The necessity of an adjuvant therapy was reasserted.

**Conclusion:** It is visible the aggressiveness of laryngeal tumors. It is necessary to begin the treatment as early as possible seeking minimal functional sequels.

**Keywords:** cancer; larynx; metastasis.

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**A6040. Vestibular Paroxysmia: Case Report**

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**Introduction:** The vestibular paroxysmia is a compression syndrome of the eighth cranial nerve. It is characterized by short episodes of vertigo, tinnitus, vestibular and auditory deficits. It has an Incidence of 2% amongst vestibular syndromes. Magnetic resonance imaging can show cranial nerve VIII compression by vessels of the posterior fossa. It can be treated with drug therapy (carbamazepine, phenytoin, or gabapentin), or microvascular decompression of the cranial nerve VIII.

**Objectives:** To report a case of a patient diagnosed with vascular cranial nerve VIII loop on magnetic resonance imaging.

**Resumed Report:** 54-year-old female, born in Rio de Janeiro. Complaint of pulsatile tinnitus for 9 months associated with hearing loss and ear fullness to the left. The symptoms started after an episode of heavy imbalance that lasted a few minutes. Hypertensive in use of losartan, denies smoking. The examination revealed opaque and retracted left eardrum without other changes. No changes in the otoneurological exam. Audiometry revealed sensorineural hearing loss severe at the left, with a discrimination of 48% and type A Jerger curves bilaterally with displacement to negative pressures on the left. Brain evoked response audiometry revealed complete absence of waves to the left. Computed tomography was normal and magnetic resonance imaging revealed the presence of vascular loops around cranial nerve VIII. Treatment was initiated with carbamazepine and the patient was referred to neurosurgery.

**Conclusion:** Although it is a rare etiology, vestibular paroxysmia can be easily diagnosed by history taking and detailed physical examination and imaging tests.

**Keywords:** vertigo, hearing loss, tinnitus, dizziness.
A6057. Paracoccidioidomycose Isolado de Orofaringe: Relato de Caso
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Introduction: Paracoccidioidomycose is the main endemic mycosis in Latin America. Among the 10 million infected with fungus, 2% develop active disease. The goal is to report a case of oropharyngeal paracoccioidomycosis as an isolated event - considered rare form of the disease - and make a brief discussion of the disease.

Case Report: G.C.R, male, 57 years came to visit at the otorhinolaryngology service with progressive dysphagia associated with sore throat, dry cough, asthenia, loss of appetite and weight loss. Former smoker (21 pack/years). On physical examination: lymphadenopathy in anterior and posterior cervical chain, bilateral, mobile, painless and fibroelastics. On auscultation breath sounds were decreased bilaterally, reduced chest expansion and absence of adventitious sounds. Oroscopy showed diffuse infiltrative lesion with hemorrhagic spots on the soft palate, posterior wall of the oropharyngeal and anterior pillars. In laryngoscopy, the involvement of vocal cords was dismissed and showed injury restricted to epiglottis. Biopsy demonstrate granulomas and presence of the fungus in steering wheel. Chest CT away pulmonary involvement and neck CT corroborates videolaryngoscopy.

Discussion: The oral lesions are very common and result in much of hematogenous spread from primary lung focus. Smoking and alcohol consumption is a risk factor for disease development. Oropharyngeal SCC is the main differential diagnosis, whose risk factors and lesion characteristics coincide with these mycoses.

Conclusion: Knowledge of oral paracoccioidomycosis is of great importance for medical doctors, since early diagnosis implies in reduction of morbidity and mortality of patients with this disease.

A6059. Frontal Sinus Mucocele - A Case Report
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Introduction: Paranasal sinus mucocele are benign, expansive and encapsulated lesions. They are locally destructive because of its bone resorption ability causing erosion and remodeling the wall of the affected sinus. The most affected are the frontal sinuses. They appear with large volumes and facial deformities, being relatively painless. The treatment is surgical, mostly successful.

Objectives: Report a case of mucocele rapidly evolving, whose presentation simulated neoplastic disease due to the rapid evolution and with good surgery results.

Resumed Report: Male, 64, complains of enopthalmos and tearing in the right eye, evolving with nodules on forehead and upper eyelid, painful, started 2 months ago. He also complains about decreased visual acuity in the right eye and denies nasal symptoms. CT scan of the paranasal sinuses showed expansive lesion with soft tissue density in frontal sinus associated with bone destruction, reaching the ceiling of the orbits and insinuated material at intracrural front and region of the orbits, most evident on the right. On physical examination, rhinoscopy, otoscopy and horoscopy with regular results, with only the presence of nodular lesions of fibro elastic consistency and measuring about 3 cm in front. He was submitted to frontal sinusotomy (Draf II), with good recovery. Patient is being followed up.

Conclusion: We highlight the importance of mucocele hypothesis in differential diagnosis of paranasal sinuses tumor, especially in cases like the exposed one, whose rapid development and local destruction led us to think primarily in neoplastic lesion.

A6061. Endoscopic Endonasal Surgery in Frontal Sinus Osteomas
Fellipe Cunha Oliveira Pomin, Ulisses Jose Ribeiro, Thiago Andrade Fraga, Fernando Martins Cruevnel, Sergio Bittencourt, Laressa Karan de Melo Rocha, Ivo Teles Melo Andrade
Seul Otorrinos

Introduction: Osteomas are relatively rare bone tumors, with slow and mostly asymptomatic growth. In this case report, we present a patient who had cephalalgia treated as sinusopathy for 2 years, refractory to treatment. Only after being submitted to computerized tomography, the hypothesis of frontal sinus osteoma was considered.

Objectives: The main goal of presenting this case is to show that although external surgery is considered the gold standard technique for extracting frontal sinus osteomas, the increasing expertise and evolution of endoscopic instruments are making endoscopic endonasal techniques emerge as good alternatives on the treatment of these tumors.

Resumed Report: 18-year-old female patient who had cephalalgia treated as sinusopathy for 2 years, refractory to treatment. After submitted to computerized tomography, the hypothesis of frontal sinus osteoma was considered. She was submitted to external and endoscopic surgery to remove the tumor and the material was sent to analysis, confirming the diagnosis. After 3 months, the cephalalgia returned and a nasofibroscopy diagnosed sinusopathy, treated with endoscopic endonasal surgery.

Conclusion: Traditionally, external techniques are considered the gold standard approach in frontal sinus osteomas. Despite this fact, thanks to the increasing expertise and evolution of instruments, with precisely defined angles which allow access to areas that could not be reached otherwise, the endoscopic endonasal techniques are becoming good alternatives on the treatment of these tumors, showing security, efficacy and better preservation of the patient, with shorter surgical times and less hospitalization. However, depending on location yet we opted for combined access.

A6070. Osseous Choristoma: Case Report
Tarssius Capelo Candido, Wilson Benini Guercio, Sebastiao Kelson Alves dos Santos, Isabella Loyola Borém Guimarães, Gilberto Francisco Ferreira Filho, Luiza Anunciacao Franca, Walter dos Reis Siqueira Junior
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Introduction: The term Choristoma is used to define the natural development of tissue, however in ectopic site (1). Thus, the choristoma may be formed of osseous tissue, cartilaginous, sebaceous glands, gastric mucosa among others (1). In literature, review report a bit of this type of tumor. There is greater incidence of osseous choristoma in head and neck, and which more than 90% in tongue, in posterior third (2). Epidemiology shows prevalence in females (80%), the third or fourth decade of life (3). In most cases, it is asymptomatic, but may present by: foreign body sensation, dysphagia, nausea and irritation. The treatment is complete exeresis of the lesion.

Objectives: Case report of lingual osseous choristoma.

A6058. Endoscopic Endonasal Surgery in Frontal Sinus Osteomas
Gilberto Francisco Ferreira Filho, Luiza Anunciação França, Kelson Alves dos Santos, Isabela Loyola Borém Guimarães, Fábio Cunha Oliveira Pomin, Ulisses José Ribeiro, Thiago Andrade Fraga, Fernando Martins Cruevnel, Laressa Karan de Melo Rocha, Ivo Teles Melo Andrade
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15th Congress of Otorhinolaryngology Foundation—August 18–20, 2016
**Resumed Report:** YCS, female, 8 years, sought medical attention on 3/26/15 complaining of foreign body in oropharynx. The examination showed hyperplastic nodular lesions in dorsal region of tongue in position paramedian left, consistency sessile and pink color appearing to 5 mm in major axis. From this analysis was submitted to excisional biopsy, 04/28/15, with diagnostic and therapeutic purposes. The anatomical-pathology results showed osseous choristoma. Patient is being monitored by presenting new lesion in contralateral region, but with aspect of lingual papillae no apparent growth.

**Conclusion:** Osseous choristoma is a rare tumor with few reports. The case presented differs from typical epidemiology in relation to age warning of a differential diagnosis to be remembered. Furthermore, there is a possibility of another lesion development something unusual.

**Keywords:** tongue osseous choristoma maxillofacial region.

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**A6072. Retroauricular Myofibroma in Childhood - Case Report**

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**Introduction:** Myofibroma is a neoplasia of myofibroblasts, presents benign clinical course. Commits predominantly children, but it can occur at any age. Clinically, it appears as solid, firm lesion on palpation, which rarely ulcers and slow growing.

**Objectives:** To report a case of diagnostic research of solid retroauricular tumor in a child, with the final diagnosis of myofibroma.

**Resumed Report:** M.F.S.F. 1-year-old, male, had retroauricular mass attached to the right ear since 2 months of age, with progressive growth. On physical examination, presence of irregular solid tumor attached to ear cartilage, without lymphadenopathy, otoscopy unchanged. CT scan showed nodular formation with slight peripheral enhancement. Fine-needle aspiration resulted in unrepresentative material. Biopsy guided by ultrasound (hypoechoic nodule, with mixed vascular ow on Doppler, estimated volume 8.9cm3) resulted in Low-grade Fusocellular Neoplasia with Collagen, raising a possibility of Desmoid Tumor. Excisional biopsy of the lesion was performed with preservation of the capsule and partial pinna perichondrium. Patient had a postoperative without complications. Histopathological diagnosis resulted in Myofibroma, the presence of pseudocapsule and beta-catenin negativity excluded the possibility of desmoid fibromatosis.

**Conclusion:** We report a case of Retroauricular Myofibroma in childhood. The difficulty in the case was due to the possibility of malignancy, and therefore, the need for surgical margin with the withdrawal of the pinna. We opted for the only excision of the lesion and wait for the final pathological diagnosis. Tumors of childhood needs safety investigation looking for an appropriated therapy.

**Keywords:** myofibroma, childhood, tumors, diagnosis, biopsy.

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**A6073. Laryngeal Paracoccidioidomycoses: A Case Report**

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**Introduction:** Paracoccidioidomycosis is an endemic systemic fungal infection in Latin America. It is caused by the thermally dimorphic fungi Paracoccidioides brasiliensis, acquired by inhalation of spores in the air. It may clinically presents as acute, subacute or a chronic form. The latter is the most common one and mostly affects men between 30-50 years old, farmers, tobacco and alcohol users. Mucosal involvement occurs in over 50 percent of cases. The mouth is most frequently affected, followed by the larynx.

**Objectives:** To report a case of Paracoccidioidomycosis in larynx, an endemic fungal infection in Brazil, which can mimic laryngeal cancer, requiring further differential diagnosis.

**Resumed Report:** Male, 57 years-old, heavy smoker, presented with progressive oropharyngeal dysphagia of 3 years duration, beginning with solids followed by liquids and accompanied by odynophagia and dysphonia over the last year. Otorhinolaryngology revealed an infiltrative lesion on arytenoid cartilages and right aryepiglottic fold. Chest radiography was normal. Patient underwent laryngeal biopsy and direct examination was consistent with a diagnosis of Paracoccidioidomycosis. Patient was referred to Fiocruz where he started treatment with sulfamethoxazole-trimethoprim and is now under regular outpatient follow up.

**Conclusion:** This case illustrates the importance of Paracoccidioidomycosis as differential diagnosis in larynx's lesions, especially in endemic areas such as Latin America. Dysphonia is the most frequent symptom in these cases. Laryngeal lesions should be biopsied with further mycological and histopathological analysis leading to early diagnosis and preventing progression to disseminated and lethal forms.

**Keywords:** paracoccidioidomycosis, larynx, cancer.

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**A6074. Facial Paralysis in a Patient with Acute Lymphoid Leukemia**

Tarssius Capelo Candido, Andre Costa Pinto Ribeiro, Gilberto Francisco Ferreira Filho, Sebastiao Kelson Alves dos Santos, Isabella Loyola Borém Guimarães, Luiza Anunciação França, Walter dos Reis Siqueira Junior

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**Introduction:** Peripheral facial paralysis is the most common acute cranial neuropathy responsible for important aesthetic and functional sequelae. Mainly manifests unilaterally with varied etiology: traumatic, neurological, infectious, metabolic, neoplastic, iatrogenic and idiopathic. Among the neoplastic causes are leukemias, primarily in the acute forms with a predilection for acute lymphoid leukemia. Other events are also plausible as sensorineural hearing loss, tympanomastoid infection, nystagmus and vertigo. Patients affected by lymphoid leukemia presenting peripheral facial paralysis mostly is diagnosed as Bell’s palsy, which has as probable etiology infection by herpes viruses.

**Objectives:** Report a peripheral facial paralysis case in patient with lymphoid leukemia.

**Resumed Report:** SVOS, female, 5 years diagnosed with lymphoid leukemia in chemotherapy hospitalized due febrile neutropenia being diagnosed with Peripheral facial paralysis House-Brackmann III left size with suspected Bell's palsy, thus contacting the oto-laryngology team. Being
observed secretion in bilateral middle ear, also found in computed tomography that showed opacification of the mastoid bilaterally. Given the ineffective response to treatment with antibiotic intravenous therapy was decided to perform bilateral myringotomy with ventilation tube insertion, observed leakage of purulent discharge, gradual improvement of facial paralysis and leukocyte count. Patient has been followed because lymphoid leukemia with tympanoplasty planning at the appropriate time.

Conclusion: The reported case shows complication that can be associated with lymphoid leukemia by the characteristic of the pathology however alerts us to the differential diagnosis including the need for surgical approach to better therapeutic response.

Keywords: Lymphoid Leukemia, Facial Paralysis, Otitis Media

A6080. Schwannoma Nasal
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Introduction: Schwannoma or neurilemoma is a benign tumor originated from the Schwann cells disorderly proliferation that came from neural crest and involve periferal nerves. Only 4% of schwannomas are located in paranasal sinuses, more often in ethmoidal sinus. There is no gender predilection, and it affects the age group between 20 and 60 years old. It manifests as unilateral nasal obstruction, epistaxis, headache, and visual involvement. Treatment involves endoscopic surgical resection, based on the lesion extension.

Objective: To report an infrequent tumor case with paranasal sinuses involvement.

Case Report: K.C.F, female, 20 years old, complaining about headache, diplopia, periodical amaurosis and nasal obstruction that begun 40 days ago. Otorhinolaryngology examination revealed an expansive lesion located in right nasal cavity, which was confirmed by fibronasalorinoscopy and face sinuses CT. The patient underwent to the endonasal lesion resection. Anatomopathological study, confirmed neurilemoma diagnoses.

Conclusion: Neurilemoma is a rare tumor, with very common symptoms related to lots of pathologies that involve paranasal sinuses. Therefore, it is necessary to exclude other differential diagnoses such as inverted papilloma, angiofibroma, etc.

A6087. Endoscopic Transsphenoidal Approach for Pituitary Adenoma Resection: Technical Aspects and Casuistic
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Introduction: Herman Schloffer made the first successful transsphenoidal surgery. Since then, the technique has been improved; Harvey Cushing used a sublabial endoscopic incision by removing the septum for endonasal access. Over the years, new techniques have been developed, such as frontal craniotomy and, in cases of sellar region surgery, a transsphenoidal approach.

Objectives: Analyze the improvement in the techniques used to resect a pituitary adenoma and the type of approach used in Hospital das Clínicas Samuel Libânio.

Data Synthesis: Report of the surgical technique for resection of pituitary adenomas in this service. The procedure requires an otolaryngologist, a neurosurgeon, general anesthesiologist, saline solution with topical epinephrine and lidocaine with epinephrine for vasoconstriction. Incision on the septal mucosa; with an endoscope close to the bone-cartilage transition, dissect around the septal cartilage, dismantling the perpendicular blade of the ethmoid and vomer, giving greater access to the anterior wall of the sphenoid sinus. Remove the dura mater to remove tumor. Close the gap in the seal with fragments of nasal septum cartilage and inferior nasal turbinates. In 2014, 971 neurosurgeries were conducted, in which 88 neurological tumors and 43 tumors of the skull base.

Conclusion: Presented the cases and the surgical technique of an interdisciplinary service of Otorhinolaryngology and Neurosurgery of the Hospital from Pouso Alegre, Minas Gerais. The approach to the pituitary adenoma has been developed over the years; the intention was to share the experience of the service.

Keywords: pituitary, adenoma, resection, otolaryngologist, neurosurgeon.

A6091. Bilateral Endoscopic in Newborn with Severe with Laryngomalacia Ehlers - Danlos Associate
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Seul Otorrinos

Introduction: Laryngomalacia is a congenital anomaly of the most frequent larynx, accounting for 60% to 75% of cases of congenital stridor. Despite its benign and self-limiting course, 10% of cases require intervention.

Objective: To demonstrate the relationship between laryngomalacia and Ehlers-Danlos syndrome.

Case Presentation: Infant, male, 02 months, and bearer of Ehlers-Danlos syndrome presented rhinorrhea, cyanosis, respiratory failure and breastfeeding failure. Performed bronchoscopy showing severe laryngomalacia. We perform endoscopic resection of redundant supraglottic tissue laser diode (bilateral aryepiglotectomy).

Discussion: In severe cases of laryngomalacia, 10 to 15% of patients should have surgery. In addition to childhood events as a result of short aryepigloticas folds and tubular and elongated shape of the epiglottis, as adults may have difficulty breathing in physical stress. The patient in question evolved with good breathing pattern after the section under general anesthesia, showed no surgical complications. Data report 85% of surgical success with unilateral aryepigloctic fold section and 95% with the section of the contralateral fold. According to the literature, there is no relationship between laryngomalacia and Ehlers-Danlos syndrome.

Conclusion: Since the literature shows no relationship between laryngomalacia and Ehlers-Danlos syndrome, we expose a case of an infant suffering from the syndrome associated with a severe degree of laryngomalacia benefiting from endoscopic resection of redundant supraglottic tissue laser diode.
A6092. Clinical Epidemiological Profile of Patients Attended in the Outpatient Sleep Clinic at Hospital Universitário Bettina Ferro de Souza, Belém, Pará
Regiane Matos Batista, Cláudio Tobias Acatauassú Nunes, Gisele Vieira Hennemann Koury, Leandro José Almeida Amaro, José de Ribamar Castro Veloso, Mariana Tótila Força, Vanessa Fernandes de Brito
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Introduction: The obstructive sleep apnea syndrome is a relevant disease nowadays, because it significantly increases the risk of cerebrovascular accident and all-cause mortality, apart of other risk factors. The prevalence ranges is 3.7 to 26%, but it is estimated to be an underdiagnosed disease.

Objectives: To demonstrate the clinical-epidemiological profile of patients attended in the outpatient sleep clinic at University Hospital Bettina Ferro de Souza, from Federal University of Pará, Brazil. Methods: Cross-sectional observational study of 11 medical charts of the outpatient sleep clinic at the University Hospital Bettina Ferro de Souza in November 2015 to April 2016.

Results: 7 men and 4 women were analyzed, with mean age and body mass index, respectively, 46.1 years and 32.7 kg/m². The most frequent comorbidities were obesity (54%) and cardiovascular disease (27%). Snoring (100%), excessive daytime sleepiness (81%) and non-restorative sleep (72%) were the most prevalent complaints. Most patients (81%) were classified as stage III in Friedman Classification. It was observed an average of 1.43 for Epworth Sleepiness Scale. 100% of patients showed high risk of obstructive sleep apnea syndrome, according to the Berlin Questionnaire. Until now, 3 (27.2%) patients underwent polysomnography, 2 diagnosed with moderate obstructive sleep apnea syndrome. Of these, 50% were treated with intraoral appliance and 50% with continuous positive airway pressure.

Conclusion: Most of the patients were male, overweight and high risk for obstructive sleep apnea syndrome. Snoring was the most common complaint.

Keywords: Sleep Apnea Syndromes; Health profile; Snoring.

A6102. Rosai-Dorfman Disease: A Case Report - Hospital Otorrinos Feira de Santana, BA
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Introduction: Rosai-Dorfman disease is an extremely rare entity, there are few cases reported in the world literature. In such cases, systemic symptoms such as malaise, fever and haematological and immunological changes are extremely rare. The diagnosis is difficult when the skin conditions occurs in isolation. Mimics other skin disease as juvenile xanthogranuloma, reticulo histiocytoma, fibrohistiocytoma, xanthomas and other lymphoproliferative disorders, and infectious disorders. For the diagnostic conclusion, it is essential the histopathological finding of mixed in ammatory infiltrate with histiocyes wide cytoblast, clear and containing intact in ammatory cells.

Objectives: To describe a case of endoscopic surgery, FESS maxillary, ethmoid and sphenoid in a patient with Rosai-Dorfman disease and discuss approach, prognosis and treatment, compared to the literature data.

Resumed Report: Patient 24 years old, female be followed in Otorrinos Hospital- Feira de Santana, Bahia, to April/2014 to April/2016 by epistaxis of small/moderate amount, frequent sneezing, nasal itching and oral breathing predominantly. Direct rhinoscopy showed red-ruby polypoid lesion in sidewall right nasal cavity. A biopsy of the lesion showed that markers consistent with Rosai-Dorfman disease.

Conclusion: The case aims to demonstrate a case of endoscopic surgery in a patient, whose has no complaints until the given time, with presentable clinical improvement and follow up with a hematologist doctor without making use of drug therapy. The event aims to present the literature a rare disease in which the endoscopic surgical treatment significantly improved the otorhinological symptoms of the patient.

Keywords: endoscopic surgery; epistaxis; itchy nose; oral breathing; rhinoscopic direct.

A6105. Case Report: Atypical Manifestation of Cytomegalovirus - Oral Lesion
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Introduction: Cytomegalovirus, a herpes virus group is considered an important pathogen in immunocompromised patients. Cytomegalovirus infection is acquired disseminated in the population between late childhood and early adolescence. Oral manifestations are rare and unspecific, ranging from xerostomia to important oral ulcerations. Despite the involvement of the gastrointestinal tract Cytomegalovirus is common in kidney transplant patients and oral location is rare. Lopes-Painter and colleagues in a retrospective study found 1.3% of oral ulcers in 453 kidney transplant patients with CMV in the range 13-23 months after transplantation.

Objective: Case report with extensive oral lesions, necrotic and secondary Cytomegalovirus infection in patient kidney transplanted and immunosuppressed.
Case Report: G.A.B., male, 59 years old, born and living in Sao Paulo. Admitted to the Hospital Beneficência Portuguesa de São Paulo for abdominal infection, fever and pain evolving secondarily with pulmonary focus and sepsis. Carrier dialysis renal failure (kidney transplant 10 years ago), in use of immunosuppressant, hypertensive. On the eighteenth day of hospitalization began bleeding injuries in tongue, hard palate and lips, with rapid evolution to necrosis of the same. It was performed biopsy, debridement and dressing with fibrin glue. The histopathology and immunohistochemistry was positive for Cytomegalovirus.

Conclusion: In view of this case, we see the importance of also considering the Cytomegalovirus as a differential diagnosis in blood-necrotic oral lesions, especially in immunocompromised patients. It is essential to carry out the biopsy to confirm the opportune diagnosis.

A6108. Profound deafness and Meniere’s Disease caused by Epstein-Barr Virus
Rachel Bichara Izai, Denise Maria H Decoster da Costa, Ana Carolina Fonseca Suzcar, Gabriel Augusto Pinto Barbosa, Rachel Bichara Izai, Carolina da Fonseca Mussel Jones, Thiago Doutor Pelegrin
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Epstein-Barr virus (EBV) or human herpes virus 4 is from the Herpesviridae family, has two serotypes. It is the main etiological agent of Infectious Mononucleosis. Typical symptoms are fever, odynophagia, posterior cervical lymphadenopathy, hepatosplenomegaly and rash, it is related to
A6112. Hospital Admissions of Children with Cerebral Palsy and Dysphagia
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Introduction: Cerebral palsy describes a group of the development of movement and posture disorders, causing limitations in activities. It originates motor disorders and associated deficiencies, which impair muscle tone. For this reason, some children with cerebral palsy have dysphagia, which is characterized by any dysfunction during swallowing. This commitment is associated with aspiration pneumonia and recurrent hospital admissions.

Methods: This research is a descriptive, cross-sectional, observational study with 11 children with cerebral palsy aged 6-14 years old. Legal responsible answered the protocol about the admissions of their children with reasons, dates and frequencies that occurred, in order to assess morbidity of patients with dysphagia.

Results: The mean age was 9.3 years. 82% of the children presented hospital admissions, being aspiration pneumonia the main cause. 18% had no commitment. 36.3% of children with cerebral palsy had dysphagia and at least one hospital admission in life. 27.2% had dysphagia, hospital admission and penetration or aspiration into the airway.

Conclusion: children with cerebral palsy and dysphagia had hospital admissions for aspiration pneumonia at least once in life.

Keywords: cerebral palsy, dysphagia, aspiration pneumonia, children

A61127. Nasal Septum Perforation Subjected to Correction - Case Report
Antonio Jose Assis Xavier de Souza Pinto, Francisco Sales de Almeida, Eduardo Poletti Camara, Nadimila de Fátima Oliveira Unifenas, Alfenas, MG, Brazil

Introduction: Septal perforation is found randomly in otorhinolaryngology exams, but most patients have no symptoms. The signs are crusting, air turbulence, causing noises, bleeding and olfactory changes. There are ways to graft other body parts to correct drilling.

Objectives: showing its importance for surgical procedures of the nasal septum perforation.

Resumed Report: Made vibrissae tonsillectomy of the vestibular region, an incision was made on the right side, the 0.5 cm subsequently the front edge of the quadrangular cartilage. Performed a subsequent vertical incision to the septal perforation to approximately 3.5 cm posterior to the anterior margin of the quadrangular cartilage. Removing held right auricular cartilage, and muscle fascia of the temporal muscle, also the right side.

Conclusion: The surgical options range from the expansion of small perforations of the anterior septum, to relieve the discomfort represented by whistles due to air ow through the defect, to which use of aps, whether of his own nasal septum to shutter the nasal septum with or without the use of grafts, which include both the vicinity of the aps. The most common operations using the area of the aps septum itself, rotated about the drilling area, held in position by sutures or biological glues and interspersed with fascia or cartilage grafts. Grafts seem to have an important role in success, serving as a structural cover for the healing of the aps, as well as isolation between the septal lea ets in an attempt to prevent the recurrence of the perforation.

A6128. Hypersomnia Idiopathic: A Diagnosis to be thought
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Introduction: Excessive daytime sleepiness refers to the condition that the patient reports increased propensity to sleep during the day, the need for involuntary naps or sleep attacks. May be present in Obstructive Sleep Apnea Syndrome, in Sleep Movement Disorders, in Narcolepsy and Idiopathic Hypersomnia. Idiopathic Hypersomnia is characterized by excessive daytime sleepiness that occurs in the absence of cataplexy. In the Multiple Sleep Latency Test does not show two or more episodes of REM sleep, and the average sleep latency should be less than or equal to eight minutes. Sleep paralysis and hypnagogic hallucination may be present.

Objective: To describe a case of Idiopathic Hypersomnia at otorhinolaryngology clinic of Portuguese Beneficent Hospital of Sao Paulo.

Case Report: RAA, male, 33 years old, from Sao Paulo. Patient complaining of snoring, excessive daytime sleepiness, chronic nasal obstruction, hypnagogic hallucinations and sleep paralysis. He denied cataplexy or talking during sleep. Performed polysomnography with apnea hypopnea index = 3. The Multiple Sleep Latency Test shown average latencies for the 7.9 minutes sleep, sleep REM absent. It was performed surgery to correct the deviated septum and started Modafinil 200 mg in the morning. The patient improved snores, excessive daytime sleepiness, and reported better willingness to perform tasks during the day.
**Conclusion:** Excessive daytime sleepiness has several causes, and in a patient with normal polysomnographic findings, the possibility of diagnosis as Hypersomnia Idiopathic should be considered.

**A6134. Mucocele Sphenoethmoidal Evolving with Reduced Visual Acuity - Report of a Rare Case**

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Female, 60, frontal headache 2 years ago, blinking in pressure, medium intensity, refractory to analgesics. One year after it progressed with worsening of symptoms associated with reduced visual acuity right and bulging in the ipsilateral upper eyelid area. He denied nasal symptoms, headache history or previous craniocerebral surgery. No other comorbidities. ENT examination without changes. Computed tomography of the paranasal sinuses, image with soft parts in the posterior ethmoid right, well-defined, shifting skull base and anterior wall of the sphenoid, optic nerve compression in the orbital apex. Underwent endoscopic sinus surgery (FESS), with resolution of the headache and improvement of visual acuity in 50 % by Sneller scale in early postoperative.

**A6134. Variation of Accessory Parotid Gland: Anatomical Study on Cadavers**

Antonio Jose Assis Xavier de Souza Pinto, Francisco Sales de Almeida, Nadimila de Fátima Oliveira, Eduardo Poletti Camara

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**Introduction:** The accessory parotid gland is a small unit of salivary gland tissue separate from the main parotid gland and in contact to masseter muscle in a close association (usually above) or anterior to the Stensen's duct. Any disorders that affect the main parotid gland can also affect the accessory parotid tissue, but tumors of accessory parotid gland are rare. **Objectives:** Find bodies to submit anomalous salivary tissue identify the accessory parotid gland, measure the glandular tissue. **Methods:** Three corpses were found in anatomic center of UNIFENAS (University José do Rosário Vellano) that have an abnormal glandular tissue, featured as accessory parotid gland. These were found through a dissection and measured from a castroviejo compass and analog caliper. **Results:** Piece one: Length = 33mm, Width: 23mm; Piece two: Length: 30mm, Width: 22.5mm; Piece three: Length: 31.5mm, Width: 20mm. **Conclusion:** There are two types of anterior extension of the parotid gland: one is "facial process" that is directly attached to the main gland. The other is "detached glandular mass" or "accessory parotid gland", which is completely separated from the main gland. The accessory parotid gland is defined as a salivary tissue that is apart from the main parotid gland and lying on masseter muscle, in front of Stensen's duct. The resulting tumors of accessory parotid gland are normally found above the midpoint of an imaginary line, which extends from a point midway between the ala of the nose and the upper lip, which corresponds to accessory parotid tissue.

**A6135. Polyostotic Fibrous Dysplasia: A Case Report**

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*Inoaa*

**Introduction:** Fibrous dysplasia is a congenital anomaly characterized by replacement of normal bone by fibrous tissue. It represents 2.5% to 7.0% of benign bone tumors and may present monostotic and polyostotic forms (which is rarer). In polyostotic form, the involvement of the head is common (50 to 100% of cases), being the jaw, ethmoid and frontal the most affected bones. **Objectives:** report a suspected case of polyostotic fibrous dysplasia without existence of endocrine diseases or skin blemishes. **Report:** A male patient, 48 years complaining of pain in the right frontal region, intermittent, associated with the exacerbation of nasal allergy symptoms for two months. Anterior rhinoscopy showed pale mucous. The videoasolfoscopy was unchanged. Computed tomography of the face showed thickening with frosted-glass attenuation of previous limiting the left maxillary antrum and lesser sphenoid wing, both suggestive of fibrous dysplasia. It was carried out drug control of nasal allergy symptoms with improvement of the patient’s complaint and opted for tomographic follow-up in six months, which proved to be unchanged from the previous exam. **Conclusion:** It is believed that Fibrous Dysplasia is developed in a primary abnormality of mesenchymal bone formation. Commonly manifests with craniofacial deformities (e.g.: leonine facies) and pain. Computed tomography is the test of choice for diagnostic evaluation of craniofacial injuries and proper surgical planning. The treatment is surgical, aiming at its removal. The disease is benign, but its growth, although slow, may jeopardize important structures in the skull base and orbit and deserve the attention of otolaryngologists.

**A6146. Analysis of the Cost-Benefit of Ambulatory Polysomnography and Polysomnography Portable, a Literature Review**

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**Introduction:** Sleep related breathing disorders are being afforded increased socio-economic relevance globally. These conditions are generally diagnosed through ambulatory polysomnography, as the gold standard procedure. However, increased incidence and consequential higher demand for tests have made portable monitoring devices a more comfortable alternative to outpatient examinations. **Objectives:** This review aims to compare the efficiency and cost-effectiveness of laboratory polysomnography, with portable monitoring held in patients’ domiciles. **Data Synthesis:** Studies comparing the effectiveness and cost-effectiveness of ambulatory polysomnography and its portable alternative are still scarce in medical literature. Some analyses seeking to correlate the quality of these tests have shown favorable results in the use of portable devices, especially with respect to patients free from any major underlying diseases, and who present clear symptoms of sleep apnea or other respiratory diseases. Those analyses have recommended portable examination as a sound diagnostic method, including a review by the American Academy of Sleep Medicine. In addition, the portable method has presented...
positive cost-effectiveness levels and represents an alternative for patients who are unable to take the ambulatory test.

**Conclusion:** Portable polysomnography provides satisfactory efficiency for OSAS diagnosis, as compared to ambulatory polysomnography.

**Keywords:** polysomnography, portable monitoring, diagnostic equipment, sleep disorder, apnea.

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**A6147. Medial Rectus Muscle Endoscopic Endonasal Surgery Decompression**

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**Introduction:** Fractures of the orbital wall are often caused by trauma. Symptoms often found are diplopia, orbital emphysema and enophthalmos, caused from the imprisonment of the medial rectus muscle and orbital fat, leading to indication of surgical exploration. Endoscopic endonasal surgery advanced since introduction in the 80s, today they are applied in the orbital and skull base approaches, with advantages over traditional techniques.

**Objectives:** Report a case of medial rectus muscle incarceration in the papery blade fracture, which developed diplopia and limitation of eye movement.

**Resumed Report:** ALR, 38, face trauma victim, enters service with injury in the right orbit region, progressing with diplopia and decreased visual acuity. The physical examination evidenced limitation of adduction and abduction in the right eye. The computed tomography evidenced paperycruse blade fracture with incarceration of the medial rectus muscle right and fracture of the orbital roof being indicated surgical exploration. The performed surgery for decompression of the medial rectus muscle endonasal started which ethmoidectomy under endoscopic vision to access orbital region; followed by decompression of the muscle; positioned graft in the inferior turbinate mucosal under the periorbital fracture using biological glue. Patient evolved with improvement of diplopia and preserved eye movement.

**Conclusion:** Due to the need of early decompression to avoid permanent damage and the difficulty of access to orbit, endonasal endoscopic surgery has advantages over traditional techniques such as allowing exposure with sharpness, magnification space, decreased morbidity, absence of scars, resulting excellent postoperative results.

**Keywords:** medial rectus muscle, endoscopic endonasal, surgery.

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**A6148. Trigeminal Neuroma: Case Report**

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**Introduction:** Trigeminal neuromas are rare benign slow-growing tumors most commonly occurring in young adults. It represents 0.07 to 0.33% of all intracranial tumors. The majority of patients present with numbness involving one or all branches of the trigeminal cranial nerve.

**Objectives:** To report a case of an elderly patient with neuroma of the second trigeminal nerve with successful conservative treatment.

**Case Report:** J.H.S, 75 years, complaining of constant front headache and facial pain for 25 years. He denied nasal obstruction, rhinorrhea and hyposmia. He underwent right maxillary sinusectomy because of an oroantral fistula after a tooth extraction 20 years earlier due to the same complaints. Physical examination revealed, at rhinoscopy, pale mucosa and hypertrophy of inferior turbinates and horoscopy without oroantral fistula. Flexible nasofibroscopy showed left nasal septum deviation and hypertrophy of inferior turbinates. Tomography of paranasal sinuses revealed enlargement of right infraorbital channel associated with expansive formation of soft tissue density. Brain and orbit resonance showed solid expansive injury with regular contours and enhancement after intravenous contrast, in topography of the upper part of the right maxillary sinus measuring 2.1 x 1.3 x 1.0 cm in anteroposterior, transversal and longitudinal diameters, compatible with a trigeminal neuroma. It was decided that a conservative treatment with pregabalin and common analgesic medications would be performed with significant improvement of the symptoms.

**Conclusion:** It is important to consider the trigeminal neuroma as a differential diagnosis for headaches and facial pains in order to provide appropriate treatment.

**Keywords:** neuroma; trigeminal nerve; pregabalin.

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**A6149. Eagle Syndrome**

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**Introduction:** Eagle's syndrome was first described by Watt Eagle in 1937, is defined as cranial facial pain due to elongation of the styloid process or calcified stylohyoid ligaments. Usually affects women aged 30 to 50 years, the clinic consists of recurrent throat and neck pain exacerbated by swallowing. Otolgia, dysphagia, and foreign body sensation are often present and are secondary to an elongated styloid process impinging on the carotid plexus or cranial nerve IX.

**Objectives:** Present a rare but important differential diagnosis, the evaluation and treatment.

**Resumed Report:** 44 years-old female patient, chief complaint of dysphagia for 1 year, no medical or surgical history of interest, the examination of oral cavity, pharyngolarynx or neck was completely normal. Three-dimensional computed tomography (CT) scan of the neck showed an elongated styloid process. The patient underwent surgery through an external approach.

**Conclusion:** Eagle syndrome is a rare condition of unknown etiology, it can be congenital, acquired or idiopathic. Chronic pain of the head and neck is common, and the origin of this pain can vary greatly 3D-CT was the radiologic investigation of choice, an imaging evaluation associated with a careful clinical examination, are mandatory in structuring a correct differential diagnosis and in the establishment of a proper therapeutic protocol. Treatment can be includes non-steroidal anti-in ammatory drugs, steroids and applications of anesthetic in the tonsillar fossa. The surgery can be for intra or extra oral approach removing the styloid process.

**Keywords:** Eagle syndrome, stylohyoid, styloid process, mandible.

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**A6156. Evaluation of Hearing Acuity among Middle School Students**

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**Introduction:** The ability of hearing plays a decisive role on the cognitive, emotional and social development of an infant. Changes in such capacity interfere on sound understanding, speech perception, learning process, reading and
writing. Therefore, children who present alterations may develop learning disorders and, as a consequence, can present school deficits.

**Objective:** To evaluate students’ auditory acuity and its possible determinants.

**Method:** The research was conducted among students, from 6th to 9th grades of Escola Estadual Dr. José Marques de Oliveira, in the year of 2015, in the city of Pouso Alegre. An amount of 92 Middle school students between 11 and 17 years old was sampled, in which 51.1% were females. Data were obtained by the application of three questionnaires during the participants’ academic shift. The first questionnaire for hearing anamnesis, the second for sociodemographic data and the last for socioeconomic data. Finally, tonal audiometry was carried by a hearing care professional.

**Results:** Between the resulting data, reports of otology (65.2%), itch (53.3%), and tinnitus (50%) stood out. It was observed that 8.69% of scholars demonstrated significant disorders at the audiometry exams. However, the analysis of data showed that none of the symptomatic, social, economic or demographic determinants presented statistic relevance when linked to hearing acuity loss ($p > 0.05$).

**Conclusion:** The presence of otological symptoms in most of the students, such as social, demographic and economic factors, do not necessarily indicates the loss of hearing acuity in school age.

**Keywords:** hearing, children, audiometry, hearing acuity, students

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**A6157. Gangrenous Pyoderma**

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**Introduction:** The Gangrenous Pyoderma is an inflammatory condition of the skin. It has incidence 3-10 cases per million people, unknown etiology and preference for lower limbs. The clinical course can be acute, relapsing or chronic. Approximately 50% of patients have an associated systemic disease.

**Objectives:** We reported a case of Gangrenous Pyoderma attended in the Otorhinolaryngology service in Evangélico Hospital in Curitiba.

**Summarized Report:** A 54-year-old female patient, reported lesion in palate for 2 months with local pain and weight loss. She was referred to chronic condition of ulcers in lower limbs. The Oroscopy examination showed epithelialized lesion without ulcerative aspect with mild hyperemia in the right side of palate. We required laboratorial exams (FAN + 1: 160 nuclear fine speckled; others normal tests). We biopsied and it showed oropharyngeal mucosa with chronic in ammation and acute ulcerated. Therefore, we decided to start prednisone 40mg. The patient returns reporting improved acuity.

**Conclusion:** The diagnosis involves the exclusion of other diseases that cause erosive or ulcerative skin lesions. We must appreciate the painful ulcerated lesions in association with systemic diseases with great performance when corticoids is used. There is no gold standard for the treatment nor protocol. We must clean injury, topical corticosteroids and intralesional or systemic corticosteroids, which is more effective for preventing new lesions and stopping the progression of ulcers. It has favorable prognosis, however patients with atypical symptoms require follow-up by the risk of arise myeloproliferative disorders.

**Keywords:** pyoderma gangrenous, oral lesion, ulcer.
manifestation of immunodeficiency. In addition to the treatment of candidiasis, should be clear to the patient that he needs to treat the underlying disease to prevent opportunistic infections.

**Keywords:** laryngeal candidiasis; HIV infection; dysphonia.

A6165. Primary Laryngeal Amyloidosis as Cause of Dysphonia
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**Introduction:** Amyloidosis is characterized by deposition of fibrillar proteins with specific tinctorial properties. Localized amyloidosis is a rare disease, representing less than 1% of benign laryngeal tumors. Affects individuals between 40 and 60 years, it is more common in males and hoarseness is the most frequent symptom.

**Objectives:** To report a case of localized laryngeal amyloidosis.

**Resumed Report:** M.R.F, female, 50 years, teacher, complaining of persistent dysphonia for four years, without improvement with vocal rest. The voice presented with hoarseness and harshness and laryngoscopy revealed polyloid lesion, angiomatous aspect, sessile, located in the middle third of the left vocal fold. She was submitted to exeresis by laryngeal microsurgery with histopathological result consistent with amyloidosis. Additional research was conducted to exclude systemic disease. She evolved with improvement in voice, secular execution of work activities, remaining in clinical and videolaryngoscopy monitoring.

**Conclusion:** Laryngeal amyloidosis can manifest in different ways, and the diagnosis and early surgical intervention can optimize phonatory and respiratory functions. Regular monitoring is important for early diagnosis of recurrence, since recurrences are common and expected.

A6166. Mastoid Osteoma: A Case Report
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**Introduction:** Mastoid osteoma is a benign tumor of slow growth, composed by the bone tissue. It is usually asymptomatic, although causes most often aesthetic deformity, seen as a protrusion of. Computed Tomography scan is useful in diagnosis and surgical planning.

**Objectives:** To describe a slow growth mastoid osteoma in a young patient.

**Resumed Report:** ACPP, 34 years old, female, complained about a tumor in the left retroauricular region, of progressive and painless growth, starting one year ago. She denied trauma or local infection. Physical examination showed a 3.0 centimeters tumor in retroauricular left region, of hard consistency, smooth, rounded, still without phlogistic signs and painless during palpation. Normal otoscopy. Computed tomography scan of temporal bones showed hyper attenuating lesion next to the left mastoid cortex, approximately 2.5 centimeters in diameter. Surgical removal was the treatment option.

**Conclusion:** The mastoid osteoma presents clinically as a slow growth tumor. It can produce external deformity and projects the ear forward. Although usually asymptomatic, it may produces pain by structures invasion or stretching adjacent peristomeum. In symptomatic lesions and aesthetic deformities, the surgical treatment is indicated. Histopathology is important for the differential diagnosis with other tumors that may affect the mastoid region, such as osteosarcoma and osteoblastic metastatic lesions, cause they have a worse prognosis. Although a low incidence pathology, must be remembered by the otolaryngologist, because it can cause aesthetic and, occasionally, functional changes.

**Keywords:** mastoid osteoma; tumor; retroauricular.

A6167. Giant Parathyroid Adenoma Resection: Case Report
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Hospital Socor

**Introduction:** Primary hyperparathyroidism results from PTH hypersecretion, resulting in hypercalcemia and hypophosphatemia. Parathyroid solitary adenoma is the most common cause.

**Case Report:** Patient hospitalized for myocardial infarction. During hospitalization, a cervical swelling and increased calcium and PTH levels were observed. Cervical ultrasound showed a large nodule posterior to the thyroid. Parathyroidectomy was conducted of the right upper parathyroid, this one measuring 5.5 × 3.8 × 2.5cm. Biopsy confirmed parathyroid adenoma.

**Discussion:** Parathyroid adenomas weigh between 0.5-5g and can weigh up to 20g (normal glands: 25mg). Surgery, the only definitive treatment, can be performed by bilateral neck exploration or minimally invasive parathyroidectomy, with similar cure and complication rates.

**Keywords:** primary hyperparathyroidism; parathyroidectomy; adenoma.

A6168. Extranasal Lymphoma: Case Report
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Hospital Socor

**Introduction:** The extranasal lymphoma, originally described as lethal midline granuloma, corresponds to a group of rare diseases of difficult diagnosis because of unspecific clinic. It has been defined as a destructive progressive condition, ulcerated-necrotizing, which primarily affects the nose and the sinuses, sometimes the mild tissues of the face, nasopharynx, orbit, larynx and trachea. Its clinical course seems to depend on the proportion of big cells observed in anatomic pathological exam, and may take indolent or aggressive form.

**Objectives:** Reporting a case of extranasal lymphoma discussing the diagnostic approach and treatment.

**Resumed Report:** It is a diabetic and hypertensive male patient, 71 years old, who began nasal obstruction, rhinorhea and posterior drip associated with a small ulcerative lesion in left jugal region that after 15 days showed aggressive behavior progressing with necrotizing ulcer appearance and edema of ipsilateral face. With approximately 24 hours, he was evidenced with poor general condition, chemosis, ophthalmoplegia, decreased visual acuity and bicipalpebral edema. It was asked a paranasal sinuses tomography of urgency where was evidenced pansinusitis and periorbital abscess on the left. Then a surgery intervention was opted for orbital decompression. The anatomic pathological result was compatible with malignant neoplasia of high-grade,
suggested NK extranodal lymphoma / T, nasal type. Seven
days after the procedure the patient came to death.

**Conclusion:** The extranodal lymphoma is an aggres-
sive disease of rapid evolution that may result in death if not
diagnosed precociously.

### A6170. Dental Implant’s Nasosinusal Complications: Two Case Reports

**Alice Karoline de Oliveira, Deyse Mayane de Castro, Roosevelt Almeida Rosário, Hélder Macario, Marina Barbosa Guimarães, Pablo Pinillos Marambaia, Flávia Alves Costa Perruco**

**Innoa**

**Introduction:** The implantodonty represents a great
advance in teeth aesthetic and functional restauraion.
When realized in the upper dental arch, the implant has an
intimal relationship with nasosinusal cavities; so odontogenic
sinusitis is a common complication.

**Objectives:** To alert about differential diagnosis of
odontogenic sinusitis in patients submitted to dental implant.

**Reports:** Case 1. PMG, female, 64 years old, complaining about
nasal obstruction, runny nose and facial pain on the left side
due to dental implant; the nasofibroscopy showed lateral wall
bulging and medial meatus draining. Case 2. RSR, 62 years old,
female, complaining about unilateral rhinorrhea and cacoscia
after an implant in the upper left dental arch; the nasofibro-
scopy showed a metal implant transfixing the palate and
penetrating the left nasal oor. The computed tomodigraphy
scan also showed the implant.

**Conclusion:** A intranasal foreign body works as a
bacterial storage place and consequently favors repeated
sinusitis; so its removal must be proceed in order to the
cure. The correct surgical planning, with computed tomodogra-
phy scan, is important before implantation to a complete
anatomic and bone density evaluation, helping to avoid nasal
oor and maxillary perforation. The odontogenic sinusitis is
causes repeated sinusitis, until the correct diagnosis is done.
Otolaryngologist and dentist must work together to the
adequate treatment.

**Keywords:** implantodonty; repeated sinusitis; odon-
togenic sinusitis; dental implants.

### A6176. Aural Myiasis after a Home Treatment for an Earache in a 59 Years Old Adult Male: A Case Report

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**Famema**

**Introduction:** Myiasis is the infestation of live verte-
brate animals with dipterous larvae, which feed on the host’s
dead or living tissue, liquid body-substance, or ingested food.
It can be correlated to increasing y populations, poor hygienic
conditions and low socioeconomic status. In aural
myiasis, maggots are found in the external auditory canal or
in the aural cavity.

**Objective:** The purpose of this study is to present a
case of a 59-year-old man with an earache conducted with
home treatment and complicated with aural myiasis.

**Resumed Report:** O.Q., 59 years old, male, farmer,
used garlic and hot oil in the right external auditory canal as a
home treatment for an earache. After a few days he started a
suppurative and bloody right ear discharge. He went to his
local Health Service before the referral to our service. In our
hospital, he was admitted and hospitalized with the manage-
ment of oral Ivermectina and endovenous antibioticotery,
manual removal of larvae from the right ear, analgesia and
clinical support. A small perforation of the tympanic mem-
brane was seen during the clinical exam, but no larvae in the
middle ear were observed. The patient presented a great
clinical evolution. Ambulatory follow with audiological exams
was oriented.

**Conclusion:** Aural myiasis is associated to low socio-
conomic status and poor hygienic conditions. This study
revealed that inappropriate health attitudes and practices
are also related to this pathology. Thus, increased access to
health information could corroborate the prevention of this
disease.

**Keywords:** myiasis; larvae; aural

### A6218. Lymphomatoid Granulomatosis in a Patient with Crohn Disease Treated with Azathioprine

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**Introduction:** Lymphomatoid granulomatosis is a rare
angiocentric and angioinvasive B-cell lymphoproliferative
disorder, related to Epstein-Barr virus and indeterminate
malignant potential. Pulmonary, central nervous system and
dermatological involvement are most common as primary
extranodal tumor. It affects patients between 30 and 50 years
old, male predominantly. Mortality rates are high, about 50%,
and treatment options are not well established. Although
lymphoproliferative disorders most often occur in patients
with immunodeficiency, in the current literature few cases
reported association between lymphomatoid granulomatosis and
treatment with azathioprine.

**Objectives:** To describe an atypical case of lympho-
atoid granulomatosis in-patient with Crohn disease in the
setting of azathioprine treatment, contributing to the knowl-
edge of this rare disease and providing data to the discussion
on risk factors.

**Resumed Report:** A forty-six years old Caucasian
woman with colonic Crohn disease on maintenance of azathi-
oprime therapy presented with unilateral nasal obstruction.
The nasal fibrosopy indicate tumor in medium meatus and
hypopharynx. Diagnostic imaging revealed pulmonary nod-
ule, however the biopsy was inconclusive. The diagnosis of
lymphomatoid granulomatosis was made based on immuno-
histochemical features on nasal biopsy.

**Conclusion:** Azathioprine therapy is already associat-
ed with an increased incidence of lymphoproliferative disor-
ders. This case suggests, in agreement with previous case
reports, that exposure to such therapy may induce specifically
lymphomatoid granulomatosis. In addition, atypical features in
our case highlights the importance of maintaining a high
degree of clinical suspicion when evaluating patients with
Crohn disease in treatment with azathioprine.

**Keywords:** lymphomatoid granulomatosis, crohn dis-
ease, nasal tumor, azathioprine.

### A6221. Vocal Fold Immobility after Thoracic Surgery with Sudden Recovery after Eight Months: Case Report

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**Introduction:** The immobility of the vocal folds in
adults results mainly from surgical trauma, tumors or neuro-
logical disorders. Most cases related to recurrent laryngeal
nerve occurs to the left, due to its longer path and relation with
the ductus arteriosus. Unilateral immobility may be asymptomatic, cause dysphonia and/or dysphagia. Initially, treatment may be conservative with speech therapy and in case of failure, surgery.

**Objectives:** Describe the case of a patient with vocal fold immobility after thoracic surgery and sudden improvement after eight months.

**Resumed Report:** Male, 35-year-old, with dysphonia after placing prosthesis in ascending aorta in November/2014. No dysphagia or dyspnea. Vocal breathiness and projection difficulty. Videolaryngoscopy: left vocal fold immobility, atrophy, prominence of arytenoid cartilage, supraglottic compensation and different levels between vocal folds. Normal videodeglutogram. Electromyography requested but not performed. Maintained in speech therapy. Five months: slight improvement of dysphonia and supraglottic sensitivity. In the eighth month, indication of thyroplasty type I was been discussed, but the patient had a sudden return of vocal quality. Videolaryngoscopy: good left vocal fold mobility without arytenoid overlap and improvement of depression.

**Conclusion:** In the literature, there are data that allows wait up to nine months of the development of immobility to occur neural regeneration/recovery. Electromyography is an important exam in decision-making, however, it is not always easily accessible. Thus, it is important to wait the evolution of the immobility and so not submit the patient to an unnecessary surgery.

**Keywords:** vocal cords paralysis; recurrent laryngeal nerve palsy; vocal fold palsy.

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**A6223. Tongue Schwannoma - Case Report**

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**Introduction:** Schwannoma is a benign, non-recurrent tumor arising in cranial nerves, bone, and gastrointestinal tract, but mainly in subcutaneous tissue and muscles, with a slight predilection for distal extremities or head and neck region, where it occurs in 25-45%. Intraoral schwannoma accounts for 1-12% of all head and neck tumors and are commonly seen at the base of the tongue region.

**Objectives:** The differential diagnosis of tongue nodular lesion has to include a schwannoma possibility.

**Resumed Report:** IVAL, male, 39-year-old, Caucasian, sought an emergency service due to a hardened tongue dorsum injury that had appeared 6 months before, with rapid and progressive growth associated to odynophagia and bleeding from the injury after eating, resulting in weight loss and significant impairment in his quality of life. The patient was then referred to an otorhinolaryngology clinic where a fibronasolaryngoscopy was carried out showing a hardened sessile lesion of 2 cm on the tongue dorsum, and a computed tomography showed an injury of 2.1 × 2.0 × 1.8 cm without peripheral enhancement after contrast. We opted for the surgical resection of the lesion and sent it to pathology, which led to the diagnosis of nodular schwannoma. The patient had a good progress and restored his daily activities.

**Conclusion:** Although not the most common site of origin of schwannomas, this condition should be considered as a differential diagnosis of tongue nodular lesions. Their complete surgical resection is curative in most cases and associated with a good prognosis.

**Keywords:** schwannoma, tongue, nodular lesion.
A6227. Tracheoesophageal Fistula: A Diagnosis to be Considered in Patients with Dysphagia
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Introduction: Communications acquired between the esophagus and the tracheal system are commonly found by iatrogenic or traumatic causes. Tracheoesophageal fistula as a late complication of tracheostomy is a rare occurrence, with incidence less than 1%. The diagnosis can be established with the direct visualization of the fistula through: Esophagoscopy, Bronchoscopy, Radiological imaging methods, Surgery or Autopsy.

Objectives: Show the importance of Otolaryngology evaluation of swallowing.

Resumed Report: M.S.A, 63, presented with fainting, followed by cardiac arrest reversed, remained hospitalized for 40 days in the Marcilio Dias Naval Hospital. On the tenth day of hospitalization, the patient was tracheostomized. After two weeks was requested Videoendoscopy swallowing for progression of oral diet and withdrawal of nasoenteral tube. During the examination, was given 5 ml of water with colorant aniline, obtaining efficient swallowing, with no penetration or aspiration. However, after 4 seconds a jet re ux throughout the larynx, with coughing. Then, the examination interrupted. Advised by the Otolaryngology service, upper gastrointestinal endoscopy and bronchoscopy were performed. Both examinations indicated tracheoesophageal fistula of 1.0cm in the endotracheal column area. The Thoracic surgery clinic opted for performing gastrostomy, new tracheostomy and conservative treatment of fistula. Three months later, a new bronchoscopy diagnosis closure of the fistula. New Videoendoscopy Swallowing showed absence of laryngeal penetration or aspiration.

Conclusion: The endoscopic evaluation of swallowing played an important role in the diagnosis and management of tracheoesophageal fistula; it was crucial in this case, for both the proper management, evolution of diet, rehabilitation and treatment.

Keywords: tracheoesophageal, fistula, dysphagia.

A6229. Prevalence of Incidental Sinus Disease on Computed Tomography of Mastoid and Temporomandibular Joint
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Introduction: The gold standard for diagnosing sinusitis is the Computed Tomography, which allows a proper evaluation of bone structures and soft tissues of the face. Incidental changes in the sinuses can be seen in CT scans of skull, mastoid or orbits of patients without clinical evidence of rhinosinusitis.

Conclusion: Vestibular rehabilitation exercises are essential in the treatment of vestibular disorders and free from side effects. In certain clinical situations, may be the only therapeutic resource, presenting undeniable effectiveness.

Keywords: vestibular, rehabilitation, balance.

A6231. Foreign Body in Otorhinolaryngology: Profile of Emergency Care in a High Complexity Public Hospital
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Introduction: A common complaint in the Otorhinolaryngology emergency services is the presence of foreign body in the ear, nose or throat. The characterization of the clinical care of the emergency service provides subsidies for work organization in the hospital.

Objectives: Analyze the profile of foreign body attendances provided in an otorhinolaryngology service of a reference hospital at Paraíba, during a period of six months.

Methods: It was performed a retrospective cross-sectional study, based on analysis of the notebook records of the emergency care service, from June to November of 2015.

Results: Attendances were made to 594 cases of foreign body in the period, equivalent to 50.59% of all cases seen at the Otorhinolaryngology service. The female gender was the most prevalent, accounting for 56% of cases. The most frequent location of foreign body was the ear (43.93%), followed by the oropharynx / larynx (41.60%) and nose (14.47%). The most prevalent type of foreign body in the ear was insects (30.06%), in the nose was grains/seeds (28.57%) and in throat was fish bones (43.16%). The need for anesthesia to remove the foreign body was 0.38% in ear and 1.16% in nasal foreign bodies.

Conclusion: The foreign body was the most prevalent complaint of Otorhinolaryngology department of this hospital. The most commonly found site were the ears, followed by the oropharynx/larynx and nose. Low anesthesia need rates were recorded in the services performed by the otorhinolaryngologist.

Keywords: foreign body, emergency, otorhinolaryngology.
A6232. Profile of Otorhinolaryngology Urgency/Emergency Care in an Emergency Hospital from João Pessoa, Paraíba
Adriano Sergio Freire Meira, Yuri Ferreira Maia, Adilson de Albuquerque Viana Junior, Nelson Jose Barboza Quintino, Thais Eugênio Gomes, Alexandre Augusto de Brito Pereira Guimarães, Kallyne Cavalcante Alves Carvalho
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Introduction: For effective care in Otorhinolaryngology emergencies, it is necessary to follow pre-defined protocols that improve and streamline the care provided. Getting to know the profile of these consultations may help.

Objectives: To evaluate the epidemiological characteristics of care in the emergency department of otorhinolaryngology at a high complexity hospital in the period of 6 months.

Methods: It was performed a descriptive, retrospective, cross-sectional study from the notebook records (attendances) of Otorhinolaryngology sector at an Emergency Hospital in Paraíba, from June to November 2015. The sessions were divided into subspecialties of otology, rhinology, laryngology and head and neck surgery.

Results: Of the 1174 attendances in the sample, 590 (50.2%) were female. The number of visits by specialties were 615 (52.38%) attendances in otology, 297 (25.3%) in laryngology, 255 (21.72%) in rhinology and only 5 (0.42%) in Head and neck surgery. Of the total attendances made, 987 (84.07%) were considered urgency/emergency in Otorhinolaryngology.

The main diagnosis found were, in a descending order: Foreign body in the ear; foreign body of oropharynx; epistaxis; nasal foreign body; external otitis; acute otitis media; trauma of the external auditory meatus; peripheral facial paralysis; tonsillitis and earache.

Conclusion: With nearly 85% of attendances considered urgent in otorhinolaryngology, it was noticed a good hospital screening service. Among the four main diagnoses, three were foreign bodies (ear, nose and oropharynx), demonstrating the inconvenience caused by them, which leads to quick search for urgent care.

Keyword: health profile; otorhinolaryngology; emergencies.

A6237. Choanal Stenosis: A Case Study
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Introduction: choanal stenosis is an incomplete choanal atresia. It is characterized as an anatomical change that causes an incomplete obstruction (membranous or osseous) of choanae, anterior and/or posterior.

Objective: To report a case of choanal stenosis.

Case Report: A female patient, 28 years old, treated in an otorhinolaryngology department in the city of João Pessoa / PB, on 03/03/2016, with a history of chronic nasal obstruction that has endured for more than 20 years, It is worse in the right nostril (chronic rhinosinusitis). A nasal endoscopy was performed with rigid optics. Polypoid lesions, chronic in the nasal mucosa in both cavities were identified; with degeneration of middle and lower turbinates, accompanied by narrowing right Choanae, hindering drainage of secretions in this cavity. Sinuses tomography showed degeneration of the nasal turbinates, right choanal stenosis and left maxillary sinus hypoplasia. The patient was referred for surgery, endoscopically, was performed the resection of the polypoid lesions, antrostomy of maxillary sinuses, bilateral inferior turbinate, as well as the correction of choanal stenosis, expanding the posterior nasal opening, which communicates the cavity nasal with the pharynx. The patient progressed satisfactorily, without obstructive complaints. Postoperatively a nasal endoscopy was made, checking an effective opening of the choanae with good communication of the cavity with the pharynx.

Conclusion: Thus, videoendoscopy more tomography of the sinuses, identified the presence of choanal stenosis, which with surgical and clinical treatment evolved satisfactorily.

Keywords: stenosis, choanae, surgery, otorhinolaryngology.

A6238. Ludwig Angina: A Case Study
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Introduction: Ludwig’s angina is a cellulite commonly caused by an odontogenic infection, involving the submandibular, sublingual and submental spaces. Symptoms include pain, swelling in the neck, dysphagia, odynophagia, trismus, oor of the mouth swelling, tongue protrusion, fever, lymphadenopathy and chills.

Objective: To report a case of Ludwig’s angina.

Case Report: A 38 years old patient, male, treated in an otorhinolaryngology department in the city of João Pessoa / PB, with odynophagia for 05 days, with limited mouth opening; edema and important and progressive cervical hyperemia, and sweating. Reports previous and incomplete dental treatment, there are 06 months. Physical examination verified the presence of signs of inflammation throughout the cervical region. Otoscopy and nasal endoscopy without changes. Ososcopy identified lockjaw. Fibronasolaryngoscopy identified bulging sidewall of the right pharynx and edema, seems to be a solid mass of cystic aspect in right areepiglotic fold. Neck tomography presented image of soft tissue right side of masticator, Para pharyngeal, submandibular, sublingual and submental space and emphysema in the oor of the mouth and midline shift to the left. It was started intravenous broad-spectrum antibiotics. The patient was referred for surgical evaluation of head and neck, drainage being performed, with improvement.

Conclusion: We conclude that the diagnosis based on clinical and imaging tests combined with effective medication and early surgical intervention is paramount for maintaining the patient’s life.

Keywords: Ludwig’s angina, odontogenic infection, otorhinolaryngology.

A6239. Profile of Microcephaly Patients Born with Suggestive Signs of Zika Virus Exposure during Pregnancy in Otorhinolaryngology Service
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Microcephaly is a rare anomaly in which the newborn presents the skull smaller than normal, and is related, according to some studies, to the presence of Zika virus. It is characterized by Cephalic Perimeter (PC), in males, equal to or less than 31,9cm and, in females, equal to or less than 31,5cm, for newborns with 37 or more weeks of gestation.
Objective: To determine the profile of patients with suggestive signs of exposure to Zika virus during pregnancy.

Methods: A retrospective documentary study conducted in 35 medical records of patients from the department of otorhinolaryngology of FUNAD - João Pessoa / PB, during the period of 2015 to April 2016.

Results: Among 35 patients, 22 (62.8%) are male and 13 (37.2%) female. Regarding the type of delivery, 21 (60%) were born by cesarean and 14 (40%) by vaginal birth, 3 (8.6%) preterm and 32 (96.4%) term birth. In relation to the PC, 13 (37.2%) patients had between 25 and 29cm and 22 (62.8%) between 30 and 32cm. It is noteworthy that 15 (42.8%) women had suggestive signs of exposure to Zika virus during the first three months of pregnancy, 10(40%) in the second and 3(8.6%) in the third; 2(5.7%) women had a husband or children with such signs, 4 did not obtain suggestive signs of this viral infection and 1(2.8%) reported signs before pregnancy.

Conclusion: PC measure is critical in pediatric care, because it can be on the basis of the diagnosis of a large number of neurological diseases such as microcephaly.

A6240. Leishmaniasis of Nasal Cavity Mucosa: A Case Study
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Introduction: Leishmaniasis is a parasitic disease caused by protozoa of the genus Leishmania, transmitted by sand- y mosquito. The mucosal leishmaniasis is constituted as a form of cutaneous leishmaniasis, which occurs after untreated skin lesion being able to give metastases, preferentially in the regions of the nasal septum and oropharynx.

Objective: To report a case of leishmaniasis in nasal cavity mucosa.

Case Report: A male patient, 70 years old, was treated in an otorhinolaryngology department in the city of João Pessoa / PB, with a history of nasal obstruction, rhinorrhea and epistaxis in the left nasal cavity, a year ago. It is noteworthy that there were no changes in the otoscopy and horoscopy. Nasal endoscopy, showed a granulomatous lesion in anterior septum more prominent in the left nostril. A paranasal sinuses tomography examined a suggestive soft tissue injury in the nasal septum. Rheumatoid factor positive and IgG for leishmaniosis (1/320). Thus, incisional biopsy was performed with the result of ulcerated tissue with dense inflammatory base, rich in plasma cells, observing focal epithelial cells agglomerates, intercalated multinucleated giant cells; chronic granulomatous process not caseficiante, compatible with the clinical hypothesis; Montenegro skin test positive. The patient is being treated for leishmaniosis, together with infectious diseases, and use of amphotericin B, evolving with an improvement.

Conclusion: The multidisciplinary care helps in early identification of diagnosis and subsequent treatment, being relevant in the complication of clinical condition.

Keywords: leishmaniosis, mucosal leishmaniosis, parasitosis, nasal cavity.

A6242. Barotrauma of Middle Ear: A Case Study
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Introduction: Barotrauma is all ear injury caused by trauma secondary to an imbalance between environmental pressure and the middle ear cavity.

Objective: To report a case of barotrauma with acute otitis media and tympanic membrane perforation.

Case Report: P.C., 24 years old, female. It has a history of asthma and allergic rhinitis. It was treated at a service in the city of João Pessoa / PB, on 10/01/2016, with earache and otorrhagia history in the right ear for 24 hours recounting previous symptoms and air travel in the prior week, highlighting significant pain and aural fullness during light, with a slight improvement after. However, the feeling of fullness remained until the day of consultation. Upon examination otoscopy was found drilling 50% of the tympanic membrane covering the upper and lower parts; otorrhagia and otorrhea. In audiometric examination, it was found mild conductive hearing loss in right ear, with type B curve, absent ipsilateral re exes. Thus, were initiated antibiotic therapy (amoxicillin clavulanate); the use of prednisolone and otocirax, and the realization of nasal lavage with saline. After ten days, a medical consultation for reassessment of the tympanic membrane was made, where was observed the healing process, without otorrhea or otorrhagia, but still perforated. After twenty days the patient returned, the membrane was reconstructed and had no complaints.

Conclusion: It is concluded that an effective ENT monitoring and treatment promotes a good prognosis for patients with barotrauma and otitis media, with consequent tympanic membrane perforation.

Keywords: barotrauma, tympanic membrane, otitis media, otolaryngology.

A6244. Acute Dacryocystitis in a Child: A Rare Case
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Acute dacryocystitis presents as an inflammation of the lacrimal sac and is typically caused by infection. The most common signs and symptoms include erythema, edema and a painful area of induration that overlies the nasolacrimal sac. Gram-positive organisms are predominant etiological agent of acute dacryocystitis. However, other causes should be considered in the presence of this manifestation. Therefore, it is important to know the underlying etiology to choose the most effective treatment and avoid complications. ICF, female, 6 years old attended the Pediatric Clinic presenting edema and hyperemia in the lower right eyelid lacrimal sac topography for 2 months. She was treated with azithromycin, clindamycin and trimethoprim- sulfamethazine with no clinical improvement. After the appearance of facial purples nodules, the clinical hypothesis of sporotrichosis was considered and itraconazol treatment was started, however there was no response to treatment. The patient underwent a biopsy of nodular lesions in the face and cervical lymph node, which revealed positive microscopy for acid-fast bacilli.

Objective: Describe a case of acute dacryocystitis in children by mycobacteria.

Conclusion: Although the main cause of dacryocystitis in children is due to congenital obstruction of lacrimal duct,
other infectious causes should be considered in this manifestation. The definition of the etiologic agent in acute dacryocystitis is important in establish the appropriate treatment and avoid complications. In countries with endemic mycobacterial infection, these agents should be considered as cause of acute dacryocystitis, despite being an unusual cause.

**A6247. Case Report: Solitary Neurofibroma of the Left Maxillary Bone**

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**Introduction:** Neurofibromas are benign tumors, derived from the periphery neural tissue. They are constituted of Schwann cells, non-neoplastic fibroblasts and perineural cells. Up to 45% affect, head and neck and only 4% affect the nasal cavity and paranasal sinuses. They can occur as multiple or solitary lesions.

**Objectives:** To describe a case of solitary neurofibroma of the left maxillary bone.

**Resumed Report:** A 16-month-old female patient presented with a 20-day history of enlargement and discrete hyperemia of the left paranasal region, associated with ipsilateral epiphora. Physical examination revealed a hardened lesion on palpation and deviation of the nasal pyramid. Computed tomography showed a cystic lesion of 2.5 x 1.2 centimeters involving the canine tooth root and the inferior portion of the nasolacrimal duct with bone remodeling of the orbital portion of the left maxillary bone. Excisional biopsy was performed and microscopy revealed cutaneous neurofibroma.

**Conclusion:** Solitary neurofibroma of the maxillary bone is a rare condition with few case reports. The treatment involves surgical removal.

**A6271. Cholesteatoma of the External Auditory Canal in Differential Diagnosis of External Otitis: Case Report**

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**Abstract:** Cholesteatoma of external auditory canal is a rare disease with an estimated incidence of 1 : 1000 of all patients seen in otologic practice. The purpose of this article is to present a case of this condition, with its main features and differential diagnosis, making it more easily recognizable in daily practice.

**Case Report:** E.M.S 72 year-old male with chronic otorrhea in the left ear for about 8 months, with no improvement despite the use of different types of ear drops. Otoscopy revealed purulent secretion and bone erosion of the external auditory canal (EAC). The tympanic membrane had no perforation and its transparency was preserved. Computed tomography of the mastoid showed the erosion area in EAC (Grade III), without middle ear involvement. The histopathology was compatible with cholesteatoma. The treatment was surgical.

**Comments:** The external auditory canal cholesteatoma is a difficult disease to diagnose because its clinical similarity to other external ear disorders. Obliterans keratosis and malignant otitis externa are the main conditions that should be considered as a diagnostic differential. CT scan is an important diagnostic tool to elucidate which of these primary lesions is present.

**A6282. Esthesioneuroblastoma: A Case Report**

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**Introduction:** This is a rare neoplasm of neuroectodermal origin that arises from olfactory epithelium in the upper nasal cavity at the level of the cribiform plate. It accounts for 3 - 6% of all intranasal tumors. There are two incidence peaks, between the ages of 11 and 20 years and between 50 and 60 years. Approximately 55% originate in the maxillary sinuses, 35% in the nasal cavity, 9% in the ethmoid and 1% in the frontal and sphenoid sinuses. Tumors in this region usually cause unspecific and common symptoms. Nasal obstruction (61.2%), epistaxis (40.8%), facial pain (39.2%) and local infection (23.9%) are the most commonly reported initial symptoms.

**Objectives:** The objective of this report is to describe the case of a rare tumor that affects the nasal cavity and paranasal sinuses. The physician must keep in mind that this rare entity is one of the diverse number of diseases that may affect this region.

**Resumed Report:** HLSJ, male, 27 years, came to us complaining of bilateral nasal obstruction, headache, and hyposmia followed by epistaxis for 6 months. Anterior rhinoscopy showed a bilateral tumoral lesion involving all the nasal cavity. After performing a CT scan, Patient was submitted a biopsy of the lesion, which resulted in the histopathological diagnosis of esthesioneuroblastoma.

**Conclusion:** Non-epithelial tumors of the nasal cavity and paranasal sinuses are rare pathologies, with extremely varied etiopathology, clinical behavior, treatment and prognosis. The lack of symptom specificity usually delays diagnosis.

**Keywords:** esthesioneuroblastoma, olfactory epithelium, neoplasm.

**A6289. Multifactor Association in Patients with Obstructive Sleep Apnea: A Case Report**

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**Introduction:** The obstructive sleep apnea is characterized by a recurrent complete or partial obstruction in upper airway during sleep, which can be due to many factors, associated or not, resulting in periods of apnea, desaturation of oxyhemoglobin and frequent awakenings with consequent daytime drowsiness and impaired quality of life.

**Objectives:** To report a case of obstructive sleep apnea with multi obstruction factors.

**Resumed Report:** M. N. C, 46, white, with complaints of snore (Stanford: 10), excessive daytime sleepiness (Epworth: 21), nasal obstruction and dysphonia. The patient has reported hypertension and diabetes in clinical treatment. The exam showed obstructive deviation of the septum, turbinate hypertrophy, web palate, palatine tonsil grade 3, Friedman 2, neck circumference of 40 cm. Polysomnography with severe obstructive sleep apnea and minimum desaturation of
A6295. Asymmetric Hearing Loss as a Manifestation of Vestibular Schwannomas
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Introduction: The natural history of Vestibular Schwannomas (VS) is yet not totally known, but most of them have the tendency to slow growth, sometimes without any kind of symptoms during the individual’s entire time. The VS occurs in an incidence of about 1:100000 inhabitants per year. Currently radical surgical removal of the VS in a single surgery stage is the treatment of choice in most cases.

Objectives: The aim of this study was to evaluate the results of surgical treatment of VS in patients operated on through the retrosigmoid approach.

Resumed Report: Patient 45 years old, female, came to our service with aural fullness of complaint, progressive hearing loss, dizziness roundabouts and occasional ringing in the left ear (OE) for 5 years. Otoscopy and neurological tests without changes. It requested tonal and vocal audiometry, which revealed severe sensorineural hearing loss in the left ear and normal thresholds right, a fact that drew attention and led us to request further tests to investigate. PEATE showed absence of left responses and OEA without otoacoustic emissions distortion product in 2, 3, 4, 6 and 8 kHz. VENG was requested for biopsy. Histopathological showed lesions compatible with lymphangioma, larynx, dysphonia.

Conclusion: The otolaryngologist doctor should keep in mind the various etiologies of asymmetric hearing loss and additional tests available for the diagnosis.

A6308. Ramsay Hunt syndrome and Vocal Fold Paralysis: Case Report
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Introduction: The Ramsay Hunt Syndrome is defined by herpes zoster ear and facial paralysis that is often associated to earache. The syndrome is associated to paralysis of others cranial nerves, rarely including vagus nerve, causing unilateral vocal fold paralysis.


Case Report: Patient, 63 years old, male, presented a left earache. In medical care was prescribed topical and systemic antibiotic. After three days, he presented edema, hyperemia and vesicles in left ear besides earache and left facial paralysis grade V associated to dysphonia, hearing loss and dizziness with Romberg right. It was applied a video-laryngoscopy that showed paralysis of the left hemilarynx in paramedian position, along with an audiometry with moderate sensorineural hearing loss in the left ear and cranial magnetic resonance imaging with neuritis of VIII left nerve without others changes. Started treatment with clindamycin, acyclovir and systemic corticosteroids. Showed progressive improvement of ear edema. After three months, remains facial paralysis grade IV, dysphonia and neuralgia, with an outpatient treatment.

Conclusion: Ramsay Hunt Syndrome has a variable clinical presentation according to the number and the extent of the involvement of cranial nerves. The clinical suspicion and early treatment allow a favorable evolution of the case.

Keywords: Ramsay Hunt Syndrome.
may be located in the carotid body, jugular bulb, along of Jacobsbøis and Arnold’s nerves, in the adrenal medulla, from the jugular fossa to the middle ear. Rare involvement of the head and neck. It can be sporadic or hereditary. The most common symptoms are hearing loss and unilateral pulsatile tinnitus.

**Objectives:** Expose information about Paraganglioma in order to direct the diagnostic reasoning.

**Resumed Report:** Male, 42, without comorbidities, with pulsatile tinnitus in his left ear for the last 6 months, progressive hearing loss and ipsilateral otorhagia, progressing to seizures. He denies earache or a history of ear infections. Otoscopy showed a red and pulsatile polypoid lesion in left external auditory canal without otorrhea. Audiometry showed mixed hearing loss in left ear. It performed CT scan of the left mastoid, cerebral angiography and Magnetic Resonance Imaging of the skull, which showed vascularized lesion in left acoustic meatus, nourished by carotid artery left, and involvement of middle ear and mastoid, with intracranial extension. It was performed left radical mastoidectomy, and removal of the entire lesion. Histopathological study showed diagnosis of Paraganglioma.

**Conclusion:** Despite being a rare tumor of the head and neck and present benign histologic nature, the paraganglioma may have extremely aggressive course making diagnosis recognition and proper therapeutic management of great importance for the doctor and his patient.

**Keywords:** paragangliomas, tinnitus, tumors.

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**A6310. Guillain-Barré Syndrome and Facial Paralysis**

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**Introduction:** Bilateral facial paralysis of the facial nerve is an infrequent and non-specific finding. Most fits in idiopathic category, however bilaterally appears in the context of various clinical entities. Hora and Elwell, establish situations in which bilateral facial paralysis may show up, among them, association with undetermined etiology of diseases (Guillain-Barré syndrome). The syndrome is an acute or subacute polyradiculoneuropathy, usually occurs after an infectious illness or surgical procedure. Primarily affects the peripheral nerves, and when reaches the cranial nerves, has affinity with the facial nerve, most often bilaterally.

**Objective:** Describe case of Guillain-Barré syndrome, with symptom of peripheral facial paralysis.

**Case Report:** GP, Brazilian, 44 years old, male. Patient was admitted at Beneficência Portuguesa Hospital, in São Paulo, with myalgia, retro-orbital pain and headache; evolving with bilateral facial paralysis (House-Brackmann score - IV), intense retroauricular pain and numbness of hands and feet. At the neurological examination, he presented arexia and paresthesia in limbs, muscle strength and preserved sensitivity. Magnetic resonance revealed right facial neuritis. Held liquor collection was made, showing protein-cytological dissociation, compatible with Guillain Barré syndrome. The dosage of IgM and IgG were positive for Epstein Barr Virus. Treatment with Immuneglobulin was done, and the patient was released after ten days with partial improvements of the symptoms.

**Conclusion:** Given the substantial raise of Guillain-Barré syndrome incidence last year in South America, it is very important to notice peripheral facial paralysis as an initial symptom.

**Keywords:** facial paralysis, Guillain-Barré syndrome, facial nerve

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**A6313. Profile of Otorhinolaryngology Surgeries in a Private Hospital in São Paulo, Brazil**

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**Introduction:** Otolaryngology surgery represents an important portion of the total surgical contingent in those hospitals, which carry this medical specialty. It is a surgery that is in high demand. The surgery is quick, and requires a short period of hospitalization, lasting on average 24 hours. Most surgeries are elective and performed under general anesthesia.

**Objectives:** Evaluate the profile of patients, which may be associated with seasonality or prevalence among subspecialties of otolaryngology, practiced in a private institution, Beneficência Portuguesa de São Paulo Hospital, during the period of January to December 2015.

**Methods:** A retrospective study based in the data of medical records of all patients undergoing otorhinolaryngology surgical procedures.

**Results:** The total number of surgeries between January and December 2015 was 538. Rhinology comprised 64.7% of the surgeries, pharyngolaryngology 23% and otology 12.3%. Septoplasty and turbinectomy were the most common procedures. 55% of patients were male. The prevalent age group was between 21 and 40 years. The season that encompassed more surgeries was Brazilian winter during which July saw the highest surgical volume particularly in patients between 8 and 20 years.

**Conclusion:** Rhinology was the subspecialty that saw the highest number of surgeries and otology the lowest. It was observed that the largest portion of surgeries was held in July with prevalence on younger patients, which may be related to school holidays and the season.

**Keywords:** otorhinolaryngologic diseases; otorhinolaryngologic surgical procedures; rhinosurgery.

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**A6326. Profile Epidemiological and Epistaxis Treatment in Emergency Unit a Tertiary Hospital in João Pessoa**

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**Introduction:** The epistaxis demand high frequency and possibility of systemic repercussions and important sites. There are several ways to approach the patient with epistaxis, not always requiring surgical intervention. Therefore, it is essential the otolaryngologist know the types of treatment available to increase the chances of success in controlling epistaxis.

**Objectives:** To evaluate the clinical and epidemiological profile of epistaxis in the emergency unit of a tertiary hospital in João Pessoa - PB. As well, the forms of treatment performed to control epistaxis.

**Methods:** An analytical study using data from the records of the emergency department in otolaryngology Hospital de Emergência e Trauma Senador Humberto Lucena Paraíba during the year 2015. Two parameters were used: Sex and topography of epistaxis (front or rear). The treatment was
divided into Clinical (clinical follow-up, front tamponade, front-rear tamponade) and surgical.

Results: Were computed 117 records of which 52% of the records were composed by the group of men and 48% for women. Bleedings in front topography prevailed 88%. Percentage were treated in clinical form, as 1% were treated surgically. Of the patients treated medically, 66% were instructed to perform outpatient clinical follow-up, 3.4% required front-ear tamponade.

Conclusion: The data measured in this study highlights the high incidence of epistaxis in the highly complex health services. Therefore, it is essential that the general practitioner knows the alternatives to approach epistaxis, using the resources at your fingertips for the first service of this very common disorder in clinical practice.

Keywords: epistaxis, treatment, surgical.

A6333. Fungal Sinusitis of Sphenoid Sinus with Complications: Case Report
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Introduction: Sinusitis is in ammation of the nasal area and sinuses. It could be viral, bacterial, fungal and allergic. Fungal sinusitis is rare.

Objectives: Describe a case of a diabetic patient with rhinosinusitis fungal sphenoid with complications.

Resumed Report: A male, 68 years old, diabetic and high blood pressure, as assessed by ophthalmology with ocular pain over one month, visual loss, exophthalmos and limitation of lateralization in the left eye. Also reported sporadic headache, worsening of the intensity and frequency in the last month. Three days later returned with hemiplegia on the left eye, decreased re ex motor and no light perception in the same eye. He was hospitalized and tests of thyroid function (no changes), serology for HIV and hepatitis C (negative), and reactive HbsAg were performed. Held orbital computed tomography, showing obliteration of the left sphenoid sinus, with sclerosis of the bone part and calcifications. Moreover, it showed focal bone discontinuity area in the lateral wall of the left sphenoid sinus. The treatment began with amphoterin B and ceftiraxone combined with metronidazole, resulting in partial improvement of eye protrusion and left visual acuity. Nuclear resonance magnetic was held, showing symmetrical cavernous sinuses without thrombosis, but with the left sphenoid sinus and cavernous sinus invasion signals. Surgery was performed and histological examination presented Aspergillus sp.

Conclusion: The severity when there is the rare sphenoid involvement presenting increased risk of orbital complications and central nervous system, especially in diabetic. Commonly the maxillary and ethmoid sinuses are most affected.

Keywords: fungal sinusitis, diabetes, complications.

A6339. Profile of Medical evaluations in the Otolaryngology Specialty, in a Private Hospital Intensive Care Unit in São Paulo
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Introduction: Intensive therapy calls for a significant portion of care in Otolaryngology. Most interconsultation is motivated by complications of procedures and behaviors performed in the Intensive Care Unit, postoperative, immunsuppression and even chronic complaints without the need for immediate treatment.

Objectives: Evaluate the profile of patients and the diagnoses and treatments most prevalent among interconsultations within Intensive Care Units of the Beneficência Portuguesa de São Paulo Hospital between February 2014 to April 2016.

Methods: Records of data collection of patients treated during the given period.

Results: 224 patients were seen, 56% of which were female, and 65% were over 60 years of age. When divided by subspecialty, we observed 45% of diagnoses in Rhinology, 19% in faringolaringoestomatology, 16% in Otology and 20% incidental findings of diagnosis through imaging studies. Most frequent diagnoses: epistaxis (43%), acute sinusitis (20%), oral lesions (14%), ear infections (10%), temporomandibular joint dysfunction (8%), laceration of the external auditory canal (5%), 70% underwent therapeutic procedures such as, chemical cauterization and nasal packing, in the room; and 30% underwent surgical procedures, such as cauterization of nasal arteries, sinosotomias or biopsies.

Conclusion: Diseases of the nose and paranasal sinuses were the most prevalent. The dominant age group was over 60 years of age, which matches with the age prevalent for admission to the Intensive Care Unit. Most reviews were completed in the patient’s room, without the necessity of a surgical environment.

Keywords: immunsuppression; sinusitis; epistaxis.

A6340. Profile of Patients with Epistaxis in One Year in a Private Hospital in São Paulo
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Introduction: Epistaxis is bleeding that originates from the mucosa nasal. It is one of the most frequent emergencies in otolaryngology, explained by the richness of the local vascularity.

Objectives: Evaluate the profile of patients with epistaxis attended by otorhinolaryngology at Beneficência Portuguesa de São Paulo Hospital, between March 2015 to March 2016. This work does not involve cases of postoperative.

Methods: Retrospective study of survey data of patients admitted or not, with a history of epistaxis, attended by Otorhinolaryngologists at Beneficência Portuguesa de São Paulo Hospital of in the period.

Results: There were a total of 472 patients, 57.5% were male, 55.5% above 60 years of age of the patients admitted, 16.25% admitted to the Intensive Care Unit, 13.75% admitted to ward and 60% patients treated in the emergency room. Of these, 50% had no active bleeding at the time of examination, 71.5% with bleeding only one nostril. 59% of cases submitted to
chemical cauterization, 39% underwent nasal packing and 2% underwent surgical intervention. 39% of patients had hypertension decompensated, 31% with posttraumatic epistaxis and 1% with Osler-Rendu-Weber syndrome.

**Conclusion:** The highest frequency of cases was in the male. Trauma also stands out as an important cause. In front of a patient with a history of epistaxis, is important to research predisposing factors to prevent recurrences. Surgical intervention was necessary in a small number of patients with epistaxis.

**Keywords:** epistaxis, nasal bleeding, rhinosurgery.

**A6347. How to Validate a Questionnaire?**
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**Introduction:** Questionnaires quality of life have often been used to evaluate the impact caused by an intervention or assess the performance of health services. Most of these questionnaires is found in the literature of the English language and be able to use them it is necessary to translate them into Portuguese, but the simple translation may not be effective. There are several guides and protocols for translation and cultural adaptation of a scale from one language to another. An example is the cultural Cross-adaptation of health-related quality of life measures: literature review and Proposed guidelines (Guillemin 1993), internationally known.

**Objective:** To describe the steps recommended internationally to perform a translation and cultural adaptation of a scale and report some changes suggested by more recent work.

**Methods:** To perform the translation and cultural adaptation is necessary to use the steps: independent translation; translation synthesis; back-translation of the synthesis; Expert Committee assessment; and pre-test.

**Result:** Guillemin and colleagues created a guide to standardize the translation and cultural adaptation procedure. Five steps should be followed: independent translation, synthesis of translations, back translation, meeting of the expert committee, pretest. A group of University of Campinas suggested some changes in this guide, one of which add to the expert committee a member of the target population.

An old male, 81 years old, with recent bladder resection for cancer, was sent to Head and Neck Surgery to evaluate an anterior cervical mass, 16 × 13 cm, of ten years of evolution. With no symptoms. Fine needle aspiration found thyroid invasive carcinoma with angiolymphatic invasion. Then, after surgery for wide resection, immunohistochemistry found anaplastic thyroid carcinoma. Patient is under follow-up and receiving chemotherapy and radiotherapy.

**Conclusion:** Anaplastic thyroid carcinoma is a classic challenge in regarding to diagnostic and therapy, even more in unexpected presentations. No protocols are established. However, because of its severeness, attention must be given to fast ways of detection and prompt approach. Surgery, radiotherapy and chemotherapy seems to bring better results.

**Resumed Report:**
Two and half years-old girl followed in the pediatric endocrinology clinic, due to obesity [Weight: 38kg(Z = +7.63) and BMI: 39.5kg/m²(Z = +8.57)], and other complications, such as: high blood pressure with microalbuminuria, retinopathy with arteriolar narrowing, insulin resistance, dyslipidemia, moderate concentric hypertrophy of the left ventricle and hepatic steatosis. She had lethargy and daytime somnolence, snoring and night apnea, needing emergency care in one of the apnea episodes. An overnight polysomnography was requested, revealing an apnea-hypopnea index (AHI) of 23.9/hour, and an oxygen-desaturation average 81.9%. The diagnosis of severe OSAS was made, and adenotonsillectomy indicated, but due to no clinical conditions to a surgery procedure, ventilator support (BiPAP) and weight loss were proposed. Polysomnography under BiPAP use was normalized and patient evolved with clinical and life quality improvement.

**Conclusion:** Even in early childhood, obesity could be associated with severe apnea. A precocious diagnose and approach could change life quality and prevent sudden death risk.

**A5925. Anaplastic Thyroid Carcinoma: 10 Years of Evolution**
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**Introduction:** Anaplastic thyroid carcinoma or undifferentiated thyroid carcinoma is derived from the thyroid follicular epithelium, being one of the more aggressive human neoplasia. Its growth is generally rapid with high mortality, in despite of suitable treatment. Most common in elderly and females. For its aggressiveness and low incidence, diagnostic can be lost and therapy is not well established, even more in unusual presentations.

**Objective:** show how an uncommon malignant neoplasia can behave like benign, showing the importance of properly diagnostic and aggressive conduct.

**Resumed Reported:** An old male, 81 years old, with recent bladder resection for cancer, was sent to Head and Neck Surgery to evaluate an anterior cervical mass, 16 × 13 cm, of ten years of evolution. With no symptoms. Fine needle aspiration found thyroid invasive carcinoma with angiolymphatic invasion. Then, after surgery for wide resection, immunohistochemistry found anaplastic thyroid carcinoma. Patient is under follow-up and receiving chemotherapy and radiotherapy.

**Conclusion:** Anaplastic thyroid carcinoma is a classic challenge in regarding to diagnostic and therapy, even more in unexpected presentations. No protocols are established. However, because of its severeness, attention must be given to fast ways of detection and prompt approach. Surgery, radiotherapy and chemotherapy seems to bring better results.
Objective: Case report of rare laryngeal paraganglioma.

Resumed Report: Female, 46, complaining of progressive dyspnea and discomfort in the throat for six months. Videolaryngoscopy showed left supraglottic tumor with glottis commitment. Incisional biopsy with immunohistochemical exam suggested laryngeal paraganglioma. The CT presented homogeneous tumor measuring 19 x 17mm, on the left piriform recess. Underwent to left hemilaryngectomy uneventfully. Pathology with immunohistochemical exam confirmed diagnosis of laryngeal paraganglioma. The control videolaryngoscopy showed edema of the operated area without remaining vocal fold changes.

Conclusion: The diagnosis of laryngeal paraganglioma is usually done by contrast MRI. Arteriography not only defines the extent of the tumor as vascular commitment and collateral circulation. Biopsy is contraindicated due to the risk of bleeding and needle puncture has low sensitivity. Although paragangliomas are generally benign, the treatment of choice consists of an open surgical resection with maximal preservation of the larynx. Radiotherapy is effective in reducing the tumor in selected cases, however, contradictory in the larynx due to its rarity.

Keywords: paraganglioma, larynx, laryngectomy.

A6111. Technical Conduct in Tracheostomy and Tracheostomy Enlargement
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Introduction: Tracheostomy is the opening portion of the cervical trachea by tracheostomy is indicated in those cases where the breathing difficulty cannot be reversed in a short time.

Objectives: Showing their importance to the surgical procedures and Tracheostomy conduct techniques.

Data Synthesis: Several situations make tracheostomy indicated as obstruction of the upper airways (UAW) by congenital abnormalities, foreign body in VAS, cervical trauma, neoplasms, bilateral vocal cord paralysis, prolonged intubation, edema from burns, infections or anaphylaxis, prior time or complement other surgeries, facilitate the aspiration of secretions from the lower respiratory tract, obstructive sleep apnea hypopnea syndrome. Incisional biopsy with immunohistochemical exam confirmed diagnosis of laryngeal paraganglioma. The control videolaryngoscopy showed edema of the operated area without remaining vocal fold changes.

Conclusion: Currently tracheostomy is widespread as simple and effective procedure, with precise indications and well-established technique. It is classified as preventive, curative, palliative, elective or emergency. However, before starting the procedure you need to check blood clotting, personal characteristics, presence of goiter, pulsatile masses or neoplasms in the region, infections or inability to extend the cervical spine, they are points that can make the difficult and dangerous procedure. In addition, some care is essential for a successful outcome, such as aspiration and chest radiography.

A6117. Aneurysm Resection in the Jugular Vein
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Introduction: Venous aneurysms are rare, it affects people of all ages and genders. Its etiology remains unclear. Although computed tomography, magnetic resonance venography and aid the accurate diagnosis, the gold standard method for diagnosis of venous aneurysm is still the duplex ultrasonography with color ow images.

Objectives: Showing their importance to the surgical procedures and angioplasty.

Data Synthesis: According to Savi et al, venous aneurysms can affect infants, children, adolescents, adults and seniors and can develop anywhere in the vascular system. Venous aneurysms can occur in different form, such as fusiform or saccular. This distinction is important for the surgical strategy. Congenital vein aneurysm is an impaired development of the venous wall, which occurs as a result of smooth muscle hypoplasia, leading to disability elastic wall of vein. The etiology of aneurysm has been described as degeneration of the vessel wall, resulting in thinning of the elastic and muscular layer of the vein wall. Pathophysiologically other way would be a prolonged mechanical stress of the venous wall.

Conclusion: Venous aneurysms are classified into different types. A primary venous aneurysm is defined as a venous expansion isolation area, which communicates with a vein structure for a single channel and must not have association with communication or arteriovenous aneurysm. The secondary or acquired venous aneurysm is commonly found in adults and most often associated with trauma, arteriovenous fistulae or venous hemodynamic changes.

A6141. Carotid Arterial Vascular Reconstruction
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Introduction: The head and neck irrigation originates from the common Carotid arteries. Partial or total obstruction on one side cause quite severe neurological sequelae from paralysis of one-half of the body, as well as difficulties in the preparation of words among others.

Objectives: Showing its importance for surgical procedures of carotid arterial reconstruction.

Data Synthesis: The materials used in the manufacture of patches are the great saphenous vein, the bovine pericardium, synthetic grafts and cervical grafts. Complications related to various types of patches are the same: bleeding, infection, thrombosis, embolization, restenosis, pseudoaneurysm formation and rupture, this being an important complication associated with a high morbidity and mortality.

Conclusion: The arterial ligation is a valid option for situations with limited control of the internal carotid artery and those with massive bleeding, often in patients with multiple penetrating trauma, indicating to control damage in the cervical region.

A6215. Relapsing Polychondritis: Early Diagnosis and Multidisciplinary Follow-Up - Case Report
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Introduction: Relapsing Polychondritis (RP) is a rare, serious disease, which has a systemic character and unknown cause (possibly immune). It is characterized by cartilage's inammation and degeneration. It is more frequent in women from 20 to 60 years and otorhinolaryngological manifestations are present in 95% of cases.

Objectives: Case description of RP and the importance of early diagnosis to multidisciplinary clinical follow-up for disease control.

Case Presentation: Male, 54, hypertensive. Following up with rheumatology due polyarthralgia in upper limbs and signs of in ammation in pinna bilaterally with structural change. Referred to our clinic in June 2015 to investigate these fi ndings. Complained of ears' collapse since April 2015. No nasal, respiratory and hearing complaints. Physical examination revealed bilateral ear cartilage hypertrophy with upper and forward projection of pinna and no propeller contours of helix and anti-helix, with in ammatory signs. Normal rhinoscopy and nasofibrolaryngoscopy. Histopathological examination of ear's cartilage showed degenerative changes and fi brosis consistent with PR.

Final Comments: Our patient is in clinical follow-up with otorhinolaryngology and rheumatology with no new clinical fi ndings. Given the severity of the disease, the importance of RP to the otorhinolaryngologist is the early diagnosis and monitoring for early diagnosis and intervention of other events, which are: involvement of the airways, especially larynx and upper trachea portion (cartilaginous collapse), hearing loss (40 % – 50 % cases) and nasal chondrite (25% of cases). So all otolaryngologist should be alert to patients with associated systemic complaints.

A6248. Atypical Fibroxanthoma: A Case Report
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Introduction: Atypical fi broxanthoma is a rare type of skin cancer, associated with prolonged sun exposition and old age; few cases in children were reported. Clinically, it presents as a single and well-de ned fast-growing exophytic nodule.

Objective: To report an atypical fi broxanthoma in a pediatric patient.

Resumed Report: An otherwise healthy 2-year-old male patient presents in an otorhinolaryngology consult complaining of a friable lesion in the left nasal ala. The mother denied local trauma; his father died due to a malignant melanoma. Physical examination revealed an exophytic, erythematous nodule in the left nasal ala, with an ulcerated surface covered with crusts, measuring 2.5 × 2.0cm. An excisional biopsy of the lesion was performed, with macroscopically clean margins. Histopathologic evaluation revealed a well-di erentiated tumor, constituted by atypical cells with large nuclei and xanthomatous cytoplasm, amidst fusocellular cells. The diagnosis of atypical fi broxanthoma was then conirmed, and the patient is currently asymptomatic, under follow-up in our outpatient otorhinolaryngology clinic.

Conclusion: Atypical fi broxanthoma is a rare entity in children. Although benign, the macroscopic appearance of this lesion resembles some malignant diseases; thus, biopsy is required before deciding for more aggressive treatments. Differential diagnosis includes squamous-cells and basal-cells carcinoma, multiple myeloma, cutaneous metastasis of several tumors, dermatofibrosarcoma protubersans, malignant fi brous histiocytoma, and pyogenic granuloma. Excision of the lesion with appropriate margins is considered to be curative, and no associated treatments are needed. However, outpatient follow-up is usually recommended.

A6249. Primary Pediatric Follicular Lymphoma of the Parotid: A Case Report
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Introduction: The head and neck tumors represent 12% of solid tumors in children and adolescents younger than 19 years, whereas in the pediatric group most injuries in this region are benign. On the salivary glands, the primary lymphomas are rare. In childhood, the follicular lymphomas constitute 10% of malignant tumors, and head and neck are the most common location. Follicular lymphoma is common in adults, but rare in children and adolescents and it represents about 6% of all lymphomas in this age group. The treatment is the same as used in other types of lymphomas with an excisional biopsy of ganglions or masses with essential histopathological for the de nitive diagnosis.

Objectives: To emphasize the importance of early diagnosis through biopsy in the swellings of the parotid gland.

Resumed Report: This is a case report of a 15 years old male patient with a 4cm bulging on the right, moveable and non-painful retromandibular, with 5 months of progressive growth, with no phlogistic signs, no symptoms B, with preserved facial expressions and no palpable cervical adenopathies. It was performed a Partial Superfi cial Parotidectomy with material sent to anatomopathological which showed an atypical follicular hyperplasia corresponding to a Pediatric type Follicular Lymphoma. The patient was then forwarded for treatment with pediatric hematology and he's located in clinical follow-up.

Conclusion: This case report presents a rare parotid tumor leading to the questioning of tumorigenesis of the head and neck lymph epithelial injuries.

Keywords: lymphoma, parotid, lymph epithelial.

A6264. Mucormycosis Rino Facial Associated To Secondary Actinomycosis in Immunocompetent Patient: Case Report
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Introduction: The mucormycosis is a rare fungal disease, severe and invasive, of quick and fulminating evolution. Actinomycosis is a bacterial infection whose differential diagnosis is often difficult by the low prevalence; most often affect both immunocompromised patients.

Objective: Describe a rare case of rhinofacial infection mucormycosis associated to actinomycosis in an immunocompetent patient.

Resumed Report: EMS, 60, male, diabetic, with a history of facial pain in the jaw region for 4 months, resulting in pain and bilateral periorbital edema. He denied nasal obstruction, fever, yellowish rhinorrhea, or hypomia, trauma or previous surgery. Reported weight loss of 22 kg in the period. He held Computed Tomography of paranasal sinuses, showing extensive osteolytic process on the left face with involvement of adjacent soft tissues, including the skull base, periorbital region and oral cavity, and multifocal sinuses. The patient underwent treatment with several antibiotics without improvement. He developed worsening of facial edema and periorbital on the left face, with subsequent drainage of purulent and bloody secretion by the injury in zygomatic region. Patient underwent surgery with multiple biopsies of bone and mucous fragments of the left maxillary and sphenoid sinus, whose anatomopathological study concluded as
ostemomyelitis associated with mucormycosis with actinomycosis coinfection. Systemic antifungal therapy was instituted with Amphotericin B and antibiotic therapy with Cetrixone and Clindamycin.

**Conclusion:** The mucormycosis and actinomycosis are opportunistic diseases that manifest as a diagnostic challenge and require histopathologic confirmation and implementation of appropriate culture tests. The treatment consists of combination of surgical debridement and prolonged therapy.

**A6281. Parotid Pleomorphic Adenoma - Case Report**
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**Introduction:** Tumors of salivary glands are relatively rare, less than 5% of cervicofacial tumors. The parotid glands are the most affected and the pleomorphic adenomas are the most common kind observed. It is often seen in women and between third and sixth decades of life. The diagnosis is based on clinical history, fine-needle aspiration and tomography scan. Surgical excision of the tumor is recommended.

**Objectives:** Emphasize the importance of parotid neoplastic disease early signs.

**Case Report:** E.B.G., 42, came to otolaryngology service due to nasal obstruction and a nodule on the left oral mucosa, suggestive of lymphadenopathy. Surgical treatment of nasal obstruction and a lymph node resection was done and its histopathology showed minimal in amnatory signs. After seven months, the patient reported a swelling at the left parotid area. A tomography scan suggested lymph node origin. Physical examination revealed a fibroelastic mass about 2.5 cm, mobile and painless in the left parotid area. A fine-needle aspiration suggested neoplastic lesion. Surgical approach was indicated and the left superficial parotid gland was ablated allowing the pleomorphic adenoma diagnosis.

**Conclusion:** This case report highlights the importance of the initial signs of pleomorphic adenoma, which, despite being a benign tumor, may have complications such as recurrence, involvement of the facial nerve and malignant transformation. Its slow growth and asymptomatic initial frame, are complicating factors for an early diagnosis. In this case, the attention paid to the patient’s secondary complaint allowed the effective treatment and the good prognosis.

**Keywords:** pleomorphic adenoma, parotid, benign tumor.

**A6294. The Relevance of the Otorhinolaryngologist Evaluation in a Tracheoesophageal Fistula: A Case Report**
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**Introduction:** Tracheoesophageal fistula can be congenital or acquired mainly by trauma, tracheostomy and prolonged endotracheal intubation. It presents severe prognosis and high rates of morbidity and mortality. The surgical treatment with a cervical incision is possible, however, a chest extension may be needed. Esophageal injury usually requires simple repair, while a tracheal injury may require cervical muscles patch.

**Objectives:** Demonstrate the relevance of the otorhinolaryngologist in the approach of tracheoesophageal fistula.

**Resumed Report:** M.R.A, male, 24 years, presented case of rhabdomyolysis after intense training, progressing to acute renal failure, sepsis and Intensive Unit required. He was initially intubated and submitted to tracheostomy later, with enteral feeding. After long hospitalization period, when patient was reestablishing oral feeding, presented important gagging and was diagnosed with tracheoesophageal fistula by digestive endoscopy in the anterolateral wall of esophagus. Flexible bronchoscopy was performed and ratified the fistula and the subglottic stenosis, presenting similar measures, suggesting a cervical surgical approach. To define the therapy, the evaluation of Otorhinolaryngology Service was required. Our service performed a videolaryngotracheoscopy with rigid optics and identify different measures (as distance of the vocal folds to stenosis = 2 cm, and distance from the stoma to carina = 6.7 cm). Initial programmed surgery was changed to a thoracic access approach.

**Conclusion:** Evaluation of otorhinolaryngologist by the rigid videolaryngotracheoscopy had great importance for a confirmation and definition of tracheoesophageal fistula position, allowing a proper surgical planning. This technique is still relevant in the conduction of surgical treatment.

**Keywords:** Tracheoesophageal fistula; tracheostomy; laryngotracheoscopy

**A5961. Alar Rim Graft Aiding Functional and Aesthetic Deficits Corrections Associated to Alar Collapse**
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**Introduction:** Alar margins deformities can be classified as congenital or acquired. Most of them are acquired defects and are generally due to an excessive resection of the inferior lateral cartilage’s lateral cross during a rhinoplasty procedure. Beyond these aesthetic shortcomings, surgeons must consider the functional alterations due to the external nasal valve collapse. The alar rim grafts are indicated to primary and secondary rhinoplasty patients that present vestibular deficits, and to those who have at least three residual millimeters of alar cartilage, or to those whose alar cartilages have little resistance or in bad position.

**Objective:** To report a case in which the Alar Rim Graft was used to aid the aesthetic correction of nasal cavities asymmetry and external nasal valve collapse.

**Case Report:** Female patient, 35 years old, presenting asymmetry of the nasal cavities and external nasal valve collapse during breathing after primary rhinoplasty in which excessive resection of the lateral cross occurred. The patient was submitted to a secondary rhinoplasty where an Alar Rim Graft was used to correct the defects mentioned before.

**Conclusion:** The Alar Rim Graft is an effective technique which must be added to surgeons abilities for those who perform rhinoplasty as a collaborative technique or an independent one, in treating aesthetic and/or functional defects associated to alar collapses.

**Keywords:** alar rim graft, external nasal valve collapse, contour grafts alar.
A6114. Complications and Surgical Technique in Otoplasties Performed in a Service of Otolaryngology Residency
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Introduction: Ear deformities involve various techniques for correction. Combination of techniques allows obtaining a more natural aesthetic result, as well as the reduction without the need for new operations.

Objective: To describe the most used surgical technique and the most common complications in an otolaryngology service (Faculdade de Medicina de São José do Rio Preto - SP).

Methods: This study intends to evaluate retrospectively otoplasties carried out by resident physicians between 2014-2015.

Results: We analyzed 132 cases (80 female and 52 male), a mean age of 25.4 (8- to 64 years). In all cases, a retroauricular spindle-shaped incision was made, 0.5 cm posterior to the posterior auricular groove. Exeresis to remove the excess of the concha of auricle and mastoid suture were also performed. In some selected cases, we carried out Mustardé sutures and lobuloplasty. All patients remained with a compression bandaging (average of 5 days). Medical follow-ups were performed with 7, 15, 21, 60, and 90 days postoperatively. Approximately 90.1% of patients approved the surgery aesthetic outcome 60 days after the procedure. We observed complications in 15.1% cases, such as hematoma (2.3%), infection (1.5%), chondritis (0.8%), extrusion points (7.5%), necrosis (0.7%), keloid (2.2%), and desire for new otoplasty (9.8%).

Conclusion: Otoplasties can effectively treat prominent ears, with good aesthetic results and low complications.

A6201. Facial Rejuvenation with Barbed Sutures
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There is a growing trend demand for minimally invasive treatments possible with less risk of complications and downtime to correct rhytides and ptosis characteristic of aging. Nonsurgical face and neck rejuvenation has been attempted with various types of interventions. Suture suspension is not a new idea. The evolution of barbed suspending has been associated with such sutures. The popularity of barbed suture lifting has increased for the time being, but it should not be presented as an alternative to a face-lift.

A6338. Spontaneous Nasal Septal Hematoma as a Consequence of Bone Marrow Aplasia: Case Report
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Introduction: Bone marrow aplasia is a disease characterized by pancytopenia in the peripheral blood and bone marrow hypopcellularity. Thrombocytopenia is characteristic of this disease, causing disturbances in blood clotting and predisposing the organism to spontaneous bleeding and hematoma. Nasal septal hematoma is an unusual disease, but has great importance as an urgency in otorhinolaryngology. Once it’s not well treated, it will evolve to a nasal septal abscess and aesthetic deformity. The blood extravasation displaces the mucous perichondrium of the septal cartilage causing local vasoconstriction with subsequent cartilaginous necrosis due to lack of blood supply.

Objectives: To report a nasal deformity due to complication of a spontaneous nasal septal hematoma caused by bone marrow aplasia.

Resumed Report: I. G. M., male, 19 years-old, with nasal deformity complaint two years ago which appeared during immunosuppressant therapy for bone marrow aplasia. Refers an early acute bilateral nasal obstruction accompanied by a softened painless bulging in the anterior nasal region, denies history of trauma and he hadn’t sought medical assistance at the time. Afterwards, he noticed a deformity at the nasal dorsum with septum’s collapse (saddle nose). It was requested additional and pre-operatory exams to evaluate the possibility of rhinoseptoplasty with costal cartilage graft concerning the possibility of recurrence.

Conclusion: Septal hematoma requires early diagnosis and immediate surgical treatment to decrease the risk of complications and functional and aesthetic sequelae. It’s a condition of great importance regarding patients with chronic diseases that predisposes spontaneous hematoma formation, such as bone marrow aplasia.

A5874. Juvenile Nasopharyngeal Angiofibroma - A Case Reported
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Introduction: The nasoangiofibroma is a rare benign lesion fibrovascular found in young males. Totals approximately 0.05% of tumors of the head and neck. Characterized by the occurrence of epistaxis and nasal obstruction. The diagnosis is based on clinical condition and radiological findings, the main one being the extension of the pterygopalatine fossa. Treatment is, in most cases, surgical, having embolization, hormone therapy and radiotherapy as adjuvant treatment.

Objective: To report a rare case of Juvenile nasopharyngeal angiofibroma in our institution.

Resumed Report: H.S.M., 18, male, bored in Alagoas. Two years ago, it presents clinical condition of recurrent epistaxis in the right nostril, frontal headache and nasal obstruction ipsilateral progressive worsening. Undergone multiple nasal packing and use of oral medications with partial resolution of the clinical condition. CT performed with contrast showed captante mass right nostril extending to the sphenoid sinus with enlargement of the pterygopalatine fossa and ratified no nasal extra commitment. Tumor classified as type II in the range of Chandler and Cols. Rhinoscopy: mass in right nostril and contralateral deviated

**Conclusion:** The juvenile Nasopharyngeal angiofibroma is a rare benign tumor, but can lead to death if not treated appropriately. The surgical treatment depends on the extent and tumor classification may occur endoscopic or open procedure according to different literatures.

**Methodology:** We present the first case of Latin American literature originated by Klemper and Rabin in 1931 as mesenchymal angiofibroma. Solitary fibrous tumor was first described by Klemper and Rabin in 1931 as mesenchymal angiofibroma is a rare benign tumor, but can lead to death if not treated appropriately. The surgical treatment depends on the extent and tumor classification may occur endoscopic or open procedure according to different literatures.

**A5875. Case Report: Rare Solitary Fibrous Tumor of Sphenoid Sinus**

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**Introduction:** Solitary fibrous tumor was first described by Klemper and Rabin in 1931 as mesenchymal neoplasm of pleura, which is the main site. SFTs are rare in nasal cavity and was founded about only 30 reported cases. We present the first case of Latin American literature originated from sphenoid sinus and treated exclusively with EES and only the second case of SFT in national literature.

**Objectives:** Presenting rare case of Nasal Solitary Fibrous Tumor treated exclusively by EES, highlighting their clinical and radiological features.

**Resumed Report:** A.I.M., female, 53 years, from São Paulo-SP. Began progressive left nasal obstruction five months ago associated with facial pain, headache and occasional epistaxis. Six months ago, it presented significant worsening. Nasal endoscopy revealed grey tumor with papillomatous aspect occupying all FNE. FND presents without lesion. CT showed lesion filling the nasal cavity and esfenomoid cells left with expansive effect surpassing the choana and reaching the nasopharynx. Because the benign mass aspect, it was decided to EES exclusive resection. Biopsy Intraoperative suggested inverted papilloma. Despite the heavy bleeding during surgery, the tumor was successfully resected beside ethmoidal cells. The histopathology and immunohistochemistry revealed “mesenchymal neoplasm spindel cell of low grade with vascular pattern hemangiopericytic”.

**Conclusion:** Although rare, we realize the importance of considering this tumor as differential diagnosis in cases of chronic nasal obstruction and epistaxis. It should always perform the histological examination associated with immunohistochemistry for confirmation and delete malignancy signs.

**Keywords:** sphenoid sinus, unilateral nasal tumor, epistaxis, solitary fibrous tumor.

**A5902. Leishmaniase Nose**

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Leishmaniasis is an infectious disease caused by leishmania brasiliensis and transmitted by gender phlebotomus insect sting. The mucosa occurs in form 3% of cases, and expresses between 2 and 10 years after infection. In nose involvement case, there is destruction of mucosa and cartilages tip and may cause retraction pyramid nose.

**Methodology:** We analyzed the protocol of 138 patients younger than 18 years from outpatient oral respirator of the otorhinolaryngology service, from January 2015 to December 2015.

**Results:** All patients had nasal obstruction as the main complaint. Of these 138 patients, 96 had nasal pruritus (69.6%), 60 with rhinorrhea (43.5%), 84 had sneezing (60.9%), 78 were female (56.5%) and 60 male (43.5%) with mean age of 12.1 years. About 82.6% were urban Zuna and 69.6%, 60 with rhinorrhea (43.5%), 84 had sneezing (60.9%), 78 were female (56.5%) and 60 male (43.5%) with mean age of 12.1 years. About 82.6% were urban Zuna and 56.5% of them lived at home unlined. There was a history of asthma in 39.1% of patients evaluated. The prevalence of sleep disorders and snoring was 60.9%. One hundred and eight (78.2%) patients had oral habits, and onychophagy the most prevalent, 60.8% of patients. Among the results of skin tests for immediate reading, 47.5% of patients had Prink positive test for any of the tested respiratory antigens, featuring a classic allergic rhinitis. The D. pteronyssinus and D. farinae obtained the highest prevalence of positivity: 34.8%.

**Conclusion:** Nasal obstruction and nasal itching were the predominant symptoms in the study population. The high prevalence of positivity in allergy testing shows important role of allergic rhinitis in the etiology of oral breathing.
A5979. Olfactory Esthesioneuroblastoma: A Case Report
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Introduction: Esthesioneuroblastoma is a rare type of tumor located in nasal cavity, malignant, that is able to take a very aggressive growth pattern. It has low incidence (6% of sinonasal and nasal cavity tumors) and its clinic presentation as a benign process that makes the patient take it as a non important process. Treatment with cure expectations is possible when it is discovered in its initial stages by craniofacial resection or intensive radiotherapy and/or chemotherapy in the more developed ones. Endoscopic transnasal resection have been recommended for his therapy in order to reduce morbidity and hospital costs.

Objective: We report a case of olfactory esthesioneuroblastoma.

Resolved Report: Geraldo Flores, 67, admitted to the otorhinolaryngology service of Antonio Pedro University Hospital who presented right nasal obstruction and occasional epistaxis is associated with headache. Endoscopic examination of the nasal cavities and computed tomography suggested unilateral polypoid mass. Histopathological diagnosis after endoscopic resection established unilateral olfactory neuroendocrine carcinoma. The patient received postoperative radiotherapy.

Conclusion: To the best of our knowledge of this potentially curable malignant tumor. Endoscopic resection allows showing expansive lesion and the resection of the tumor with margins comparable to conventional surgery, being an option to investigate differential diagnosis of nasal and parasinal masses to avoid delayed diagnosis.

Keywords: olfactory esthesioneuroblastoma, para-nasal sinus cancer, neuroendocrine carcinoma, endoscopic resection.

A5984. Endoscopic Endonasal Transsphenoidal Surgery in Pituitary Tumors: Experience with 19 Patients
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Introduction: Pituitary tumors are the most frequent sellar pathologies and its treatment is surgical in most cases. The endonasal endoscopic technique has been used in approach to the sella turcica, with good acceptance.

Objective: Describe the experience of service in the treatment of pituitary tumors by endoscopic endonasal transsphenoidal surgery.

Method: Retrospective analysis of medical records of 22 patients that underwent transsphenoidal endoscopic sellar region surgery between January 2012 to December 2015, as a treatment for pituitary tumor and are assessed age, sex, cerebospinal uid leak in intra or postoperative, bleeding nasal or meningitis postoperative, need to postoperative tamponade or cauterization, need for transfusion, previous endoscopic sinus surgery history and tumor recurrence.

Results: Mean age of patients was 48 years. The total removal of the tumor was achieved in 100% of patients, with no cases of recurrence. There were no intraoperative bleeding that would lead to interruption of the procedure. Four patients had late nosebleeds, requiring nasal packing in two of them. Two patients presented cerebospinal uid leak diagnosed after acute meningitis, with spontaneous closure of the fistula after appropriate treatment. Only one patient had undergone previous surgery to remove the tumor.

Conclusion: The transnasal endoscopy is a safe, effective and minimally invasive technique for the treatment of pituitary tumors. The main advantage is to facilitate complete resection of the tumor, decreasing the chances of relapse. The complications of this surgery exist and should not be neglected, but its incidence is low and similar to other approaches.

Keywords: endoscopic surgery; transsphenoidal surgery; pituitary tumor.

A6001. Rhabdomyosarcoma in Nasopharynx
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Introduction: Sarcomas are rare mesenchymal malignant neoplasms. The rhabdomyosarcoma, a skeletal muscle subtype, is the most common soft tissue sarcoma in children, comprising about 50% of these tumors. The head and neck are the most common primary sites in children and teenagers. Surgical resection should be reserved for patients with residual disease after chemotherapy and radiotherapy.

Objective: This article aims to describe a case of rhabdomyosarcoma in nasopharynx and the importance of early diagnosis.

Resolved Report: Child, male, 5 years old, with nasal congestion complaints and bloody nasal discharge as well as pain in the lower limbs with 4 days of evolution. Rhinoscopy had the presence of vegetating lesion type whitish and bleeding occluding the right nostril, could not display your insertion site. CT scan of the paranasal sinuses with contrast showed lesion with mass effect in the nostril extending the nasopharynx. Following the patient underwent surgical excision biopsy, however, due to the large extent of the tumor was possible only partial removal of the lesion. Following the patient was referred for radiotherapy and chemotherapy without metastasis to the present time.

Conclusion: The authors presented a case of rhabdomyosarcoma in nasopharynx in a 5-years-old boy, with advanced clinical condition and atypical symptoms. Due to rapid progression, it is necessary an early and accurate diagnostic for effective treatment and possible cure and shows that it is preferable not to make a big surgical resection, but choose to adjuvant chemotherapy and radiation, thus preventing mutilating surgery.

A6013. Invasive Melanoma of the Sinonasal Mucosa
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Introduction: The nasal mucosa invasive melanoma, have a low incidence and is most common in the elderly population, between 65-70 years, without gender prevalence, and often runs with aggressive character, and may present as a clinical nasal bleeding, nasal congestion, coryza. The surgical approach is preferred in these patients. Radiation therapy can also be used but their effectiveness is discussed.

Objective: To demonstrate the importance of the differential diagnosis between benign intranasal tumors and nose benign diseases.
A6017. Anterior Fossa Meningioma, A Case Report
Instituto Felipu de Otorrinolaringologia, São Paulo, SP, Brazil

Introduction: Among the most common benign intracranial asymptomatic tumors, meningiomas originate from arachnoid cells, and can be found throughout the various external surfaces of the brain as well as within the ventricular system. The incidence of this pathology is independent of gender and increases with age. However, the tumor growth rate appears to be lower in patients with advanced age.

Objective: Present a case of anterior fossa meningiomas, showing the importance of research on seemingly ordinary complaints, to discuss the endonasal surgical approach of this tumor, and highlight the effectiveness of nasoseptal retail in large skull base reconstructions, when performed by well-trained staff.

Case Report: Male, 32 years old, black, machine operator, started in 2013 with hyposmia, disturbing his daily activities. In the same year, he suddenly began with anosmia, which also evolved with loss of taste. In the diagnostic approach was performed computed tomography scan, which revealed a lesion in the anterior fossa, a likely meningioma. The approach of the tumor was performed by endonasal endoscopic, with resection of much of the tumor by freezing biopsy confirmed diagnosis and skull base reconstruction with nasoseptal retail.

Conclusion: Although most patients with hyposmia did not have the symptom caused by tumor pathology, it is important to reinforce the need for research, being rough imaging in patients with olfactory alteration complaints, regardless of patients age, due to the possibility of more aggravating conditions, which require early diagnosis for a better prognosis.

A6015. Cerebrospinal Fluid Leaks Spontaneous
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Seul Otórininos

Introduction: Cerebrospinal uid leaks may have different symptoms or signs, the most frequent is rhinorrhea, representing life threatening to the patient, which can trigger infections in the central nervous system, such as meningitis.

Objective: To describe a case of Cerebrospinal uid leaks fistula surgically treated.

Case Presentation: A male patient, 39, for 20 days with spontaneous nasal drip hyaline in the left nasal cavity. No history of trauma or infection. In rhinoscopy, nasal drip hyaline in nasal were left. In computerized tomography, the presence of free uid in the left sphenoid sinus. Submitted to endonasal surgery and displayed on the left sphenoid sinus fistula and performed correction. Before the procedure, lumbar puncture performed with fluoresein injection 5% for better identification.

Discussion: Spontaneous cerebrospinal uid leaks fistula varies from 4 to 39%. Unknown origin. The correction by endonasal technique is performed on a large scale and considered safe and effective. The location and visualization by endoscopic allow more easily remove the fibrous tissue and scarify the edges of the lesion, allowing greater graft adherence in the region, with excellent results. There are several endonasal techniques for correction and all have been carried out with great success.

Conclusion: The high success rate and low morbidity of fistula repair endonasally makes this approach the preferred technique for its treatment. Cerebrospinal uid leaks associated with large defects, meningocèle and secondary injuries, should have special attention and changes in technique to ensure the continued closure of the fistula.
examination showed no mitotic activity and suggested osseous fibroma. Immunohistochemistry revealed hemangiopericytoma. The proposed treatment was surgical excision.

**Conclusion:** Hemangiopericytoma orbital is a very rare tumor that may have aggressive behavior and surgical excision is the first therapeutic option.

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**A6044. Esphenoidal Sinus Osteomyelitis: Case Reported of Late Clinical Diagnosis**


**Instituto Felippu de Otorrinolaringologia, São Paulo, SP, Brazil**

**Introduction:** This case report presents a patient who underwent treatment of skull base osteomyelitis in April 2016. This disease is highly aggressive and can invade vital structures such as the optic nerve. For this reason, we must get to know the differential diagnosis in patients presenting nasal obstruction, headache and diplopia. In this case, the treatment consists on an endonasal videodendoscopy surgical approach for infectious osteomucosa lesion’s resection.

**Objective:** To report a skull base osteomyelitis case who evolved with peculiar clinic due to involvement of second cranial nerve. Therefore, it highlights the importance of early diagnosis.

**Summary Report:** Female, 55 years. Refers hemicraniial headache and facial pain on left side, with high intensity, supra and retro-orbital since 2008 with one-week duration and five times a year. She has always been diagnosed with sinusitis by otorhinolaryngologists and neurologists who performed multiple treatments and clinical imaging. In August 2015, she had an exacerbation of pain and early convergent squint, was hospitalized and prescribed broad-spectrum antibiotics and strong painkillers unsuccessfully. In December 2015, the Endoscopic endonasal surgery was indicated in order to drain sphenoidal sinus, without success. After two months, the pain worsened. The patient came to our service with new imaging tests, was diagnosed with skull base osteomyelitis. It was performed an endonasal procedure for resection of the infectious lesion in the osteomucosa of the sphenoid sinus.

**Conclusion:** A fast clinical diagnosis and surgical approach of skull base pathologies, can avoid catastrophic outcomes such as cavernous sinus thrombosis, amaurosis and osteomyelitis.

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**A6049. Base Skull Osteomyelitis after Adjuvant Radiotherapy**


**Instituto Felippu de Otorrinolaringologia, São Paulo, SP, Brazil**

**Introduction:** This work presents a case report of a patient who underwent surgery and radiotherapy by nasopharyngeal carcinoma 8 years ago, evolving to skull base osteomyelitis. This disease is highly aggressive and can invade vital structures such as the carotid artery. For these reasons, we must know differential diagnosis in patients presenting headache and nasal obstruction. The treatment for this disease depend of the stage, but in operable cases, the solvability ratio is higher, especially if associated with adjuvant radiotherapy.

**Objective:** To report a case of skull base osteomyelitis and to associate relate, to other published cases, the occurrence of this event after surgical and radiotherapeutics treatment of nasopharyngeal carcinoma.

**Summary Report:** Male patient, 53 years old, refers longtime nasal obstruction associated to ear fullness. After several medical appointments, he was diagnosed with rhinopharyngeal tumor, being surgically treated with adjuvant radiotherapy. In 2016, eight years after surgery, the patient returns, complaining of swallowing bloody contents, with endoscopic endonasal exam showing a nasopharyngeal ulcerated lesion, and the magnetic resonance showing consistent changes with osteomyelitis on Clivus region. After the diagnosis, was performed an endonasal surgery with part of Clivus withdrawal and duramater exposing.

**Conclusion:** The Radiotherapy after surgical treatment of nasopharyngeal tumor may be directly related to the bone cell death, which would be the cause of the osteomyelitis developed by this patient.

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**A6053. Pleomorphic Adenoma in Nose - Case Report**

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**Faculdade de Medicina de Botucatu, SP, Brazil**

**Introduction:** Nasal tumors are quite rare. The most observed tumors in the nasal cavity are epithelial papilloma, angioma, transitional cell carcinoma, squamous cell carcinoma and adenocarcinoma. The pleomorphic adenoma belongs to the group of tumors that appear less frequently in the nasal cavity, and is the most common benign glandular tumor in the head and neck.

**Case Report:** S. Y., 55, female, rhinorrhea complaint, sneezing and myalgia 2 days. On examination, presence of exoftica injury ceel left nasal cavity, reddish, hard consistency, apparent deployment nostril septum. Performed biopsy, which resulted in epithelial neoplasia/low grade myoepithelial. Underwent tumor resection in the left nasal cavity with reconstruction using right ear pinna cartilage and skullcap. Intraoperatively asked to freeze that showed free surgical margins. Anatomopathological result, pleomorphic adenoma. This is a case with an unusual presentation of pleomorphic adenoma. The otolaryngologist should be aware of the possibility of this diagnosis in the investigation of a patient with a tumor in the nasal fossa.

**Conclusion:** We report a case of pleomorphic adenoma of the nasal septum, an extremely rare location of this benign tumor in a patient without nasal complaints. The treatment is surgical, conservative or radical, depending on the evolutionary characteristics of the tumor. Distant metastasis and tendency to malignancy are extremely rare.

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**A6067. Case Report: Nasal Polyposis in Patient with Churg-Strauss Syndrome**

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**Hospital Beneficência Portuguesa de São Paulo, SP, Brazil**

**Introduction:** Churg Strauss syndrome is a rare vasculitis, with an autoimmune character, undetermined etiology and difficult diagnosis. At least four of the following criteria must be present to confirm: severe to moderate asthma, peripheral eosinophilia, neuropathy, transient pulmonary infiltrates, involvement of paranasal sinuses and histopathological obtained by biopsy demonstrating blood vessel with
extravascular eosinophils. Among the nasal Churg Strauss syndrome alterations, stand out often the presence of nasal polyposis. Friable mucosa and nasal polyps or diffuse nodules are common clinical signs. The main histopathological findings of the nasal mucosa are extravascular granuloma and inflammatory lesion rich in eosinophils. ANCA evaluation and hypergamaglobulinemia are useful to distinguish between atopic predisposition and an active vasculitis.

**Objective:** To present a rare case of Churg-Strauss Syndrome associated with nasal polyposis and polynepropathy in a private hospital in São Paulo.

**Case Report:** D.R.S., female, 46 years old, from São Paulo. Admitted this service with polynepropathy. Asthmatic, with chronic rhinitis and nasal polyposis treated surgically 1 year ago, during procedure was performed biopsy of the sinuses that showed eosinophilic infiltrate, but presented negative ANCA. Decided by sinonasal clinical control associated with pulse therapy with corticosteroids and cyclophosphamide, obtaining good therapeutic response. Currently has only been referred by a neurologist who had requested tomography.

**Conclusion:** Given the above, it’s worth remembering this rare syndrome among differential diagnoses of nasal polyposis with eosinophilic infiltrate, mainly if is associated with polynepropathy and/or other systemic symptoms.

**Keywords:** nasal polyposis, Churg-Strauss syndrome, chronic rhinosinusitis.

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**A6071. Squamous Cell Carcinoma of Nasal Cavity: A Case Report**


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**Introduction:** Squamous cell carcinoma is the most common malignant tumor of the nasal cavity, which shows invasive characteristics and trend to a rapid growth. Such tumors have worse prognosis when there is an invasion of the paranasal sinus. The main risk factors for this tumor are smoking and papilloma virus, as in the majority of tumors that appear less frequently in the nasal cavity. In videonasoendoscopy control was observed residual lesion in cavum and smooth mass occupying the right nasal cavity, attached to the septum. The tomography of face showed an expansive lesion in the right nasal cavity, with peripheral calcifications, bone destruction of the nasal septum, measuring 3.0 × 2.8 × 3.5 cm. It was given a biopsy of the lesion, which showed lesions compatible with pleomorphic adenoma in the nasal cavity. In videoendoscopy control was observed residual lesion in cavum and smooth mass occupying the right nasal cavity, attached to the septum. The tomography of face showed an expansive lesion in the right nasal cavity, with peripheral calcifications, bone destruction of the nasal septum, measuring 3.0 × 2.8 × 3.5 cm. It was given a biopsy of the lesion, which showed lesions compatible with papilloma inverse. It underwent a new surgical procedure to remove the lesion adhered to the septum and nasal floor monoblock.

**Conclusion:** Given the above, it’s worth remembering this rare syndrome among differential diagnoses of nasal polyposis with eosinophilic infiltrate, mainly if is associated with polynepropathy and/or other systemic symptoms.

**Keywords:** nasal polyposis, Churg-Strauss syndrome, chronic rhinosinusitis.

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**A6099. Pleomorphic Adenoma of the Nasal Cavity: A Case Report**

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Hospital de Base do Distrito Federal, DF, Brazil

**Introduction:** Nasal tumors are quite rare. The pleomorphic adenoma is the most common benign glandular tumor in the head and neck, but belongs to the group of tumors that appear less frequently in the nasal cavity.

**Objective:** Given the rarity of the clinical presentation of nasal pleomorphic adenoma, we describe a case of a female patient.

**Resumed Report:** A.R.S.O, female, 33 years, complaining of nasal obstruction, worse left. On examination, it was viewed obstructive septal deviation and lesion in the left inferior meatus. It was indicated Septoplasty and exeresis of lesion. For the diagnosis of rhinosinusitis, are considered the abscess. Made in hospital referral hospital in neurosurgery, face, the resonance with contrast presenting intracranial complications. He returned after ten days of high, with new swelling in the face, the resonance with contrast presenting intracranial complications. The patient was operated by endonasal endoscopic approach with involvement of adjacent structures, and demonstrated squamous cell carcinoma Invasive, located in the left inferior meatus. It was indicated Septoplasty and exeresis of lesion. The patient progressed well keeping the follow up.

**Conclusion:** To show the importance and effectiveness of endoscopic approach in invasive malignant tumors even with involvement of adjacent structures, and demonstrate the importance of using imaging for early diagnosis in cases of recurrent epistaxis

**Keywords:** nasal polyps, Churg-Strauss syndrome, rhinosinusitis.
gold standard for the diagnosis of intracranial complications. The treatment of intracranial abscesses is based on broad-spectrum antibiotics with surgical approach in most cases.

**Conclusion:** It is considered important to present this case given the low incidence of this complication of acute rhinosinusitis, the therapeutic approach performed as well as the development and the clinical outcome of the patient.

**Keywords:** rhinosinusitis, complications, intracranial abscess.

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**A6194. Successful Management of Invasive Fungal Rhinosinusitis on an Immunocompromised Patient: Case Report**

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Pontificia Universidade Católica de Campinas, SP, Brazil

**Introduction:** Acute invasive fungal rhinosinusitis is a rare condition with mortality rates up to 80%. It is associated with immunodeficiency, particularly poorly controlled insulin dependent diabetes and neutropenia.

**Objectives:** To describe a case of successful treatment of rhinosinusitis on an immunocompromised patient.

**Resumed Report:** A 58-year-old male presented with a 30-day history of right temporal headache and an ulcerated lesion in the hard palate. Patient had long-term insulin-dependent diabetes with poor clinical control. Physical examination showed proptosis of the right eye and an ulcerated lesion of the hard palate that communicated with the right maxillary sinus. The patient was diagnosed by culture as having acute invasive fungal rhinosinusitis caused by mucormycosis and was managed successfully with early surgical debridement, ammonoterin B and itraconazole.

**Conclusion:** Invasive fungal rhinosinusitis has high mortality rates in immunodeficient patients. Early diagnosis may allow a favorable outcome.

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**A6234. Diffuse large B-Cell Lymphoma of Nasopharynx and Orbit in a HIV Patient: Case Report**

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Diffuse large B-cell lymphoma is the most common type of non-Hodgkin lymphoma in HIV patients, predominantly in men aged 40 to 70 years. The appearance in the nasopharynx and paranasal sinuses is rare and symptoms are usually nonspecific. Therefore, a high degree of clinical suspicion is required for the diagnosis of this disease. Describe a rare case of lymphoma involving paranasal sinuses, nasopharynx and orbit in a HIV-infected patient.

MCAS, a previously healthy 41-year-old male, presented bilateral nasal congestion and purulent rhinorrhea with blood, four months ago. This condition was associated with left eye proptosis and right axillary tumor with progressive growth. Patient reported weight loss of 8 kg during this period. One month ago, the patient was diagnosed with HIV infection and submitted to antiretroviral therapy. Computed tomographic scan of the paranasal sinuses showed solid mass, with contrast enhancement, occupying much of the nasopharynx, nasal cavity and ethmoid labyrinth. Image also revealed severe proptosis caused by the tumor’s presence in the orbital cavity; and solid component in frontal sinuses, sphenoid and right orbit. Patient was submitted to exeresis of the left eye and incisional biopsy of the left nasal cavity. Pathology and immunohistochemistry results were compatible with non-Hodgkin diffuse large cell lymphoma B. Patient started chemotherapy and responded well to the treatment.

In summary, the present case describes a rare presentation of diffuse B lymphoma, with aggressive character and rapid response to chemotherapy. It must be considered in the differential diagnosis of tumors in the nasopharynx and paranasal sinus.

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**A6246. Maxillary Sinusitis Odontogenic Acute: A Case Report**

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**Introduction:** Maxillary sinusitis is a condition characterized by infection and/or in amnation of the maxillary sinus mucous. There are several causes however due to its close relationship with the dental roots, 5 to 10% of sinus causes are odontogenic. The diagnosis is made by clinical and imaging, being the Computed Tomography exam of choice. Treatment is based on the elimination of dental causal factors, the management of sinus infection through surgery and antibiotic therapy. If not properly treated maxillary sinusitis can lead to a variety of complications.

**Objective:** To report a case of maxillary sinusitis disease of odontogenic origin, showing clinical and tomographic information.

**Case Report:** This is a male 10 year old that after 7 days of dental treatment began nasal obstruction, periorbital edema without signs of inflammation, fever, yellowish secretion of fetid odor in right nostril when he was hospitalized and started antibiotic therapy without success. Arrived at the service of Presidente Prudente Regional Hospital with symptoms persist when was performed Computed Tomography which showed opacification of the maxillary sinus with obliteration ostial right. He underwent antrostomy jaw abscess and drain the urgency of right and held broad-spectrum antibiotics. The patient had a satisfactory postoperative evolution, with complete remission of symptoms.

**Conclusion:** Odontogenic sinusitis can be operated initially as a rhinosinusitis, Computed Tomography is essential when the cause is unknown or when there is no remission of symptoms after antibiotic and therapy appropriate surgical planning if necessary

**Keywords:** odontogenic infection, sinusitis, computed tomography.

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**A6259. Case Report: Haemangiopericytoma - A Rare Vascular Nasal Tumor**

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Hospital Federal dos Servidores do Estado

Haemangiopericytomas are rare tumors derived from pericytes - cells similar to myofibroblasts, normally arranged between the capillaries and venules. With variable malignant potential, Haemangiopericytomas represent about 1% of vascular tumors, about 25% of cases in the head and neck. Those may occur as slow painless swelling tumor in any anatomical location, but are more common in lower limbs and retroperitoneal. The most common nasal signs and symptoms of Haemangiopericytomas are nasal obstruction.
and epistaxis. The diagnosis of this tumor is made by histopathology and the choice treatment is surgical.

The objective of this study is to report a rare case of nasal cavity haemangiopericytoma studied at the ENT service of the Hospital Federal dos Servidores do Estado.

Patient M.F.S., 77-years-old, complained of right nasal obstruction and recurrent epistaxis. Nasal endoscopy showed friable right cavum tumor. After a total resection of the lesion, endoscopically the material was sent for histopathological study, whose results were haemangiopericytoma. The patient was referred for chemotherapy and radiotherapy.

Although rare, the sinuses and nasal cavity haemangiopericytoma should be remembered in the differential diagnosis of well vascularized nasal tumor by the otolaryngologist and its malignant potential assessed.

**A6262. Case Report: Lethal Midline Granuloma**
Liaian Carvalioni Bertoldi, Aida Regina Monteiro de Assunção, Luana Ferreira Cruz, Murilo Mendes Aquino, Beatriz Figueiredo Brandão, Nathalia Prudêncio Silvano
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**Introduction:** The lethal midline granuloma is a rare disease, which is characterized by necrotizing process of nasal structures and other parts of the upper respiratory tract.

**Objective:** This study aims to report the case of granuloma of lethal midline and draw attention to the differential diagnosis of ulcerated lesions and midline infiltrative.

**Resume Report:** Man, 51, with nasal obstruction, rhinorrhea, blood and pus secretion and fetid odor for 3 months, associated with hyperemia and periorbital edema on the right eye, showing no improvement after intravenous antibiotic. On examination, right hemifacial edema and hyperemia, and nasal endoscopy with prior septal perforation, adherent crusts and secretion occupying the entire right nasal cavity. The paranasal sinuses tomography showed pansinusitis and soft tissue density material occupying the entire right nasal cavity. It was started amphotericin B and levofloxacin and performed surgical debridement. Histopathology showed T cell lymphoma. The patient was referred to the hematology service, which remains in chemotherapy.

**Conclusion:** T / NK cell lymphoma is a new terminology for lymphoma that destroys the midline facial tissue or aero digestive tract. One of the great difficulties is to differentiate it from other granulomas. It presents the most frequent symptoms: nasal obstruction, bloody rhinorrhea, crusting, evolving to septal perforation. Chemotherapy and radiotherapy are the treatment of choice and the secondary infections are treated with high doses of antibiotics. The lethal midline granuloma is an aggressive disease with significant mortality rates when treatment initiation is delayed. A correct diagnosis and early treatment can prolong patients survival rates.

**A6263. Mucormycosis Rhino-Cerebral in Badly Managed Diabetic Patient: Case Report**
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**Introduction:** Mucormycosis is a rare invasive fungal infection that can manifest: rhino-brain, skin, gastrointestinal and lung. Rhino-cerebral form is more common and can affect the sinuses, jaw, cheekbone, orbital and oral cavity. For Otolaryngologist, clinical suspicion is extremely important because delayed diagnosis and treatment lead bad evolution.

**Objective:** To report a case of mucormycosis attended the service Otolaryngology and Head and Neck State University of Campinas.

**Resume Report:** Male patient, 55, with right headache 8 days, diplopia, lacrimation and ptosis ipsilateral evolved for more than 48 hours despite the use of appropriate antimicrobials should undergo sinus computed tomography and middle turbinate biopsy. After 72 hours without improvement, surgical intervention is mandatory. Patients without signs of rhinosinusitis must be followed until a diagnosis is established or the patient’s condition improves. After 72 hours of undiagnosed fever, a sinus computed tomography should be performed. Borderline cases should be evaluated also with a computed tomography and, in case of high suspicion for fungal infection (eosinophilia, positive galactomannan test, severe neutropenia > 15 days or graft-versus-host disease), with middle turbinate biopsy.

**Conclusion:** Treatment outcomes in patients with acute invasive fungal rhinosinusitis rely on early diagnosis. At-risk patients must be referred to a specialist for clinical examination and nasal endoscopy. Computed tomography and middle turbinate biopsy are useful diagnostic tools in specific scenarios.

**A6267. Acute Invasive Fungal Rhinosinusitis in Hospitalized Immunocompromised Patients: Literature Review and Protocol Proposal**
Lucas Resende Lucinda, Yasser Jebahi, Enio Murilo Dal Negro Junior, Vanessa Mazanek Santos, Carolina Albino Waltrick, Ane Trento Bürgio
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**Introduction:** Acute invasive fungal rhinosinusitis is mostly seen in immunocompromised hematology/oncology or transplanted patients, with high mortality rates. The diagnosis is often delayed due to lack of host response to infection. Fundamental understanding of risk factors and appropriate evaluation are paramount for early diagnosis and treatment.

**Objectives:** To identify through literature review predictors raising suspicion for invasive fungal rhinosinusitis and to propose a protocol for otorhinolaryngological assessment of at-risk patients.

**Data Synthesis:** Immunocompromised patients with fever of unknown origin for more than 24hs or symptoms of rhinosinusitis should be promptly referred to a specialist. Evaluation of nasal mucosa through endoscopy remains the initial diagnostic procedure of choice. Those with uncompli- cated bacterial rhinosinusitis whose fever persisted for more than 48 hours despite the use of appropriate antimicrobials should undergo sinus computed tomography and middle turbinate biopsy. After 72 hours without improvement, surgical intervention is mandatory. Patients without signs of rhinosinusitis must be followed until a diagnosis is established or the patient’s condition improves. After 72 hours of undiagnosed fever, a sinus computed tomography should be performed. Borderline cases should be evaluated also with a computed tomography and, in case of high suspicion for fungal infection (eosinophilia, positive galactomannan test, severe neutropenia > 15 days or graft-versus-host disease), with middle turbinate biopsy.

**Conclusion:** Treatment outcomes in patients with acute invasive fungal rhinosinusitis rely on early diagnosis. At-risk patients must be referred to a specialist for clinical examination and nasal endoscopy. Computed tomography and middle turbinate biopsy are useful diagnostic tools in specific scenarios.
not yet consensus on extent of surgical treatment in the evolution and prognosis of these patients.

A6286. Rhinosporidiosis: Case Report and Literature Review
Beatriz Santos Bosaipo, Daniela Santos Bosaipo, Eduardo Pereira Bosaipo, Sara Delfonso Moraes, Carolina Santos Bosaipo
Clinica Orl Bosaipo, Porto, Portugal

Introduction: Rare, benign fungal disease, slow progression caused by Rhinosporidium seeberi, transmitted by inoculation of natural orifices by water containing spores, more commonly, by contaminated cow manure dust inhalation.

Objectives: Authors describe a case of Rhinosporidiosis, treatment and literature review.

Resumed Report: F.S.C, 18 years old, male, born and resident in ZÉ Doça-MA sought the Otorhinolaryngology Service. ORL-Bosaipo presenting left nasal obstruction by a painless mass and frequent epistaxis, over the past year. Rhinoscopy showed a pediculated vegetating tumor, friable, bleeding, in the left septum, area II of Cottle. Treated with surgical excision of the nasal tumor with electric scalpel and cautery of the insertion base. Anatomopathological examination of fragment measuring 4.0 \( \times \) 2.4 \( \times \) 1.1cm, firm and brownish tissue showed multiple cystic structures of thick wall, with sporangia Rhinosporidium seeberi. Patient followed-up asymptomatic for 7 months after surgery.

Conclusions: Endemic in Sri Lanka and India, relatively rare in Brazil, keeps important relation with patients from rural areas with history of inhalation of dust and bathing in stagnant water. Slow progression, unilateral, painless, friable, causing nasal obstruction and bleeding. As the tumor aspect simulates various pathologies, the diagnosis is only confirmed by histopathology. Treatment is surgical with cauterezation of the implantation site, with unusual recurrences (about 10%). Even though friable nasal lesions with papillomatous aspect are common in clinical practice, in patients coming from rural areas Rhinosporidiosis should be among the differential diagnoses, being all confirmed by anatomopathological examination.

A6229. Juvenile Nasopharyngeal Angiofibroma: The Experience in Video-Assisted Approach from Tertiary Hospital
Marcela Maria Rabelo Pinto, Rodrigo Augusto de Souza Leão, Erideise Gurgel da Costa, Adriana Xavier Tavares, Nathalia Anaissi Rocha Pessoa, Ana Elizabeth de Santana Carneiro Vilela Hospital Agamenon Magalhães, Recife, PE, Brazil

Introduction: Juvenile nasopharyngeal angiofibroma is a vascular benign tumor. That corresponds to 0.5% of head and neck tumors. It originates in the sphenopalatine foramen, progressing by pterygopalatine fossa, infratemporal fossa and intracranial cavity. The surgical access via depends on the staging and the surgeon’s experience.

Objective: To describe the experience from Agamenon Magalhães hospital in surgical treatment of juvenile nasopharyngeal angiofibroma.

Method: Retrospective study, descriptive, case series, of twelve patients from 2008 to 2015.

Results: The age of patients ranges from 15 to 30 years. In 41% of cases, achieved consultation with expert at twelve months, epistaxis being the main complaint. According to Fisch’s classification modified, 83% of patients in stage II and 17% in stage IIIa. Embolization was performed in 80% of the interventions. The mean duration of surgery was 160 minutes. All patients underwent video-assisted surgery. Twelve approaches with endonasal access and three external accesses were made. Blood transfusion was performed in 53.33% of the interventions. The average hospital stay was 3.7 days. The rate of postoperative complications was 26%. Two patients had recurrence between six months to two years. Cure index after the first approach was 83, 3% of patients in stage II and IIIa. The longer follow-up observed was seven years until the time with serial CT scan of the sinuses.

Conclusion: In this study, the video-assisted technique either endonasal or external proved to be safe and effective for resection in stages (II and IIIa).

Keywords: juvenile nasopharyngeal angiofibroma, vascular benign tumor, endoscopic resection video-assisted surgery.

A6332. Invasive Fungal Sinusitis in Immunocompromised Patients: Analysis of Clinical Manifestations in a Case Series
Camila Figueiredo Bruno, Amanda Carvalho Villa de Camargo, Renata Izabela Martins de Miranda, Tamara Gambogi Araújo, Pablo Alves Auda Moreira, Eliana Rodrigues Biamino, Antonio Carlos Cedin
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Introduction: Invasive Fungal Sinusitis is an aggressive angioinvasive infection of the paranasal sinuses, which may extend to adjacent structures such as soft tissue, orbit and skull. It is being increasingly recognized in immunocompromised and with poorly controlled diabetes patients. It is the most lethal form of fungal sinusitis, with a reported mortality of 50% - 80%
**Objectives**: Analyze most prevalent symptoms and signs in Invasive Fungal Sinusitis.

**Methods**: Retrospective analysis of 22 medical records and examinations of patients diagnosed with Invasive Fungal Sinusitis treated between February 2007 and September 2015 by Department of Otolaryngology of Beneficência Portuguesa de São Paulo Hospital.

**Results**: Of the 22 patients included in the study, 100% had refractory fever within 48 hours of broad-spectrum antibiotic use. Facial edema was observed in 36% of patients. Endoscopic findings observed: yellow-green rhinorrhea in 86%, grayish mucous in 72% and blackened mucous in 27%. The most prevalent eye finding was proptosis (13%).

**Conclusion**: The clinical presentation can be merely refractory fever to intravenous antibiotic therapy. It is fundamental to perform nasal endoscopy as part of the physical examination, aiming early identification of Invasive Fungal Sinusitis. Due to rapid progression and aggressiveness of Invasive Fungal Sinusitis, early suspicion and diagnosis are crucial to avoid unfavorable outcomes.

**Keywords**: sinusitis; immunocompromised patients; diabetes mellitus.

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**A6354. Surgical Technique of Osteoplastic Flap in Cochlear Implant Surgery for Prevention Physiological and Post-Surgical Retroauricular Defect**

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**Introduction**: Mastoidectomy cavities result in skin depressions in the retroauricular region, especially in procedures that require extensive cortical resections. This causes inconveniences as aesthetic complaints and local pain. Especially after CI surgery, the retroauricular speech processor touches the depression and causes discomfort in some patients. To address these issues, we propose a new surgical technique that avoids skin depressions in the surgical site.

**Methods**: We perform a vascularized osteoplastic ap by preserving the mastoid cortical bone and leaving it adhered to the periosteum. The ap is pediculated on the anterior portion, the external ear canal is left intact and the ap is repositioned and sutured at the end of surgery. To perform the procedure safely and avoid damage to the sigmoid sinus, a thorough evaluation of preoperative CT scan was done.

**Results and Discussion**: There were no complications during surgery. Patients were followed at two weeks, one and six months after surgery. Computer tomography scan revealed good osseous continuity in the mastoid cortex suggesting adequate bone healing and integrity with well-aerated mastoid cavity. Patients related good satisfaction about the aesthetic results, as the clinics exam reveals during the follow-up and it is easily reproducible, with good physiological results and aesthetic satisfaction.

**Speech, Language and Hearing Sciences**

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**A5853. Development and Tests of an Application for Tablets to Stimulate Speech and Language of Children Users of Cochlear Implants and the Evaluation of its Effectiveness**

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Hearing loss is one of the main physical disabilities that affect the individual in any phase of life. It may occur in the period pre-linguistic generating quite damaging consequences to the development of speech and language. Such impact can affect the cognitive development, as language acquisition happens via the interactions and the dialogues between child and adult. Development of an application for Android devices with the purpose of being an additional tool to assist in the therapeutic process of hearing impaired children users of cochlear implant. This application can be used by speech therapists and families in stimulation of auditory abilities and in the development of speech and language. The efficacy was evaluated through a questionnaire provided to the parents and therapists of 8 children new users of cochlear implant at University Hospital Clementino Fraga Filho, Universidade Federal do Rio de Janeiro, with age ranging from 15 to 30 months, which used the app during one month to stimulate language. All children have manipulated the tablets and the app properly. It was observed in 100% of the children the interest aroused by the communication, both by the interaction with the content of the application, and the communicative intention in relation to the interlocutor. It was observed also a beginning of vocalizations, as well as the increase in the oral emissions. The application proved to be an important tool in the stimulation of the speech and language of children users of cochlear implants and may also be used at home.

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**A5856. Symptoms Extra-Hearing in Workers Exposed to Noise: An Integrative Review**

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**Objective**: To characterize the national literature about the extra-auditory symptoms reported by workers exposed to high sound pressure levels.

**Methods**: This is an integrative review on electronic databases LILACS, MEDLINE and SciELO, using the descriptors “noise”, “hearing”, “audiology” and “symptoms”, with searches achieved in the year of 2015. There were inserted articles published between the years of 2002 and 2015, totaling 30 articles, of which 15 were accepted at the inclusion criteria.

**Results**: Of the 15 studies, seven were conducted in São Paulo city; two in Minas Gerais and Parana, Pernambuco, Bahia, Rio de Janeiro, Rio Grande do Sul and Ceará. Regarding the publication period: a study was published in 2002, 2005, 2006, 2008, 2010, 2011; two in 2007, 2009 and 2013 and three in 2012. Concerning the methodological approach, there was a predominance of quantitative study, totaling 14. Most studies report on the hearing and non-hearing symptoms presented by workers exposed to noise, as well as on the importance of the injury prevention strategies on health in general.

**Conclusion**: The literature has shown that induced hearing loss noise is not the only injury caused by exposure to noise; there are several symptoms and problems in health that can arise in the worker’s life. To prevent and minimize absenteeism at work, it is necessary that the general public and professionals are well informed and empowered to exercise self-care and other prevention and control.

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**A5859. Distribution of Newborn Hearing Screening program in Brazil in 2015**

Amanda Sampaio Almeida, Marcus Miranda Lessa, Cristina Salles, Marta Luiza Santana da Cunha

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**Introduction**: Newborn hearing screening (NHS) aims to provide early detection and intervention in cases of hearing impairment. Therefore, it minimizes deleterious effects on
A5865. Functional Mobility on the Senescence
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Introduction: Falls can cause disability, injuries and deaths, which become important to assess the mobility and functional balance of the elderly.

Objective: To characterize the body balance in elderly socially independent.

Method: 56 independent elderly, both genders, aged over than 60 years were evaluated by Timed Up and Go test that assess the functional mobility abd balance. On this test, the time to start and finish the tasks must spend less than 10 seconds on normal subjects. Time over 11 seconds could indicate risks to falls.

Results: 89.3% of the population were female and 10.7% male, with a mean age of 70.23 years. The average test score was 12.71 points on Timed Up and Go. Statistical analysis found no association with gender, previous dizziness complaints or previous related fall events. However an association was seen between test performance and age (p value = 0.013930).

Conclusion: The use of test Time Up and Go (TUG) showed that the mobility and functional balance was altered in this population, particularly on the older elderly.

A5885. Brazilian Scale of Hearing and Language Development (EDAL-1): Normality Curve in Children Normal Hearing from 0 to 24 Months
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Introduction: The protocol called Brazilian Scale of Hearing and Language Development (EDAL-1) was developed by audiologists in order to assess and record the development of hearing and language skills in children with cochlear implants, in the first two years of hearing age.

Objective: in order to standardize this protocol is necessary to establish the normal curve in normal hearing children aged 0 to 24 months.

Methods: This is an experimental study of a descriptive nature, conducted with 92 normal hearing children, 49 male and 43 female. The EDAL-1 was applied to parents of children in hearing health service accredited by SUS.

Results: EDAL-1 was shown to be easily applied by the researcher and easily understood by parents. It was possible to categorize the sample every three months and describe the results. The average of the responses found in terms of scores for each age category shows an increasing scale following the evolution of chronological age: up to 3 months - 34.23 points, up to 6 months - 54.68 points, up to 9 months - 73 points, up to 12 months - 82.5 points, up to 15 months - 87 points, up to 18 months - 91 points, up to 21 months - 92.5 points and up to 24 months - 95.83 points.

Conclusion: The normal curve for EDAL-1 was successfully established. The averages can be considered as standard protocol for normality, serving as a reference for comparison with other populations.

Keywords: speech therapy, hearing, language, hearing loss, clinical protocols.

A5886. Brazilian Scale of Hearing and Language Development (EDAL-1): Normality Curve in Children Normal Hearing from 0 to 24 Months
Claudia Andriguetto Maoski Moretti, Angela Ribas
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Introduction: To evaluate and record the development of hearing and language skills in children users of cochlear implant, the first two years of hearing age is required in hearing health services. The purpose is to monitor the progress of children in their rehabilitation process.

Objective: To characterize the hearing and oral language performance in implanted children up to two years hearing age in relation to the standard protocol of normality.

Methods: This is an experimental study of a descriptive nature. The participants were 141 children divided into two groups: control with 92 children with normal hearing and the trial with 49 deaf children accompanied audiologically during the first two years after implantation. The normal hearing children underwent auditory evaluation and parents responded to EDAL-1 following. Implanted children underwent otorhinolaryngological and speech evaluation every three months after the implantation, and parents responded to EDAL-1 in each session.

Results: In both groups, the results are ascendant, with better responses to the extent that age increases. It was possible to trace a line of development of hearing issues and oral language and thus visualize the progress made since the day of activation of the cochlear implant.

Conclusion: The hearing and language performance in implanted children was characterized by the application of EDAL-1 questionnaire. It is found that there is a significant
difference between the averages for the two groups, and the values are significantly higher in the group of normal-hearing children.

Keywords: speech therapy, hearing, language, cochlear implants, clinical protocols.

A5887. Hearing Care Perception Analysis through Audiometry Screening and Self-Declaration
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Introduction: According to the last census of IBGE, in 2010, the population of Rio de Janeiro State was 15,989,929, and 771,995 declared to have some kind of hearing impairment. This means that 4.8% of the population residing in Rio de Janeiro declared some kind of hearing problem, but there is no formal evidence through hearing tests, which ensure this information. This study aims at analyzing the hearing care perception of a population that spontaneously looked for an audiology service, through hearing screening and data collection of self-declaration questionnaires.

Methods: An action of hearing care was carried out to offer hearing screening through otoscopy, a questionnaire about hearing care and research of the hearing threshold in 25dB in both ears, in the frequencies of 500, 1000, 2000 and 4000Hz of the local population with age between 6 and 78 years old and both sexes. Subjects that answered in 25 dB in all frequencies in both ears were considered suggestive of normal hearing.

Results: Of the 81 subjects evaluated, 48 declared to have difficulties to hear and only 20 (42%) failed the screening.

Conclusion: The hearing care perception of the population that declared to have hearing difficulties was bigger than the number that was quantified in the hearing screening, i.e., 42% showed impairment of the peripheral auditory pathways. It should be noted that people with complaints of auditory processing disorder can have normal peripheral hearing, but they can show a hearing difficulty in the central pathway.

A5888. Waardenburg Syndrome
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Waardenburg syndrome is an autosomal dominant condition with variable penetrance and expressivity of its characters. The diagnosis is clinical, requiring two major or one major and two minor criteria. Most individuals with Waardenburg syndrome have mutations identified in PAX3 gene, the only one known associated with the syndrome. The prognosis for patients with hearing loss depends on early and appropriate intervention. LANs, 09 years, born in Paragominas (PA), sought the otolaryngologist, accompanied by the mother, with a history of bilateral hearing loss since birth and delayed development. They denied gestational or perinatal history. Audiometry showed profound sensorineural hearing loss bilaterally. As the child had poor oralization, he was referred to the use of individual sound amplification devices (hearing aids). At the moment, he is in speech therapy for hearing rehabilitation. In this case, we found, in the patient, the following major criteria: congenital sensorineural hearing loss, hair hypopigmentation (white fringe), bright blue iris and affected first-degree relative. The minor criteria found were broad nasal root and hypoplastic nasal wing. Therefore, the clinical diagnosis of Waardenburg syndrome was confirmed by the presence of four major criteria and two minor criteria. In the literature, the most frequent clinical features are high nasal root, hyperplasia of the medial portion of the eyebrows and sensorineural deafness. Early diagnosis is essential for proper hearing rehabilitation. Furthermore, it should be given genetic counseling to the family, since it is an autosomal dominant inheritance. Mortality rates are compatible with healthy subjects.

A5903. Prevention on Risks for Falls: Intervention Model
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Introduction: Falls in senescence compromises the mobility, independence and decrease the quality of life.

Objective: Apply a model of intervention to decrease the risk of falls.

Method: Sixty volunteers both genders aged over than 60 years were interviewed and evaluated by Dynamic Gait Index test and Timed Up and Go. After all volunteers were submitted to five therapeutic meeting based on Cawthorne and Cooksey. At the final step, all volunteers were reevaluated and the results of 39 volunteers compose the final analysis.

Results: 89.0% were female and 11.0% male with a mean age of 70.07 (±7.02) years. It was found 19.56 points (±3.76) as the average for the Dynamic Gait Index test with 35.8% of the sample with risk for falls and 13.07 seconds (±4.54) for the Timed Up and Go with 76.3% with risk on the beginning of the process. In the final phase, it was found 22.17 (±2.69) as the average on Dynamic Gait Index test with 10.25% at risk of falling and 9.31 seconds (±2.66) on Timed Up and Go and 23.6% of the sample with risks. The p value on the Wilcoxon test showed significant association in the initial and final scores for the Dynamic Gait Index test (p = 0.0000006) and the Timed Up and Go (p = 0.00000006).

Conclusion: The proposal successfully reached its goal since it decreased the risk for falls and improved gait and the dynamic equilibrium of a population with potential risks for falls.

A5952. Peripherical, Central and Vestibular Hearing Evaluation in Patients with Incontinentia Pigmenti
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Introduction: Incontinentia Pigmenti is a rare, dominant, X-linked genodermatosis, caused by a mutation in the NEMO gene, the genetic factor kappa B, located in the q28 portion of this chromosome. It usually affects female neontates, being lethal to male fetuses. It is characterized by skin changes associated with injuries in various apparatuses and organs of ectodermal origin, such as teeth, bones, eyes, and central nervous system.

Objective: To describe and analyze the peripheral, central and vestibular auditory function in patients with Incontinentia Pigmenti.

Methods: Three patients with diagnosis of Incontinentia Pigmenti participated in the hearing tests consisted of peripheral auditory assessment (pure tone and vocal audiometry, acoustic immittance measurements), central
audiological assessment by electrophysiological tests (Mismatch Negativity and long latency auditory evoked potentials) and vestibular evaluation (cVEMP).

**Results:** The patients had no peripheral audiological changes with normal hearing, tympanometric curve type “A” and acoustic re ex in both ears. One patient had normal latency and amplitude in the Mismatch Negativity; two did not have the presence of wave. Regarding the long latency auditory evoked potentials, there was only the wave P1 in one of the patients, two showed only the P1 and N1 waves, all of them with delay. The vestibular evaluation showed changes in all patients.

**Conclusion:** Our findings suggest that vestibular and central hearing disorders may be present in individuals with Incontinetia Pigmenti, and the latter could be correlated with changes in the central nervous system present in the syndrome.

**Keywords:** incontinetia pigmenti; electrophysiology; hearing.

**A5954. Cervical Vestibular Evoked Myogenic Potential in Children and Adolescents without Vestibular Complaints**

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**Introduction:** Cervical vestibular evoked myogenic potential assess vestibular function from the muscle response due to a strong auditory stimulation. The formed myogenic responses are recorded by electromyography. Because it is a recent survey there are few studies about the answers of this test in children and adolescents, which limits their applicability in clinical practice with this population, so it is necessary to know their normal range in this population in different equipment.

**Objectives:** To analyze the responses of cervical vestibular evoked myogenic potential and compare the latencies between ears and genres in children and adolescents.

**Methods:** 22 children, 11 female and 11 male, were evaluated using the equipment MASBE ATC PLUS, by Contronic. The parameters were: 5.1 stimuli per second; 200 tone burst stimuli, 500 Hz frequency; 118 dBNA intensity; alternating polarity; band-pass filter of 5 Hz to 1000 Hz; noise limit was 90% to 100% using inserting earphones. The tracings were analyzed for the first biphasic potential.

**Results:** The mean latency of wave P1 was 15.60 and of N1 was 23.80. There was no statistically significant difference between genders (p = 0.341). It was not found a statistically significant difference between ears in P13 (p = 0.093) and in N23 (p = 0.182), but there was lower latencies in the right ear.

**Introduction:** This study has shown no statistical difference latencies between ears and between sexes.

**Keywords:** vestibular evoked myogenic potentials; vestibular function tests; children; adolescents.

**A5958. Comparison of Cervical Vestibular Evoked Myogenic Potential Between Two Different Equipment**

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**Introduction:** Cervical vestibular evoked myogenic potential evaluates body balance, being generated from myogenic responses, these being activated by a sound stimulation of high intensity, which activates the saccular macula, the vestibular nerve and the vestibular-spinal pathways descendants. These responses are recorded by surface electromyography of the cervical muscles in the presence of muscle contraction (head rotation).

**Objectives:** To compare the cervical vestibular evoked myogenic potential in two different equipment in adults without vestibular complaints.

**Methods:** An evaluation was performed on 74 adults with vestibular complaints: 21 men and 21 women using the equipment MASBE ATC PLUS, by Contronic, using 200 Tone burst stimuli with frequency of 500 Hz; intensity 118 dBNA; and 32 adults, 16 men and 16 women, were evaluated using the Eclipse-Otoaccess, by Interacoustic. Tone burst stimuli was used with 200 stimuli, frequency of 500 Hz and intensity of 100 dBNA. Insert earphones was used in both. The tracings were analyzed for the first biphasic potential.

**Results:** The data analysis showed a statistically significant difference in the latencies of P1 (p = 0.042) and N1 (p = 0.034) between the two devices used, showing higher values in the Eclipse-Otoaccess equipment. Comparing range, there was a statistically significant difference (p = 0.029) between the two devices used, showing lower results in the MASBE ATC PLUS.

**Conclusion:** Comparing the two devices responses, there was statistical difference between the equipment in P1 and N1 latencies and amplitudes, and this emphasizes the importance of standardization of cervical vestibular evoked myogenic potential entrance exam in equipment.

**Keywords:** adult; vestibular evoked myogenic potentials; vestibular function tests.

**A5985. Bilateral Cochlear Implants: Some Variables Responsible for the Success**

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**Introduction:** The various benefits of binaural stimulation is undeniable, well described in the literature. However, the results show that this is not always done entirely, depending on relatives of patient’s factors and communication skills.

**Objectives:** To observe the relationship of family involvement, auditory and language development in children users of cochlear implant bilateral.

**Method:** A descriptive study of the psychological interview analysis in which we classify family relations in accordance with the criteria of Möeller (2000) and the categories of hearing and language according to Geers (1994) described in the patient record.

**Results:** We evaluated 16 patients implanted bilaterally. The age at surgery ranged from 10m to 3y8m. Among them, nine were beyond the hearing, other commitments. With regard to categorization Moeller (N): category 1 (0), 2 (1), 3 (4), 4 (3) and 5 (8). Language Category (N): 1 (3), 2 (3), 3 (3), 4 (2), 5 (5). Auditory Category (N): 1 (5), 2 (0), 3 (1), 4 (4), 5 (0), 6 (1), 7 (5). Mothers who understand child’s anxieties gives support for language development, contributing the stimulation of the entire family. Children with multiple disabilities have worse outcomes and family disagreements, while the mother driving the process, with exceptions. Audiological progress and language alleviate emotional problems, allowing the child’s communication with its environment.

**Conclusion:** We noticed better results with bilateral CI when the child belongs to a suitable family. Additionally, cognitive deficiencies in patients with multiple handicaps play an important role in its development language.
A6002. A Quality Overview of Audiometer Calibrations in Brazil
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Inmetro

Introduction: Audiometers are measurement instruments used to quantify the hearing threshold. The results should be as reliable as possible, since the audiometry can be the base for ontological diagnoses. The periodic audiometer calibration consists in verifying if the sound stimuli reproduced by phones and bone vibrators meet the requirements of the IEC 60645-1 technical standard, about general requirements for audiometers. This study aims at introducing a perspective of the quality of the results of audiometers calibration of the critical analysis of audiometer calibration certificates and their conformity through the IEC 60645-1, quantifying the highest deviations in decibels found in the air conduction calibration and its implications in audiometric reports.

Methods: Documental analysis of the audiometer calibration certificates that were calibrated in Inmetro and in the Brazilian Calibration Network of Inmetro, in the period ranging from January 2000 to December 2012. All the certificates were analyzed regarding the conformity with the IEC 60645-1.

Results: A total of 165 audiometer calibration certificates were analyzed. 53% of the evaluated certificates showed non-compliance with the IEC 60645-1. Furthermore, it was identified maximum deviations in air conduction calibration from 15dB to 20dB in frequencies of 3000Hz, 4000Hz and 6000Hz.

Conclusion: Only 47% of the certificates were in compliance with the IEC 60645-1 requirements. Audiometers that present deviations, of 20dB as identified in this study, can compromise the interpretation of the degree of hearing loss and consequently change the audiometric report.

A6005. Mismatch Negativity in Musicians
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Introduction: The mismatch negativity is an auditory evoked potential of long latency, correspond to brain electrical activity in the matter of processing, discriminating and audio memorizing. It is possible that musicians present better results in these abilities because of the necessity of hearing precision.

Object: Measure answers of the mismatch negativity in musicians and compare with the latency of non-musicians of the same age range.

Method: Cross-sectional study comprising a sample of 10 adult musicians, 7 males and 3 females, and a control group of non-musicians with a sample of 54 subjects, 27 females and 27 males, with age between 21 and 47 years old. As criteria for inclusion, all from the group in subject should have practical musical knowledge for at least 3 years, also complete a comprehensive peripheral hearing assessment and Mismatch Negativity. The auditory stimulus were presented in monaural mode, with 1000Hz frequency for frequent stimulus and 2000Hz for rare stimulus, the intensity of 70dBNA a 90dBNA for cases, with 1,8 stimulus per second. The equipment used was MASBE ATC Plus, Contronic®.

Results: The average of latencies and amplitudes found in the musicians was, respectively: 165.9ms and 4.5µV right ear; 175.6ms and 4.6µV left ear. When compared the results between musicians and non-musicians, it was found inferior latency in the right ear of the musicians, even though, these results are not significant statistically (p = 0.073).

Conclusion: The sample in subject there was not a significant difference comparing both groups.

Keywords: mismatch negativity, evoked potentials, auditory; electrophysiology; musicians; mismatch negativity.
panorama of hearing rehabilitation in Sergipe developed by researchers containing thirteen questions, using Google Docs platform as a collection and analysis tool.

Results: The data shows that only 9 of the 32 audiologists reported performing auditory rehabilitation therapy. The main difficulty was the lack of training in the area, followed by the lack of information on availability, responsibility and place for referral of patients for therapy. It turned out that 15 speech therapists (50%) work in the state capital, and the other participants are active within Sergipe, including 6 of 8 micro-regions of Sergipe.

Conclusion: The research propelled the organization of the counter-reference network in the state by allowing through the network, more accessibility for the patients and facilitating the flow between the reference and counter-reference of hearing health.

Keywords: rehabilitation; public health; hearing.

A6095. Hearing, Language, Motor and Social Skills in the Child Development: A Screening Proposal
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Introduction: At preschool age, significant behavioral changes occur to the typical development, thus, to timely identify deviations in that course is essential for early intervention.

Objective: To analyze the hearing, language, motor and social skills of children and propose a screening of child development.

Methods: 129 preschool children of both sexes, aged between three and six years old, enrolled in educational institutions and 25 teachers of kindergarten from public and private institutions participated. All children with no history of hearing disorders, with type A tympanometry curves and the presence of acoustic reflexes. In children, it applied the neuropsychometric test, Denver II, and the evaluation of sound localization and temporal ordination of three verbal and non-verbal sounds. For the educators responsible for the children, it was applied a questionnaire, SAB Scale.

Results: It was found that most of the participants with normal SAB presented hearing abilities standard Denver II; while in the amended SAB group, most of the participants presented alterations in Denver II or in the auditory abilities tests. It has been found, also, that part of the children with standard Denver II were pointed, by the educators, as misbehaving in SAB.

Conclusion: The combination of the findings of the Denver II, hearing tests of sound localization and temporal ordination and the SAB Scale are useful in the characterization of child development and, thus, it is recommended the use of these three instruments for screening in this age group.

Keywords: auditory perception; child language; language development.

A6097. The Otoacoustic Emissions Evoked as Hearing Disorders Monitoring Tool in Young Musicians
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Introduction: The effects caused by exposure to music are not always visible in the results of the tone audiometry. Evoked otoacoustic emissions can be used to search for indications of changes in the auditory system, including individuals with normal audiometric thresholds.

Objective: To analyze the use of otoacoustic emissions evoked as a monitoring tool for hearing loss in young musicians.

Method: The study was observational, cross-sectional of inquiry. The survey was conducted with 22 musicians of a Philharmonic band. Were conducted Anamnesis, Meatoscopy, acoustic immittance Measurements, tone Audiometry, Otoacoustic Emissions evoked by transient stimulus (TEOAЕ) and distortion product (DPOAE).

Result: The study included 22 musicians with an average age of 17.41 years old (±3.320), 72.73% were male and 27.27%, female. Regarding the results of transient otoacoustic emissions (TEOAЕ), were observed worse results in 4kHz among the acute frequencies. At this frequency, the left ear presented 13.64% of the missing answers. In the DPOAEs, the worst medians in f2 were observed in the frequencies of 3kHz and 8kHz. In the analyzes by ear of the TEOE, the absence of at least one of the frequency bands was 9.09% on the RE and 18.18% in the LE. As for the DPOAE, the absence of at least one f2 was 27.27% in both ears.

Conclusion: The otoacoustic emission test is useful in identifying evidences of changes resulting from continued exposure to amplified music.

Keywords: hearing; music; occupational noise.

A6129. Adaptation of Personal Frequency Modulation System in a Hearing Health Program
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Introduction: The frequency modulation system is used as a complement to adaptation of hearing aid and/or Cochlear implant.

Purpose: To identify the benefits and limitations of Personal Frequency Modulation System according to the variables of age and audibility.

Methods: Based on the individual records assisted at a Hearing Health Program, aged between 5 and 17, they were classified as Candidates and Not Candidates for the new adaptation system, according to the Decree of the Health Ministry Number-1.274.

Results: 247 individuals were identified according to their ages. 99 were considered not candidates and 148 candidates. 98 received the new System. 47 returned to service for assessment of the adaptation process. 37 said to be well adapted and noticed improvements on speech comprehension, especially in noisy environments, as well as attentional improvement. 10 did not adapt due to difficulty in acceptance, lack of cooperation from teachers and/or interest from parents. Statistical analysis identified that age in uenced in a statistically significant way in the new technology adaptation process, which did not occur considering the audibility.

Conclusion: It was found there was a sum of factors that determined the outcome of the adaptation system in this process in the referred population, involving acoustic, individual, family and educational aspects. It was also found that among the adapted individuals, prevailed with the younger age and among the not adapted ones, prevailed with the older ones, whereas hearing thresholds were not decisive in adapting use of this system.

Keywords: hearing; hearing loss; hearing aids; children and adolescents.
A6130. Hearing Aid Fitting When the Indication is Controversial
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Introduction: According to the National Health System, in Display and Supply Hearing Aids guidelines there is controversy regarding the indication of those for individuals with normal hearing according to tritone average and loss in other frequencies.

Purpose: To investigate the adaptation of hearing aids in adult subjects with normal hearing according to tritone average and loss in other frequencies bilaterally, considering the main complaint variables, bilateral fitting, technology, ear molds and effective use.

Method: A retrospective study based on medical records of patients included with Hearing Aids, from 2007 to 2015, of a Hearing Health Program. 25 patients were identified and then a descriptive analysis data was accomplished.

Results: 64% (n = 16) of the analyzed individuals showed significant tinnitus as main complaint and 36% (n = 9) significant difficulty in understanding speech in noise. All received bilateral aids 4% (n = 1) with A technology, 68% (n = 17) with B technology and 28% (n = 7) with C technology. Behind-the-ear. Among the 25 individuals, only 28% (n = 7) reported effectively use the hearing aids for more than 8 hours/day and many did not return to service.

Conclusion: It was found that, despite having significant complaints related to hearing, which can be minimized with the use of sound amplification, having received two aids and most with B or C technology, many did not come for the returning assessments, suggesting discontinuity of use. Corroborating the statement of hearing aids for these cases is controversial and should be analyzed individually, since not always the expected benefit from them is achieved.

Keywords: hearing; hearing aids; adaptation.

A6133. Unmedicated Treatments of Tinnitus: Implications and Solutions
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Introduction: Health professionals and audiologists are increasingly more involved in the search for effective and definitive therapeutic alternatives for the treatment of tinnitus. It is believed that the existence of an abnormal neuronal activity in the auditory pathways is the main determining factor for the appearance of tinnitus. Among the main disorders caused by tinnitus are counted disturbances of sleep, concentration, emotional balance and social activity.

Objective: Compare the unmedicated methods of tinnitus treatment and to clarify which are the most effective.

Methods: This study is of a descriptive nature, thus, searches were performed in electronic databases, namely: LILACS, MEDLINE, PUBMED, SCIELO and BIREME, from which were selected the most representative national and international literature from the period between 1980 and 2015. This essay integrates part of a monograph developed at CEFAC - Porto Alegre (RS/ Brazil).

Results: It was possible to clarify which are the main unmedicated treatments of tinnitus, namely: Tinnitus Retraining Therapy (TRT), Individual Sound Amplification Device (AASI), masking, psychotherapy, electrical stimulation with cochlear implant and biofeedback. The TRT bases itself on the brain’s capacity of ignoring neutral, meaningless stimuli. The use of PSA has been producing satisfactory results in minimizing the undesirable effects of tinnitus, which means the sonorous enrichment of the auditory pathways.

Conclusion: it was ascertained that Tinnitus Retraining Therapy and Personal Sound Amplification were the methods that achieved the best responses according to the literature researched. The TRT, besides being the method most studied and used, is shown to be the most efficient.

A6138. Referrals to Fitting Aids without Proper Audiological Indication
Maryndia Diehl Muller, Ana Valéria de Almeida Vaucher, Maristela Julio Costa, Geise Corrêa Ferreira, Lidiéli Dalla Costa, Tais Regina Hennig

Introduction: Ordinance 793 and 835/2012 of the Health Ministry establishes criteria to be fulfilled by applicants for the use of hearing aids.

Purpose: To analyze the audiological data of adults referred to the selection process and fitting of hearing aids without proper audiological indication, and discuss the causes and effects.

Methodology: The study was conducted based on the analysis of the database of a Hearing Health Program of an Institution of Higher Education. The sample consisted of 22 adults with an average age of 43 years old, referred for hearing aid fitting, from March 2014 to October 2015, whose audiological data did not indicate the adjustment.

Results: 7 (31.81%) individuals had limited hearing loss at frequencies above 3000 Hz bilaterally; 4 (18.18%) had unilateral anacusis with normal contralateral hearing; 2 (9.09%), unilateral profound hearing loss; 4 (18.18%) with unilateral or bilateral conductive component without medical monitoring; 2 (9.09%) with normal hearing, 2 (9.09%) with bilateral profound hearing loss and/or anacusis and 1 (4.54%) with mild loss with adequate speech recognition.

Conclusion: These criteria are important because there is no effective benefit with hearing aids in these cases; it is believed that inappropriate referrals are due to a lack of professionals on the criteria set out in ordinances; this fact brings disadvantages to the patient, who creates expectations that will not be fulfilled, in addition to being a financial and wasted time for the patient, for the system and the professionals responsible for the assistance.

Keywords: hearing disorders; hearing aids; national health system.

A6163. Efferent Auditory System: Effect of Otoacoustic Emissions Suppression and Auditory Skills Closing Figure and Background
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Introduction: Individuals with complaints of difficulty in central auditory skills can perform poorly in behavioral hearing tests as well as decrease the effect OAE suppression with the opposite side ear noise introduction.

Objective: To evaluate the effect OAE and look for possible correlations with the performance of adults in tests that evaluate the closing skills and background figure with verbal sounds.

Methodology: 18 individuals with normal hearing adults between 18 and 45 years old, divided into two groups:
control group (CG) - 9 individuals without complaints of auditory processing disorders and Study Group (SG) - 9 individuals complaining difficulty in speech understanding in noise suggesting auditory processing disorders.

**Results:** For the suppression of OAE nonlinear right ear (Ear-R) and left (Ear-L), the average CG was 1.24 dB and 1.19 respectively and 0.86 and 0.57 for SG. For the suppression of linear OAE, the CG was 0.66 dB and −0.11 dB and SG, −0.10 dB and 0.76 dB respectively for Ear-R and Ear-L. For the dichotic consonant-vowel test, the CG got the ear predominance index of 19.13% and 18.34% SG. The results obtained in free attention and steps directed attention were similar for both groups on the right and left ears. In noisy speech test, the CG averaged 95.56% accuracy for Ear-R and 95.56 for Ear-L and SG, 95.33% and 94.44%, respectively.

**Conclusion:** The SG scored worse in most test although there was no statistically significant difference between the groups.

**Keywords:** adult; hearing; hearing disorders; efferent pathways; suppression; hearing tests.

**A6178. Case Report: Deaf Blinding Syndrome and Challenges in Investigating Usher Syndrome**

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**Introduction:** Syndromes of deaf blindness, although relatively rare, can affect quality of life and economic capacity in adults. These syndromes evolve differently and deepening of sensory loss is variable. Usher syndrome is an autosomal recessive condition characterized by sensorineural hearing loss, variable vestibular dysfunction, and visual impairment. Late diagnosis increases the therapeutic difficulties and restricts the evolutionary assessment of these rare diseases.

**Objectives:** We aimed to report a case of deaf blindness investigation and correlate with literature data.

**Resumed Report:** L.B.P 41, Female, cleaning professional and resident of Rio de Janeiro. Admitted in August 2015, after 4 years of progressive worsening of hearing and visual loss. Held initial audiometric evaluation revealed severe sensorineural hearing loss, bilateral and symmetrical at all frequencies. She also had decreased speech recognition and mild phonetic disorder. Parallel, patient underwent eye exams and returned to the clinic diagnosed with Retinitis Pigmentosa. Then, we hypothesized Usher’s syndrome and its differential diagnosis to hold an investigation towards it.

**Conclusion:** Deaf blindness can affect individuals differently, leading to misdiagnosis and inaccurate rates presentation, especially in rare Usher’s syndrome. Therefore, it is challenging diagnosis and needs report for better understanding. Our patient hearing and visual loss affects social and professional skills. She underwent bilateral hearing aid with audiological rehabilitation and amplification prosthetics as family follow in attendance while awaiting genetic tests that would define the diagnosis of corroborative way. There are no curative treatment based on evidence, but cochlear implants may be an option for patients with preserved auditory cortex.

**A6188. Static Post-Urography on Vestibular Dysfunction and Hyper-Re active Bilateral**

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To investigate the stabilometric parameters of balance in post urography in individuals with Vestibular Dysfunction and Hyper-Re active Bilateral.

**Method:** Sample from 20 patients with 09 patients with Vestibular Dysfunction and Hyper-Re active Bilateral (G1) in accurate value in electro-nistamography and G2 (control) with 11 individuals. All the patients were submitted to the balance test through a force platform (FP) in bipedal position (P1) and semi-tandem position P2 with open eyes.

**Results:** G1 had 09 subjects with a mean age 48.55 years (08 females (90%) and 01 men (10%) SD = 13.67, and finally, G2 with 11 individuals, 02 men (18%) and 09 women (81%), mean age = 51.8 years, SD = 10.20. There was no statistically significant difference when compared to groups with vestibulopathies for COP in position P1 (p = 0.47) and P2 (p = 0.98), both presented similar posture control similar for the stabilometric parameters.

**Conclusion:** Although statistically significant differences were not found in the results of post urography on Vestibular Dysfunction and Hyper-Re active Bilateral in this population, these deserve more in-depth study with studies on longitudinal delineation to verify long-term changes in balance in vestibulopathies in general.

**A6189. Audiological Characteristics of Individuals Exposed to Occupational Noise**

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**Introduction:** The exposure to high levels of the noise can cause irreversible damages to the hearing, like an induced hearing loss for high noise levels depression. Such exposure can cause many organic, mental and social commitments. The objective of this work was to compare the audiological characteristics of a group of individuals exposed to the occupational noise for a period of five years.

**Methodology:** To the comparative analysis, it was selected from the admission and sequential exams that was realized after five years, of each worker, taken from records available in an audiology service provider clinical, and classified according of the Agreement with Ordinance No 19 of 1998, the security of health and work secretariat.

**Results:** After a comparison, 26% form the audiological exams presented some kind of change, and of these, 77% suggestive of hearing loss triggering induced by high noise levels and 23% depression suggestive of worsening. Among the ears with changes, 61.5% had changes bilaterally and 38.5% unilaterally, being the right ear the most affected. There was the presence of major changes with the male gender.

**Conclusion:** There was a considerable number of workers who showed hearing changes, prevailing as bilateral and the male gender was the most affected.
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Introduction: Physical inactivity is an important risk factor for many aging-related symptoms. Studies suggest that physical activity may help to relieve hearing loss.

Purpose: To investigate the presence of hearing loss in elderly patients by associating it with the practice of regular physical activity.

Methods: A cross-sectional study including elderly individuals with independent living. The practical of physical activity was checked by a questionnaire with objective questions and hearing loss by and pure tone audiometry. Statistical analysis was performed using the chi-square and relative risk.

Results: Based on a sample of 329 subjects, 222 females and 107 males, it was found that 72.3% complained of hearing loss and 91 (27.7%) did not. Among complainants, 162 (68.1%) practiced physical and 76 (31.9%) did not practice activity. Of the 91 complainants not hearing loss, 63 (69.2%) were engaged in physical activity and 28 (30.8%) did not practice. In analyzes with the total sample (329 subjects), the Chi square test resulted in $X^2 = 2.259$, p = 0.323, showing no statistically significant association between hearing loss and physical activity. Although, analyzing those with hearing loss only in the right ear, we found statistically significant association between, $X^2 = 6.507$, p = 0.039.

Conclusion: Our results presented an association between regular physical activity and hearing loss in right ear in the total population. Future researches are also needed to investigate the mechanism of this association using longitudinal data to examine the link between physical activity and hearing loss across the lifespan.

Keywords: vertigo, stroke, rehabilitation vestibular.

A6274. Auditory Processing Evaluation in Musicians and in Nonmusicians
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Objective: Evaluate and compare the abilities of temporal processing, through the Random Gap Detection Test, of musicians and non-musicians.

Method: Participated in this study six individuals musicians and six individuals non-musicians, being six from the male gender and six from the female gender, with normal hearing and no history of alterations in educational, neurologic and/or language, submitted to a questionnaire, hearing assessment and the Random Gap Detection Test, to evaluate the temporal resolution.

Results: The performance of Random Gap Detection Test on the musicians group was not significant in relation to the non-musicians group, whether by frequency or by gender. There was better performance from the musicians and from the male gender. The average of RGDT in the musicians was of 5.63ms and in the non-musicians of 9.13ms.

Conclusion: By the Random Gap Detection Test, there was a good performance in the temporal resolution ability in both groups, however it was noted better average in the musicians group. The frequency of 500 Hz it was shown with a worse level of gap detection for both groups. There were better results in the male gender.

Keywords: music; auditory perception; auditory threshold.

A6228. Case Report: Ductolithiasis Associated with the Vestibular Dysfunction Central in Adult after Stroke
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Introduction: Patients with complaints of imbalance and vertigo may show changes peripheral vestibular, central or the association of both, featuring a change to mixed, showing great loss quality of life. For its proper treatment is important to the knowledge pathophysiology of these changes.

Objective: Perform analysis results of the evaluation vestibular of an after stroke adult patient.

Resumed Report: Patient, G.L.L.Z female, 51 years old, complaint of imbalance there were seven months, after the episode stroke, there were 2 months, the symptom of vertigo in the left lateral position. Performed Vestontynagstomography observed signs suggestive of a central disorder (nystagmus semi-spontaneous rotational time not accompanied by vertigo to left; caloric test, the absence of the inhibitory effect of the fixation ocular to left). In the Dix-Hallpike maneuver position to right was observed nystagmus rotational time without latency, not paroxysmal, not fatigable and not accompanied by vertigo, suggestive of change central; the left presented nystagmus with same characteristics of the previous position, but with vertigo. Therefore, it has questioned the possibility of ductolithiasis associated change central due to the presence of vertigo. Performed Epley maneuver to the left as test diagnostic. After reevaluation, noted in the Dix- Hallpike maneuver same nystagmus mentioned above, but the left not accompanied by vertigo, confirming diagnostic hypothesis.

Conclusion: Repositioning maneuvers are innocuous to the patient, it becomes important to perform them with findings of the central in the presence of vertigo, and be used as diagnostic test.

Keywords: vertigo, stroke, rehabilitation vestibular.

A6285. Quality of Life on Individuals with Tinnitus and Associated Hearing Loss
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Introduction: Tinnitus is defined as an auditory perception in the absence of an external sound source that can be noticed in several ways, it causes extreme discomfort and is difficult to characterize and treat. Often, tinnitus can cause sleep and concentration disorders, emotional instability, dis- enablement, exclusion from social relationships and even lead to suicide, directly affecting the quality of life. In clinical practice, instruments such as the WHOQOL questionnaire (World Health Organization Quality Of Life) allow to assess how the individual feels about their quality of life, health and other aspects.

Objective: To evaluate the quality of life of individuals who have tinnitus associated with hearing loss before and after intervention with hearing aids adaptation.

Methods: WHOQOL questionnaire was applied in 23 individuals with tinnitus associated with hearing loss before and after three months of intervention.

Results: A significant improvement in quality of life was observed after the hearing aid adaptation and consequent decrease of tinnitus. Considering the Physical and Psychological domains assessed by WHOQOL and the total result, there was a statistically significant difference when analyzed the
scores before and after the hearing aid adaptation, in addition to a significant difference in the analysis of the domains of Social Relations, Environment and Quality of Life Self-evaluation.

Conclusion: Tinnitus has in uence on individuals with associated hearing loss, and its reduction or disappearance is directly related to an improve on quality of life, especially in the physical and psychological aspects.

Keywords: tinnitus, quality of life, hearing loss, hearing aids.

A6303. Analysis of Sensitivity and Specificity of a Reference Criterion of Transient Otoacoustic Emissions
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Objective: to verify the sensitivity and specificity of the reference criterion of Transient Otoacoustic Emissions (TOAEs) by Finitzo (1998) by performing another diagnostic test, the Brainstem Auditory Evoked Potential (BAEP).

Method: Prospective study. It was considered as inclusion criteria individuals of both genders, belonging to the low and high-risk groups for hearing impairment who underwent the TOAE in the UNIVAG School Clinic from September 2013 to October 2015. Afterwards, the Brainstem Auditory Evoked Potential (BAEP) was performed in 15 patients who failed bilaterally and 15 who passed in the TOAEs according to the criterion proposed by Finitzo (1998) conducted from May to October 2015.

Results: Of the 15 patients who failed the OAE, 4 (27%) of them showed altered BAEP in the right ear and 3 (20%) in the left ear. All 15 patients who passed the TOAE, presented normal results both in the left and in the right ears in the BAEP. Relating TOAE with BAEP OD, we had a sensitivity of 26.7% for the right ear and 20% for the left ear as well as specificity of 100% for both ears.

Conclusion: The sensitivity and specificity of the TOAEs using as analysis the proposed reference criterion were of low sensitivity and high specificity for the neonatal hearing screening.

Keywords: screening, hearing, otoacoustic emission.

A6345. The use of Sound Generator and the Efficacy Validation of Masking Noise to Reduce Tinnitus - Pilot Study
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Introduction: Tinnitus is a disorder that affects millions of Brazilians. In the presence of hearing loss, hearing aid fitting can interfere with the central representation of tinnitus, reducing their perception. If tinnitus is not mitigated only with the use of amplification, it can be considered a combined device: amplification and sound generator.

Objectives: To determine the effectiveness of incentives offered by sound generators in the treatment of tinnitus and compare the effectiveness of each stimulus in patients with tinnitus and sensorineural hearing loss from mild to moderate.

Methods: In this pilot study were selected 8 adult patients, all male, with symmetrical bilateral sensorineural hearing loss, from mild to moderate, constant ringing and no previous experience with hearing aids. All were submitted to the tinnitus handicap questionnaire, the analog visual scale and speech perception test. Four stimuli groups were created: White Noise; Pink Noise; Speech Noise and High Tone Noise. Patients were randomly distributed among them, receiving guidance on tinnitus and reassessed after 3 months of use.

Results: Preliminary results showed a significant decrease in handicap in all patients and improvement in speech perception test.

Conclusions: An improvement in the degree of tinnitus annoyance stated on the handicap questionnaire, in the analog visual scale and within the speech perception test results, both in quiet and in noise without significant difference between the stimuli used.

Keywords: hearing aids, hearing loss, tinnitus.

A4843. National Program of Education and Control of Noise Pollution - SILENCE - Opinion of Hearing Care Professionals
Felipe de Oliveira Rodrigues, Isabella Monteiro de Castro Silva
IBAMA

Introduction: Silence Program coordinated by the Brazilian Institute of Environment and Renewable Natural Resources - IBAMA, was established in Brazil in 1990 to control noise that is harmful to the health and the welfare of its population. In the same year it created Noise Stamp to indicate the sound power level, mandatory for household appliances, whether produced in Brazil or imported, that generate noise in operation. Initially, the obligation to use the stamp was established for three appliances: blenders, hair dryers and vacuum cleaners.

Objective: To investigate the knowledge of professional hearing experts about Silence Program and analyze their opinions about the relevance of the program on the health and quality of life of the population.

Methods: Questionnaires were sent through the Internet; 77 valid responses were obtained.

Results: The findings indicate that 63% of respondents do not know the program, 40.3% considered the appliances that carry the noise stamp ‘very important’. 74.1% considered ‘likely’ and ‘very likely’ the possibility of a partnership in disseminating and implementing educational program activities. The items most often cited as suggestions for inclusion in the program, respectively, were: air conditioners, mixers, fans, drills, washing machines and kitchen exhaust fans. These results suggest that a greater disclosure of Silence Program is required, in addition to the expansion of items monitored. There is a great possibility of a partnership in educational actions promoted by the program, indicating an alternative of action and more widespread dissemination in the field of health.

Keywords: noise; hearing; appliances.

A5843. An Analysis of Pressure Change Effects in Diving on Hearing Health and Quality of Life of Professional Divers
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Introduction: The professional diving is an activity with a high level of dangerousness, exposing the professionals to frequent changes of atmospheric pressure, which may cause changes in hearing health and the quality of life of those professionals. Hearing is one of the most important senses, having the major role in communication and preservation of the species for it is directly linked to alert function. Hearing disorders are among the most frequent complaints related to the professional diving work.

Objective: Discussing the effects of atmospheric pressure and its relation to hearing health and quality of life of the professional diver.
A5844. Asymptomatic Middle Ear Changes and its Relationship with the Academic Performance in Students of One year of the Centro Educacional Redentor

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Introduction: The auditory function is our primary means of communication, interfering significantly in the emotional, social and child's cognitive development. Thus, if there is any hearing loss over the child's life, you may develop possible language impairments and even in the learning phase school. However, middle ear disorders in children are very common, especially in literacy phase. In addition, to help in the diagnosis of middle ear disorders, a school hearing screening is performed.

Objective: To describe a list of possible auditory middle ear troubles to the problems of learning and attainment in children's literacy.

Resumed Report: Applied research, approved by Centro Educacional Redentor of CEP was held (042925/2015), where were analyzed eleven (11) school enrolled in the 1st year of primary school aged between six (6) and Nine (9) that are in the process of literacy. The procedures conducted comprised adapted anamnesis, tympanometry and acoustic re. ex. In the group of the children without complaints of school difficulties, 67% do not have hearing disorder and normal ipsilateral re. ex. Children with complaints of school difficulties, 25% have tympanometric profile changed with absent ipsilateral re. ex, 62% showed high ipsilateral re. ex.

Conclusion: Most changes in middle ear are asymptomatic and may result in a quantitative loss in noise emission and changes in central auditory processing. In children in the literacy process, this can lead to large losses, compromising the academic performance of these children.

Keywords: middle ear; hearing screening; learning.

A5845. Risks to Falls: Comparative Study

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Introduction: One third of people over 65 years present risks to falls. The preventive and rehabilitation proposals depend on the diagnosis of these risks.

Objective: To compare the risk of falls with independent and institutionalized elderly groups

Method: 52 independent elderly community and 53 institutionalized elderly were submitted to the Berg Balance Scale, Performed Oriented Mobility Assessment and Timed Up and Go test.

Results: 28.4% of independent group were male and 71.6% female, mean age 75.11 (±4.37) years and in institutionalized group, 37.73% were male and 62.27% female, mean age 77.24 (±10.04) years. It was no verified differences between the ages of two groups (p = 0.1618). In Berg Scale was found an average 49.8 on Independent group and 44.4 in the Institutionalized, on Oriented Mobility test it was founded an average of 35.9 points in first group and 33.4 in the second and on the Timed Up and Go, the first showed an average of 13.9 seconds, and 17.4 in second group. It was verified p values of 6.02 × 106; 1.7 × 104 and 2.3 × 104, respectively, pointing the worst performance on Institutionalized sample. These results could be explained by the comorbidities, muscle weakness, postural changes, reduced mobility, poor self-rated health, depression, visual changes and environmental factors that increased risk of falls. These facts do not exclude the possibility of risks in independent elderly.

Conclusion: The results showed that the institutionalized elderly, especially those with advanced age, have a higher risk of falling than independent seniors.

A5846. Analysis of Threshold Audiometric in Individuals with Poorly Controlled Systemic Arterial Hypertension (SAH)

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Introduction: Hypertension is considered today one of the leading causes of preventable death in the world, 30 million people have hypertension, and 50% of these do not know the disease. Hypertension impairs the functioning of various organs, including the ears.

Objectives: This study aimed to compare the audiometric thresholds of individuals with hypertension systemic poorly controlled of the individuals who control blood pressure diagnosed by the medical specialist.

Methods: The casuistry of this research was composed for 54 individuals who underwent pure tone audiometry, where gender was not a determinant factor of research.

Results: The results showed significant differences 05-10dB worse in the audiometric findings of individuals with controlled hypertension from the individuals not adhered to systematic medication treatment of hypertension.

Conclusion: Individuals who do not adhere to treatment had audiometric thresholds best when compared with individuals who adhere to treatment probably due to age.

Keywords: hypertension; hearing; medication treatment.

A5847. The Perception of Hearing Health of Seamstresses - A Study on Small Clothing Manufacturing in RJ and MG

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Introduction: Hearing is one of the main senses of the human body and brings about with the power of communication and socializing. Thus, the loss of that sense can result in great frustration and may become a threat to the individual. Caring for the hearing health of seamstresses is little discussed, especially with regard to small clothing manufacturing.
**Objectives:** This study aims to present a brief report on the hearing health of seamstresses.

**Resumed Report:** This research is the upshot of occupational audiology discipline (Speech / FAC-Redentor) and developed in an exploratory way, in order to investigate the perception of hearing risks and signs of Induced Hearing Loss (NHL) in seamstresses. In the survey, we have used a semi-structured form, applied with twenty seamstresses, 18-60 years old, who have worked in different clothing, Divino-MG, RJ-Iaperuna, Muriaé-MG and St. Antônio de Pádua-RJ. The results have indicated the presence of signs and symptoms of hearing loss, present in professionals with over thirty years of age and over six years of profession. From the public concerned, 100% reported that no hearing conservation program has been carried out and that not using hearing protection equipment. **Conclusion:** the implementation of a hearing conservation program to act in the prevention and hearing conservation is necessary, health and life quality of the seamstresses and the audiologist must be aware to act beyond the assessment of hearing.

**Keywords:** seamstresses, hearing health, promotion, prevention, speech.

**A6066. Analysis of the Severity of the Phonological Disorder, Phonemic Phonological Awareness and Masking Level Difference Test**

Kariny Zencke da Silva, Laura Fabiana Burkhard, Bruna Santos Sant’Anna, Laura dos Santos Abon Zahr, Bárbara Luísa Simonetti, Leticia Pacheco Ribas

**Introduction:** Studies demonstrate that children with Phonological Disorder have changes of metalinguistic skills, and provides auditory processing disorders.

**Objectives:** Analyze the severity of speech disorder, data about phonemic phonological awareness and the results of auditory processing test binaural interaction (Masking Level Difference-MLD).

**Methods:** Based on speech therapy evaluations of children with Phonological Disorder from a database (CEP995.344), it was analyzed the severity of speech disorder by the percentage of correct-revised consonants (PCC-R), the assessment of phonological awareness phonemic and the MLD test to assess hearing binaural interaction.

**Results:** The sample of this study has reviews of 44 children, with results of phonological awareness and MLD test. It was observed that 28 subjects have alterations in MLD from 17 present phonemic phonological awareness alterations, 10 (22%) with phonemic phonological awareness and changes in MLD test, in which two children have medium severity; 6 with medium-moderate; 1 with moderate-severe; and 1 with severe. Of the entire sample, the medium-moderate severity was the most frequent (24 cases, 54%) and only 4 with severe severity, among these only one with change of phonological awareness and other MLD test.

**Conclusion:** This study shows that 22% of the sample have alterations in phonemic phonological awareness and MLD; and 60% have medium-moderate severity. It is remarkable that less than 10% with severe severity, the more unintelligible, and none of these subjects shows changes in both phonemic phonological awareness as the MLD test.

**Keywords:** phonological disorder, CONFIAS, MLD.

**A5870. Speech Perception and Satisfaction in Adults Users of Bone Anchored Hearing System**

Thaysa Vidal Dias de Freitas, Wanderley Vieira da Silva Junior, Cláudia Granato Barbosa de Lima, Fabiana Danieli

**Introduction:** The bone anchored hearing system can benefit individuals with conductive and/or mixed hearing loss or single side deafness. This direct bone conduction provides higher sound quality, thus bypassing the outer and/or middle ear problems.

**Objective:** To study speech perception and satisfaction with the device of the bone anchored hearing system users.

**Method:** The subjects were four adults with conductive or mixed hearing loss, unilateral or bilateral with moderate to profound degree, age ranging between 31 and 77 years old and users of bone anchored hearing system PontoIM from Oticon Medical. All subjects were followed up in a private clinic in Piracicaba - São Paulo. To evaluate the speech perception were used the monosyllable recognition test in three different conditions: without the device, with the device coupled to the soft band in the test condition, and with the device attached directly on the abutment (two months after fitting). The application of satisfaction with amplification in daily life questionnaire evaluated the user satisfaction with the device two months after fitting.

**Results:** To the speech perception, the subjects presented mean percentage with best scores after fitting (85%) and in the test condition (75%), compared without the device (50%). The average overall score of satisfaction with amplification in daily life was 6.05.

**Conclusion:** All subjects showed better results in speech perception using the Ponto system and were very satisfied with the device.

**Keywords:** bone conduction; hearing loss; hearing loss, mixed conductive-sensorineural; hearing loss unilateral; adult.

**A5871. Long Latency Auditory Evoked Potential in Children with Sensorineural Hearing Impairment and Hearing Aid Users**

Thaysa Vidal Dias de Freitas, Doris Ruthy Lewis

**Introduction:** The long latency auditory evoked potentials results can provide data on the effectiveness of the stimulation of hearing aids to present a cortical response.

**Objective:** To describe the long latency auditory evoked potentials results (Positive 1–Negative 1 complex) in children aids users.

**Method:** The subjects were 10 children with congenital bilateral sensorineural hearing loss and moderate to profound degree, age ranging between two and eight years old, they were followed up in an audiological center in Sao Paulo. Data from audiological characteristics and speech therapy were collected. The cortical response were recorded in the unaided test using insert earphones at 85 decibel sound pressure level and in the aided test with loudspeaker at 100 decibel sound pressure level.

**Results:** The subjects with absence of cortical response in the unaided test had severe and profound hearing loss. In the aided tests, all subjects showed cortical response. There was significance correlation between auditory age and Positive 1–Negative 1 latency. In the analysis between onset age of hearing aids use, weekly hours of therapy, approach in language therapy, and systematic use of hearing aids, there was no association with the Positive 1–Negative 1 latency.
A5898. Relationship between Speech Recognition Threshold (LRF) and Degree of Severity in the Phonological Disorder
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Introduction: There are many factors that have an impact on the degree of speech intelligibility. A higher hearing acuity for speech, even in auditory thresholds within normality patterns, may be a factor that favors a lower severity of phonological disorder.

Objectives: Check differences of the results of speech recognition threshold test in children with medium degree of Phonological Disorder, moderate, moderate-severe and severe.

Methods: This study is quantitative and retrospective. The study included 48 children aged 5 to 9 years with hearing thresholds within the normal pattern, diagnosed with phonological disorder. Speech Recognition Thresholds were analyzed and phonological assessments of children belonging to a database with speech therapy evaluations (CEP 995 344), observing the results of the LRF in each threshold.

Results: The group of children with medium grade had the average speech recognition threshold 10.41dB for the right ear and 11.25dB left. On average medium-moderate, 10.41dB and 11.25dB. In moderate severe, 13.3dB and 11.66dB and severe, 10dB and 8.3dB. Further results will be described by statistical analysis.

Conclusion: In the sample analyzed, there were no quantitative differences in LRF results between different degrees of severity in the phonological disorder, suggesting that speech recognition in phonological disorder cannot explain a minor degree of speech intelligibility.

Keywords: language development, language development disorders, audiology.

A5899. Education and Speech Severity in Phonological Disorder
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Introduction: Phonological Disorder is characterized as difficulty in the organization of phonological rules of idiopathic nature. Such communication disorder can impact the child’s life on the learning process.

Objectives: To analyze the educational level with different severities of speech of children with phonological disorder.

Methods: Cross-sectional study with data from children with Phonological Disorder from the VALDEF (CEP995,344), in which Data collected, included educational level and severity of speech. For data analysis, it was divided two groups as to the severity of speech and three groups related to educational level.

Results: Were analyzed data from 63 subjects, 42 of which presented a medium severity or medium-moderate and 21 had moderate-severe or severe severity. As for educational level with medium or medium-moderate severity: 11 were in kindergarten, 14 were in the 1st grade/year and 17 were in 2nd grade/year. Of the subjects with moderate-severe or severe severity, 10 were in kindergarten, 7 were in the 1st grade/year and 4 were in 2nd grade/year.

Conclusion: It was observed that the higher the educational level, the higher the incidence of subjects with medium and medium-moderate severity, as well as lower occurrence of moderate-severe and severe gravity. The distribution of subjects in different severities of speech was more homogeneous in with lower school and more heterogeneous in education with higher levels of schooling. This analysis shows that the formal written language education promotes knowledge of the sounds of language and corroborates the literature on the remediation of Phonological Disorder.

Keywords: education, speech severity, phonological disorder.

A5937. The Use of Elastic Bandage on Singers - a Preliminary Study
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Introduction: Elastic bandage is a therapeutic tool that can be used as a support in situations of muscle soreness, among others possibilities. Singers often report pain in muscles of the neck, shoulders and back.

Objective: Verify the incidence of vocal tract discomfort symptoms and the 24-hour effect of the elastic bandage use on singers.

Methods: Twenty individuals, mean age of 33.8 years, active singers, responded about: sample characterization, presence or absence of cervical discomfort, and the Vocal Tract Discomfort Scale - VTDS. The elastic bandage was applied at the specific discomfort related locations in 18 of them who had associated muscles complaints while singing. After 24 hours of bandage usage, they were asked about its effects on cervical comfort, voice quality and effort to speak.

Results: 95% of the singers have reported at least one sign of vocal tract discomfort and 55% have informed four or more signs. After 24 hour-use of the elastic bandage, 72.2% of subjects reported cervical comfort improvement, 33.3% reported better voice quality and 50% reported less effort while speaking. The real nature of the perceived effect is hard to identify, however, the outcome is quite interesting.

Conclusion: Most of the surveyed singers presented high incidence of vocal tract discomfort symptoms. The use of elastic bandage may represent a way of achieving better cervical comfort with positive impact on vocal quality and effort to speak on singers.

Keywords: bandage; singers; comfort; voice.

A5938. Vocal Fold Immobility after Emergency Orotracheal Intubation: A Series Report
Charles Henrique Dias Marques, Sandy Maira Almeida de Andrade, Mariana Ribeiro Lopes Neves, Thalyta Georgia Vieira Borges, Fernanda Cristina de Oliveira Rocha, Graziella Muzzo de Oliveira, Carla Rocha Muniz
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Introduction: Orotracheal intubation provides ventilation. The achievement of the emergency procedure
as the tube’s permanence for more than 24-hours can cause anatomical and physiological changes in voice and swallowing functions, such as arytenoid dislocation, recurrent laryngeal nerve injury, vocal fold paralysis and incomplete glottal closure.

Objectives: To describe the effects of the Neuromuscular Electrical Stimulation on rehabilitation of vocal cord dysfunctions.

Resumed Report: Series report, three individuals (A; B; C), male, 40 ± 2 years old, all underwent to emergency intubation. Diagnosis: right unilateral vocal fold paralysis, hoarse-breathy voice quality, and decreased loudness. One-hour weekly intervention/rehabilitation. Treatment consisted in the application of facilitators exercises associated to Transcutaneous Electrical Nerve Stimulation (300µs, frequency 10Hz, 5 minutes), followed by isotonic exercises simultaneous to Functional Electrical Stimulation (300µs, frequency 80Hz, 40 minutes) and returning to the first stimulation at rest (300µs, frequency 30Hz, 5 minutes). Acoustic registration and analysis with the sustained vowel [a] pre and post-intervention (VoxMetria software). The variables, respectively, studied before and after intervention were: maximum phonation time of A (3.68s/10.96s), B (2.18s)/(6.45s), and C (5.58s)/(5.36s); fundamental frequency of A (128.17 ± 1.65Hz) / (105.43 ± 12.47Hz), B (127 ± 8.21Hz) / (114.25 ± 2.86Hz), and C (150.97 ± 40.66Hz) / (186.11 ± 12.14Hz); intensity of A (70.61 ± 3.84dB) / (76 ± 0.6dB), B (73.33 ± 8.11dB) / (75.58 ± 6.06dB) and C (73.39 ± 4.11dB) / (74.86 ± 4.23dB).

Conclusion: All patients achieved better vocal quality and acoustic parameters within normal limits. Furthermore, the Neuromuscular Electrical Stimulation indicated can enhance the vocal rehabilitation process. Further studies with larger sample sizes and well-defined etiologic groups should be performed in order to generalize the results presented.

Keywords: intubation intra-tracheal, dysphonia, electrical stimulation, rehabilitation.

A5942. Analysis on the Acquisition of the Initial Complex Onset in Children with Phonological Disorder
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Introduction: The complex onset is characterized by the existence of two consecutive consonants at the beginning of the CCV syllable structure, and may the second consonant consist only in [r] or [l] in Brazilian Portuguese, which is the more complex structure and last to be acquired.

Objective: To examine the acquisition of the initial onset complex, from the analysis of production index of the second segment of the same -[r]- and [l]- in children with phonological disorder.

Methods: were analyzed the productions of the second sound of the initial complex onset in 130 children, Brazilian Portuguese speakers with Phonological Disorder, aged 5 and 10 years, the results are from the data bank VALDEF/CEP 995 334). The analysis was limited to observe the production was performed or not, considering how not acquired percentage up to 49% by acquiring 50% to 74% and acquired from 75% correct productions.

Results: from all subjects, 23% of children have acquired the /r/ and 22% acquired /l/ in CCV; 4% are acquiring the /r/ and 12% /l/; 72% did not acquire the /r/ and 66% did not get the /l/.

Conclusion: Although the number of children who have acquired the phonemes /r/(23%) and /l/(21.5%) is very close, only 4% are acquiring the /r/ while 12% are acquiring /l/. The analysis shows that the large majority of children with phonological disorder is not able to properly produce the CCV syllable structure, even after the expected age for the acquisition.

Keywords: initial onset complex, Phonological Disorder, acquisition.

A5944. Speech-Language Findings of Patients with Stroke in a Hospital at Porto Alegre
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Introduction: A Stroke is the sudden development of a neurological deficit, as a result of obstruction of one or more blood vessels of the brain or bleeding and may result in impaired swallowing.

Objectives: To describe the speech language’s findings of patients with stroke.

Methods: A descriptive, retrospective study to a database (ethics committee n° 41354), where described the findings of patients referred for clinical bedside swallowing assessments in a hospital at Porto Alegre. Patients were evaluated with the Gugging Swallowing Screening protocol for classify the swallow. They included those with history of ischemic or hemorrhagic stroke.

Results: Were analyzed 20 subjects, aged 46-86 years, with an average age of 69 years, 12 (60%) women. The clinical bedside swallowing assessments was requested in order to verify the ability to reintroduce oral feeding in 8 (40%) patients. In orofacial sensorimotor evaluation 6 (30%) patients had swallowing problems before hospitalization, 14 (70%) power changes and/or mobility of the lips, 16 (80%) of tongue, 10 (50%) change the sensitivity of the tongue, 8 (40%) sensitivity of the face, 19 (95%) opening changes and/or jaw lateralization. Regarding dysphagia: 1 (5%) had normal swallowing, 9 (45%) mild dysphagia, 3 (15%) moderate dysphagia, 6 (30%) severe dysphagia and 1 (5%) patient had not clinical conditions for evaluation.

Conclusion: We observed more frequently women in our sample, referred to verify the ability to reintroduce oral feeding. It was identified orofacial sensorimotor changes and modifications of swallowing in most patients.

Keywords: stroke, swallow, speech therapy.

A5966. Audiological Profile of Brazilian Elderly in a Rehabilitation Center of Public Health System
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Introduction: Hearing difficulties, stigma regarding hearing loss, symptoms such as dizziness, tinnitus may occur in the elderly population.

Objectives: The primary aim is to analyze audiological profile in a database with 468 Brazilian Elderly waiting for Hearing Aids.

Method: This is a retrospective study of 468 records of elderly the period from 2011 to 2015 in a Rehabilitation Center of Public Health System. Information on the following variables were collected: age, gender, tinnitus, hear and not understand, dizziness, symmetry and degree of hearing loss
and the occurrence is bilateral or unilateral. The data were processed by SPSS 21.0 software (Bivariate Correlation with Spearman Coefficient).

**Results:** The study demonstrates that 85.9% of these hearing loss are classified as moderate to moderately severe. The complaint “hear and not understand” was found in 64.7% of the sample evaluated in relation to the frequency tinnitus was 45.1% and 20.3% for dizziness. It was observed that dizziness has significant relationship with complain of not understanding speech (p < 0.001; R = 0.17) and there was significant correlation between tinnitus and dizziness (p < 0.001; R = 0.32).

**Conclusion:** This epidemiological profile shows the importance of identify risk factors and psychosocial consequences of hearing loss and communication problems to listen and not understand speech reported by the most elderly with moderate to severe hearing loss and the importance of hearing aids to improve quality of life this population.

**Keywords:** presbyacusis, epidemiology, quality of life.

**A5974. Neonatal Hearing Screening Outcome in Diabetic Mellitus or Hypertensive Mothers: A Systematic Literature Review**

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**Introduction:** Among the diseases associated with high-risk pregnancies are diabetes mellitus (DM) and arterial hypertension (AH). Little is known about possible deficits in the hearing of newborns derived from these clinical conditions.

**Objectives:** To systematically review the literature on the results of Universal Newborn Hearing Screening (UNHS) of newborns whose mothers had AH and/or DM during pregnancy.

**Data Synthesis:** Electronic searches in the databases MEDLINE (via PubMed), LILACS (BVS), Scopus, Web of Science and EMBASE were performed, using as search strategy: neonatal screening AND hearing AND (OR hypertension diabetes mellitus). There was no language restriction. The publication period covered January/1975 to November/2015. For search, selection and analysis of the articles, the PRISMA protocol was adopted. Although 64 records were found, only 5 were included for analysis. The articles analyzed came from United States (n = 2), Iran (n = 1), Israel (n = 1) and Spain (n = 1), and showed a diversity of design. Regarding the results, both relations between AH and DM in pregnancy (together or separately) and changes in the outcome of UNHS were found, as any relation at all.

**Conclusion:** It is not possible to affirm the existence of a relationship between AH and DM during pregnancy and changes in the outcome of UNHS, particularly congenital hearing loss. Prospective studies are needed to examine the relationship between these health conditions and the functioning of the auditory system of newborns in order to isolate confounding factors and minimize bias in assessment and selection.

**Keywords:** neonatal screening; hearing; hypertension; diabetes mellitus; systematic review.

**A5988. Newborn Hearing Screening Program: Characterization of Neonates Referred to High Complexity Services in a Public Hospital Connected to Rede Cegonha Policy**

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**Introduction:** Neonatal hearing screening (NHS) is offered universally to neonates through the Rede Cegonha (RC) policy of Brazilian Ministry of Health (MS). Every neonate/infant who does not show appropriate responses in NHS, monitoring or follow-up, should be referred and have access to functional diagnosis at a Hearing Health Care Service of High Complexity (HC), licensed by MS.

**Objectives:** To characterize and measure the prevalence of referrals to HC in the context of NHS in a public hospital located at Porto Alegre/RS.

**Methods:** A cross-documentary study was conducted, covering the period from May 2014 to May 2015, considering the hospital records of babies referrals to HC at the day of NHS. Babies both were in the rooming or in the Neonatal Intensive Care Unit (NICU). The study was approved by the Ethics in Research Committee of the Federal University of Health Sciences of Porto Alegre (Protocol number 1.387.303).

**Results:** Of the 2,323 infants attended, 32 (1.37%) were referred for HC, of which 22 (0.94%) came from the rooming or NICU. Of these, 13 (59.09%) were male, 12 (54.54%) required admission to the NICU, 5 (22.72%) were premature, 2 (9.08%) had less than 1,500 grams; 3 (13.63%) had Apgar ≤ 4 in the first minute and none of them presented Apgar ≤ 6 in the fifth minute. Only 5 (22.72%) had no risk factors for hearing loss (RFHL).

**Conclusion:** These results highlight the importance of speech therapy care for newborns with RFHL, and emphasizes the importance of referral whenever there is suspicion of hearing loss by parents/caregivers and health professionals.

**Keywords:** neonatal screening; hearing; speech, language and hearing sciences; government programs.

**A6000. Breastfeeding Assessment of Preterm Newborns: A Systematic Literature Review**

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**Introduction:** Breastfeeding is associated with reduced length of hospital stay and several medical conditions resulting from prematurity, such as retinopathy. The evaluation of breastfeeding is essential to its success, because permits to identify predisposing factors for its maintenance or interruption.

**Objectives:** To review the literature on the evaluation of breastfeeding in premature infants, in order to describe the protocols used.

**Data Synthesis:** A search was conducted in electronic databases MEDLINE One File, Directory of Open Access Journals, SciELO Brazil and Mary Ann Liebert, using as strategy: “infant, premature” AND “breast feeding” AND (“evaluation” OR “protocols”). Year of publication (2005-2015) and language (Portuguese, English, Spanish and French) were used as filters. Although 184 articles were found, only six were selected for analysis. The remains were excluded because were not available free, missing the focus theme, did not have human babies as sample, and were literature reviews/theoretical or
duplicated. Brazilian studies were the most prevalent (N = 3). PIBBs Scale, ANADAT Software/LABDAT, Feeding Observation Protocol, BSES Scale-SF and LATCH were the protocols employed. A study drawn up an own assessment protocol. In five articles, a clinical evaluation was performed, and only in one of them, the evaluation was objective.

**Conclusion:** This review pointed out the need to develop specific protocols for assessing breastfeeding on premature babies, since only one was designed for this goal. Other aspects should be taken into consideration during the evaluation of premature babies, as readiness for oral feeding, the oral reflexes and the function of stomatognathic system.

**Keywords:** breastfeeding; infant premature; evaluation; speech therapist.

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**A6005. Speech Therapy in the Treatment of Meige Syndrome: Case Report**


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**Introduction:** Meige syndrome is a degenerative disease characterized by blepharospasm associated with oromandibular dystonia, including pharynx and larynx.

**Objectives:** to evaluate the immediate effect of exercises for swallowing and voice and describe the results of the rehabilitation of a patient with Meige syndrome.

**Resumed Report:** female, 66 years. Acoustic samples of swallowing/voice pre and post exercises. Collected sustained vowels /a/, /e/ and water swallows (5 and 10ml). The exercises were Expiratory Muscle Strength Training, Masako and Shaker at intervals of one week. The rehabilitation process was defined after analyzing the effects of each exercise. Performed Fiberoptic Endoscopic Evaluation of Swallowing pre and post treatment. The results indicated, respectively, to pre and post Expiratory Training, Masako and Shaker for vowel /a/: fundamental frequency (161.9/157.16/140.77/163.76), intensity (61.65/68.07/60.16/71.55), maximum phonation time (5.54/8.44/6.8/5.6), Vowel /e/: deviation diagram (3/1/1/1), jitter (1.68/0.17/0.16/0.19), shimmer (13.96/8.03/7.65/6.89), irregularity (5.84/4.82/4.74/4.7). For 5 and 10ml swallows, the results showed: intensity peak (74.3/73.3, 82.81/83.8, 84.07/81.7, 87.1/86.5) duration (0.4/0.4, 0.4/0.5, 0.3/0.4, 1.0/0.7), number of components (3.5/2.5, 6/5.5, 4.5/3.5, 7/6). The instrumental evaluation showed improved residues in valleculae and piriformes sinus and changes in the swallowing time (1.5 ± 0.5/1.07 ± 0.3).

**Conclusion:** expiratory training and Shaker exercises contributed to both functions. Fiberoptic Endoscopic Evaluation of Swallowing corroborates with the results, indicated post treatment absence of stasis, and improved swallowing coordination. Further research is suggested to describe the effect of the exercises in swallowing and voice impaired in Meige’s syndrome, which can assist in the rehabilitation process.

**Keywords:** meige syndrome, deglutition disorders, dysphonia, rehabilitation.

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**A6009. The Importance of Otolaryngologists Diagnosis in Vocal Emergency Attendance in Call Center**

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**Clin Gestão em Saúde**

**Introduction:** Telemarketers depend on the voice to do their job. Otolaryngology, gastric and behavioral factors can cause transient voice changes compromising their health and efficiency of your calls. The precocious diagnosis allows faster therapeutic intervention thereby shortening recovery time and the risk of chronicity. The immediate action of the speech therapist often depends of otolaryngologist diagnosis.

**Objective:** To evaluate the importance of early otolaryngologist diagnosis in a vocal health program in a call center increasing the speed in the therapeutic process to prevent the installation of permanent dysphonia and vocal disorders.

**Resumed Report:** Case study with 189 telemarketers with dysphonia complaints made by the speech therapist team in a health care clinic of a call center of a financial institution in the city of São Paulo during the period of five months. Of the total 106 cases (56%) had a complaint related to otolaryngologist symptoms; 57 (30%) dysphonia with no other symptoms and 26 (14%) gastric changes.

**Conclusion:** Most of the visits “in loco” (56%) of a vocal health program featured cases involving these complaints, thus requiring referral to diagnosis definition, with instant speech conduct for best vocal framework and subsequent implementation of specific speech therapy. It follows therefore that the participation of an otolaryngologist in the multidisciplinary team can optimize treatment reducing the risk of chronicity.

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**A6012. Acoustic Analysis of Cervical Auscultation of Healthy Adults and Elderly’s**

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**Introduction:** The swallowing process is a biological, complex and coordinated function, including voluntary and reflex activity, which aims to transport food or saliva from the oral cavity through the pharynx, esophagus to the stomach. With a neurological connection and timing of muscle actions, it is accompanied by simultaneous contraction and relaxation of a large number of muscles in the oropharyngeal region.

**Objectives:** To compare the acoustic characteristics of the swallowing sounds of healthy adults and elderly's.

**Resumed Report:** The acoustic sample of swallowing liquid consistency were compared of 37 elderly, with mean age 66.7 years and 36 adults, with an average age of 35.5 years, collected through electronic stethoscope Littman brand, 4100 model. The acoustic analysis was performed by means of the software “Deglutisom”, specific for swallowing sounds. It was found in the elderly’s an frequency average of 820 Hz and 60.73 dB of intensity; in adults, an average of 927.13 Hz of frequency and 45.85 dB of intensity.

**Conclusion:** The acoustic characteristics of the swallowing noises of the elderly present intensity values larger than those found in adults, and a signal noise with a lower frequency, reinforcing the need for adjustments in the aging process of the muscular structures. The difference between the two samples confirms the findings of the literature, in which we have the swallowing noises suffer in uence of the age of the subject.

**Keywords:** auscultation, deglutition, deglutition disorders.
A6014. Acoustic Characteristics of Swallowing: Duration, Frequency and Intensity
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Introduction: The process of clinical evaluation of swallowing checks aspects of orofacial structures, integrity of oral functions, voice quality, re exes, voluntary cough and sensitivity. In the case of a subjective evaluation, it is necessary to complete it by cervical auscultation, pulse oximetry, and indirectly through video oroscopy and nasal endoscopy.

Objective: To report the results after analysis of swallowing sounds by specific software.

Resumed Report: we studied 36 adults swallowing noise with a mean age of 35.5 years, collected during swallowing food in 50ml liquid consistency, obtained by digital stethoscope placed in the trachea of the side edge immediately below the cricoid cartilage to greater extent signal to noise analyzed by specific software for analysis deglutition. Verified it is that the average of the peak frequency of swallowing was 927.13 Hz and intensity 45.85dB, and literature references in the figures of 556HZ to the initial peak, the intensity ranging between 40 and 60 dB, thus confirming the existence of variation in the findings, and these may be explained by the higher sensitivity of analysis, it has been performed by a specific tool for identifying changes in swallowing noises.

Conclusion: Therefore the analysis of digital cervical auscultation can be quantified the acoustic characteristics of swallowing as duration, frequency and intensity.

Keywords: cervical auscultation, deglutition, deglutition disorders.

A6016. Dysphagia’s Aspects in Patients with Neuropathies of a Clinical Care Unit
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Introduction: Swallowing is the process of transporting food from the oral cavity to the stomach, involving various structures, controlled by the Central Nervous System. When the subject is affected by any neurological disease or trauma, which endangers the sensory-motor system of the muscles involved in the swallowing process, it can develop dysphagia.

Objectives: Characterize aspects of dysphagia in neurologically impaired individuals

Methods: Retrospective database analysis, whose patients were treated by speech therapy service at the Neurology Clinic of a hospital in southern Brazil, from 2012 to 2015, through the Speech Therapy Evaluation protocol of Dysphagia Oropharyngeal Etiology Neurogenic - AFDN. This study was approved by the CEP in 42/2012.

Results: Of the 45 patients, 53% are male, mean age 54.5 years, affected mostly by the neuropathies: Ischemic Stroke (31%), Amyotrophic Lateral Sclerosis (20%) and Parkinson’s disease (9%). Dysphagia was established in 42% of patients, of which: 21% were affected by ischemic stroke; 75% of patients with Parkinson’s disease; 55% of Amyotrophic Lateral Sclerosis; and 50% other neuropathies.

Conclusion: The prevalence of dysphagia was the oropharyngeal type and moderate intensity. The neuropathy with the highest occurrence of dysphagia was Parkinson’s disease, followed by Amyotrophic Lateral Sclerosis. The neurogenic oropharyngeal dysphagia are related to the high degree of morbidity and mortality, as they often cause nutritional changes and tracheobronchial aspiration, leading to clinical complications of dehydration, malnutrition and risk of aspiration pneumonia and repetition.

A6020. Factors that Influence Breastfeeding Duration on Mothers who wish to Exclusively Breastfeed their Children
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Introduction: Exclusive Breastfeeding (EBF) is the ideal feeding practice for infants under six months. Mothers generally wish to breastfeed their babies; however, lack of guidance, difficulties in the practice and myths related to breastfeeding may compromise EBF duration.

Objectives: To compare the length of EBF with mothers wish to perform it.

Methods: A longitudinal study was conducted in the maternity of a Porto Alegre Hospital. It was applied a quiz made for this study: 73 mothers were interviewed in the hospital and followed through the third month of their babies life. This research was approved by UFCSPA’s ethics committee under number 481,830.

Results: The entire 73 mother wished to EBF their babies a when asked at the postpartum period. At two days of their babies life, 14 (19%) of the mothers had cracked nipples and 13 (17%) related lack of milk. In the first month of life, 38 (52%) infants were breastfed; of the mothers how chose to discontinue EBF, 13 (17%) related latch problems and 19 (26%) related lack of milk. In the third month of life, only 21 (28%) infants were breastfed; of the mothers how chose to discontinue EBF, 14 (19%) related latch problems and 26 (35%) related lack of milk.

Conclusions: EBF duration was compromised by latch problems, like breast pain and cracked nipples and by the myth of inadequate production of milk. That caused the mothers to not fulfill their wish to breastfeed their children.

Keywords: breastfeeding; infants; child nutrition.

A6021. Relationship between Tinnitus Laterality and the Level of Discomfort Caused by Its Symptoms
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Introduction: The perception of tinnitus differ in intensity, frequency and location. The greater the intensity, and frequency are, the worse is the discomfort reported by patients. However, the laterality of symptoms in relation to the discomfort has not been further studied yet.

Objective: To relate the laterality of tinnitus, and the discomfort caused by its symptoms.

Methods: 46 individuals, ages 18-76, assisted at the Clinical School of Phonoaudiology of the Federal University of Paraíba. It was applied: Tinnitus Handicap Inventory- THI, the visual analogue scale – VAS, the State-Trait Anxiety Inventory – STAI, and the Beck questionnaire for depression.

Results: 23 had unilateral tinnitus, and 23 had bilateral. Through the Spearman’s rho, a significant correlation between THI, and VAS was noticed (rs = 0.584, p = 0.015; n = 46), which means that the higher is the discomfort, the greater is the loss of life quality, for both groups. However, when comparing the average of THI, and VAS, it was noticed higher scores in the group with unilateral tinnitus (THI = 47.91, VAS = 6.43), while bilateral tinnitus showed average of THI = 40.87, and VAS = 6.09. In addition, patients with...
unilateral tinnitus also had higher scores on the STAI (average 46.82), and the Beck questionnaire for depression (average 43.08).

**Conclusion:** Patients with unilateral tinnitus demonstrated higher levels of auditory discomfort. High scores of anxiety and depression may explain these findings, as the participation of the limbic system is responsible for provoking negative emotional associations, and uncomfortable reactions reported by patients.

**Keywords:** tinnitus; functional laterality; auditory perception.

**A6024. Speech-Language Therapy Clinical Parameters of Respiratory Function by the use of Inspiratory Encourager**

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**Introduction:** Respiration is one of the main vital functions in the human being, promoting gas exchange (lung hemato) and providing the necessary oxygen to the body's cells. The incentive spirometry can be used to promote deep breaths and provide increased breathing capacity improving oxygenation.

**Objective:** To verify the quality, the respiratory dynamic capacity and laryngeal efficiency from the use of incentive respiratory.

**Methods:** Longitudinal observational cohort study, with healthy adult volunteers. Was conducted a screening by questionnaire with questions open and closed, breath with healthy adult volunteers. Was conducted a screening in incentive respiratory.

**Results:** Selected five volunteers with a mean age of 51.4 years, initially with average respiratory tract, nasal way, respiratory average frequency of 15.20 cycles / min; MPT, maximum phonation time (MPT), spirometry and training inspiratory supporter of Respiron make, model Classic Middle Level - NCS through 30 inspirations (three sets of 10 repetitions) twice a day.

**Conclusion:** The use of incentive provided an increase in capacity, improving quality and laryngeal efficiency.

**Keywords:** tinnitus; myofascial pain syndromes; auditory perception.

**A6027. Anxiety Interference in the Perception of Discomfort Caused by Tinnitus**

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**Introduction:** Tinnitus is a sound perception attributed by the individual in the absence of an external source. Neurophysiologically, clinically significant tinnitus is a result of the dynamic interaction between the auditory and non-auditory centers of the nervous system, with the involvement of the autonomic nervous system, and the limbic system. Also responsible for provoking negative emotional associations, and consequent discomfort reported by patients, where anxiety and depression are common behavioral expressions in clinical settings.

**Objectives:** To identify whether anxiety levels interfere in the discomfort caused by tinnitus.

**Methods:** The research is descriptive, cross-sectional, and observational, with a quantitative approach. It was composed by 29 young volunteers, ages between 18-36 years old, assisted at the Clinical School of Phoniatrics of the Federal University of Paraiba. It was applied the Tinnitus Handicap Inventory - THI, the visual analogue scale - VAS, and the State-trait Anxiety Inventory - STAI.

**Results:** According to Spearman's correlation coefficient, there was a positive relationship between the STAI and the VAS, indicating that the more anxious the patient was, greater was his discomfort report (rs = 0.564, p = 0.0001, n = 29). It was also observed that there was a significant correlation between VAS and THI (r = 0.411; p = 0.015; n = 29), implying that the higher the discomfort, the greater the loss in quality of life.

**Conclusion:** Anxiety can interfere in hearing discomfort felt by patients, emphasizing the importance of interdisciplinary assessment and treatment of individuals affected by the symptomatology.

**Keywords:** tinnitus; anxiety; auditory perception.
A6028. Precocious Tinnitus: The Influence of Hearing Habits and Attitudes of Elementary School Students towards the Noise
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Introduction: The concern of health professionals with hearing loss induced by noise began to extend to leisure activities, especially amongst adolescents. This fact is related to the overexposure to environments with harmful noise levels, and misuse of personal audio devices such as headphones.

Objectives: To evaluate the perception of adolescents about the environmental noise, their complaints, and hearing habits.

Methods: 26 adolescents of both genders, average age of 14.8 years old. Ninth grade age students in the Brazilian School System of a Municipal School in João Pessoa-PB. The Brazilian version of YANS questionnaire was utilized to explore attitudes of adolescents towards the noise, and issues related to hearing habits, analyzed by descriptive statistics.

Results: Regarding the questionnaire YANS, 53.8% of the sample strongly disagrees to give up activities that the volume is too high, and 51.5% agree that it is unnecessary to use hearing protection when they are in these locations. The majority of the adolescents (84.6%) reported to have felt tinnitus, and 57.6% consider themselves sensitive to noise. However, 69.2% do not mind going to shows, even with previous experience of tinnitus. On hearing habits, 92.4% reported listening music with headphoens daily, and 57.7% listen to music in high volumes at home.

Conclusion: It was concluded that the harmful habits to hearing health are frequent amongst adolescents, which corroborates the early perception of tinnitus. Therefore, promoting hearing health through basic educational activities should be part of the school environment.

Keywords: tinnitus; hearing loss; adolescent health; health education.

A6031. Effects of Transcranial Direct Current Stimulation in Chronic Tinnitus Treatment: Case Study
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Introduction: Transcranial Direct Current Stimulation—tDCS, a therapeutic modality that has shown efficacy in the treatment of tinnitus, uses different parameters in regard to stimulation. Although, the current polarity (anodic or cathodic) still little studied.

Objective: To acknowledge the current polarity most effective in reducing the discomfort caused by the symptoms.

Resumed Report: Case study, double-blind of a 23 years old patient with bilateral tinnitus, who has been presenting the symptoms for 5 months. Subsequently, she presented cases of anxiety, and depression with suicidal thoughts. tDCS was applied for five consecutive days, current of 2mA, 20 minutes, in the temporoparietal left area, and right prefrontal cortex. The current polarities or sham were randomized ratio of 1:1:1. The patient received active tDCS (anodic or cathodic) and was assessed before and after each intervention by acuphenometry and Visual Analogue Scale-VAS. Observed in the first day, 23 dB intensity in the right ear, and 25 dB on the left, both in the frequency of 8000 Hz, and sound type narrow band noise. Among the sessions, the intensity varied on average 12.5 dB in the right ear and 8 dB on the left. The reduction of tinnitus was higher in cathodic tDCS (2nd, and 3rd day). The type of sound changed to continuous (2nd day). The patient also reported discomfort level, VAS 8 on the first day, and VAS 5 in the last day.

Conclusion: tDCS appeared to be promising in the treatment of tinnitus, most effective with cathodic polarity.

Keywords: tinnitus; tDCS; polarity of the current.

A6033. Transcranial Direct Current Stimulation in Patients with Tinnitus: A Systematic Review
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Introduction: Transcranial Direct Current Stimulation Direct Current is a noninvasive means to modulate neural activity. Studies in published articles tested different stimulation parameters, such as cortical area, intensity, polarity and duration of the current, but they are still incipient researches with variables protocols.

Objective: To assess and compare the parameters of Transcranial Direct Current Stimulation that points better results for elimination or reduction of tinnitus.

Data Synthesis: This is a systematic review conducted by consulting the scientific articles selected from databases: Scielo, PubMed, Clinical Trials, Cochrane, through the descriptors: òtinnitus and transcranial direct-current stimulationâ, in the last 5 years. 47 articles were found, and 16 were selected for fitting in the main theme of the review. From the articles selected, 53.3% used current intensity of 2 mA, 80% lasting 20 minutes, more frequently 5 or 6 sessions (26.6% each). Regarding to the site of stimulation, the application was more frequent in the dorsolateral prefrontal cortex (50%).

Conclusion: Transcranial Direct Current Stimulation has been identified as a promising method in the treatment of tinnitus, and the parameters used that most had positive effects and that caused relief of the symptoms were: anodic tDCS of the left temporoparietal area or bilateral prefrontal cortex (with anode and cathode right to left), 5 sessions, 20 minutes application with a 2mA current intensity.

Keywords: tinnitus; tDCS; parameter tDCS.

A6035. Fiberoptic Endoscopic and Video Uroscopy Evaluation of Swallowing in Oculopharyngeal Dystrophy: Case Report
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Introduction: Oculopharyngeal dystrophy is an autosomal dominant disease characterized by ptosis and dysphagia.

Objectives: To describe the disturbances of swallowing and the effects of postural swallowing maneuvers in a patient with oculopharyngeal dystrophy.

Resumed Report: Female, 66 years. In Fiberoptic Evaluation was evident incomplete coronal velopharyngeal and glottic closure with reduced laryngeal sensitivity. Liquid and semi-liquid consistencies were assessed (5 mL, 10 mL, free drink) and solid (biscuit). There was difficulty in oral ejection, delay of the pharyngeal phase, incomplete obliteration, stasis grade 4, nasal reflux, penetration-aspiration grade 5 (semi-liquid/solid) and 6 (liquid). Chin-Tuck Maneuver: penetration-aspiration grade 6 (semi-liquid) and grade 7 (liquid).
Supraglottic Maneuver: penetration-aspiration grade 3 and Super-Supraglottic grade 2. Effort Swallowing associated with Multiple Deglutition and cleaning expectoration: stasis grade 3. In video fluoroscopy measures, respectively, to 5 mL, 10 mL and solid volume, laryngeal elevation (1.25 ± 0.25mm), (4.73 ± 0.9mm), (2.14 ± 0.5mm); laryngeal anteriorization (0.9 ± 0.24mm), (3.97 ± 0.95mm), (4.28 ± 0.8mm); opening of the upper esophageal sphincter (3.75 ± 1.79mm), (4 ± 0.5mm), (3.93 ± 1.1mm). There was a deficit in oral organization with hypopharynx scar. Reduced pharyngoesophageal transit and penetration grade 5 at the level of the vocal folds (Rosenbeck scale). Visible residue in vallecula, aryepiglottic pharyngeal folds and pharyngeal sinus. There was also a significant reduction in laryngeal displacement and in the opening of the upper esophageal sphincter with posterior pharyngeal bar.

Conclusion: The disturbances found are related to dependent pressure mechanisms of airway protection and are observed in all consistencies. The Supraglottic, Super-Supraglottic Swallowing Maneuvers have partially positive effects. Chin-Tuck, due to the stasis in the pyriform sinus, intensified the penetration-aspiration.

Keywords: muscular dystrophies, pharyngeal muscles, deglutition disorders.

A6048. Immediate Vocal Modification After Shaker Exercise in Case of Supracricoid Laryngectomy
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Introduction: Voice and swallowing are functions that share structures that are functionally readjusted. The Shaker exercise is intended to strengthen the supralaryngeal muscles and thus has an impact on swallowing. Therefore, it may also have an effect on vocal tract.

Objectives: To describe the immediate effect of the Shaker exercise on individual’s phonation managed with laryngectomy.

Resumed Report: Case report, male, 63, supracricoid partial laryngectomy with cricothyroidepiglottopexy (arytenoids preserved), oropharyngeal dysphagia and aphony. Treatment consisted in the application of the exercise, isometric task (three sustained head lifts for 60-seconds with the same time of rest between each lift). Acoustic registration and analysis with the sustained vowel [i] pre and post-intervention (VoxMetria software). The variables, respectively, extracted before and after intervention were: maximum phonation time of the series 1 (7.35-seconds); (6.29-seconds), series 2 (4.11-seconds); (5.67-seconds), series 3 (4.91-seconds); (5.86-seconds), fundamental frequency of the series 1 (306.40Hz); (296.74Hz), series 2 (168.04Hz); (156.69Hz), series 3 (179.37Hz); (264.76Hz) and vocal intensity of the series 1 (75.74dB); (82.05dB), series 2 (71.64dB); (70.78dB) and series 3 (73.22dB); (76.24dB). The emergence of formants in the spectrographic analysis and the simultaneous increase of the acoustic parameters’ values were observed after series 3. The patient acquired functional voice and safe oral ingestion.

Conclusion: Shaker exercise, specific to the rehabilitation of oropharyngeal dysphagia, has an effect on vocal performance by modifying the vocal quality and acoustic parameters. Other studies with larger sample size may determine such effects in the medium and long term, as well as the effectiveness of its clinical applicability.

Keywords: deglutition disorders; rehabilitation; laryngectomy.

A6060. Degree of Severity and Speech Recognition Index of Children with Phonological Disorder
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Introduction: The Phonological Disorder can be classified as degrees of severity according to the percentage of correct consonants (PCC) produced spontaneously nomination in speech evaluation.

Objectives: To verify if there is a relationship between different degrees of severity of the Phonological disorder and the results of the Index of Speech Recognition (IPRF).

Methods: Were analyzed the IPRF results and the degree of severity of the data of 96 children, ages 5 to 10 years, with phonological disorder from the database VALDEF (CEP 995 344). It was observed different degrees of severity of each subject and the results of the IPRF.

Results: Of the 32 children with a medium degree of severity, only 01 showed IPRF downgraded, while the other had normal percentage. 41 children with mild-moderate severity only 01 had downgraded index of IPRF other normal indicators. The 10 children with severe degree of moderate severity were normal percentage of IPRF. Of the 13 children with severe degree of severity, only 02 showed IPRF lowered, while the others had normal percentage.

Conclusion: It can be observed that there is no relation between the severity of speech and the IPRF, it seems that the difficulty of the child in relation to the speech disorder may be spontaneous nomination and not the repetition of words that is the task of IPRF.

Keywords: phonological disorder, index of speech recognition, child.

A6062. The Analysis of the Phonological System Children with Acoustic Re exes Absentee
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Introduction: Some studies claim there is a relationship between the absent acoustic re ex and the phonological disorder, since the alterations to this re ex may indicate difficulties in the discrimination of phonemes and thus impair the acquisition of speech sounds. Its measurement allows obtaining information on the functioning of the middle ear and auditory pathways, adding valuable information to the speech therapy diagnosis.

Objectives: To analyze the data on acoustic re ex of children with phonological disorder, checking for the existence of similar characteristics in relation to atypical acquisition of the phonological system of these.

Methods: 130 children data were analyzed, aged 5 and 10 years, from the database of valdef (cep 995 344), diagnosed with phonological disorder. They included those with absent acoustic re exes, resulting in a sample of 64 children data. To reach the objective of the study, it was observed the phonological system and features on phonemic acquisition.

Results: Most of the sample had not acquired phonemes with sound trace, among them are: // (64%), // (60%), // (35%), // (26%), // (21%), // (20%) and // (17%) and b/ (15%) the single phoneme with trace [-sonoro] not purchased by 26% of the children was the phoneme //.
**Conclusion:** The results of this study suggest the existence of similarities in the phonological system of children with phonological disorder and absent acoustic re ex data.

**Keywords:** child language, re ex, acoustic, language development disorders.

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**A6082. Perceptual-Auditory Assessment and Vocal Self-Assessment in Dysphonic Women Before and After Electromyography Biofeedback Associated to Voice Therapy: Preliminary Results**

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**Introduction:** The relation between voice clinical assessment and self-assessment is complex and not direct. Electromyography biofeedback is a procedure used to improve dysphonic subjects’ self-monitoring.

**Objectives:** To analyze and to correlate the clinical assessment and voice self-assessment of dysphonic women, after and before electromyography biofeedback associated with voice therapy.

**Methods:** Randomized controlled trial (Research Ethics Committee 1â€”235â€”463). Six women with behavioral dysphonic (mean age 37 years) were divided into two groups: experimental group and placebo group. Experimental group received eight sessions of electromyography biofeedback (software Biotrainer-Biotec®) in suprahyoid and sterno-clavicular muscles associated with voice therapy (vibrant sounds, nasal sounds and fricatives sounds) for 30 minutes. Placebo group received electromyography biofeedback placebo associated with the same voice therapy, in the same time and condition of the experimental group. Participants self-assessed their voices and were submitted to the auditory-perceptual analysis before and after therapy. For the auditory-perceptual assessment, three judges analyzed the parameters: degree of vocal deviation, roughness, breathiness, tension and instability. The statistics used were ANOVA and Spearman Correlation Test (p<0.05).

**Results:** There was significant decrease in degree of vocal deviation (experimental group p = .040; placebo group p = .040) and roughness (experimental group p = .005; placebo group p = .005) after therapy for both groups. There was no difference in voice self-perception and there was no correlation between perceptual-auditory analysis and voice self-assessment after and before therapy in both groups.

**Conclusion:** There was improvement in degree of vocal deviation and roughness after therapy in perceptual-auditory analysis, but without in uence or relation with electromyography biofeedback.

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**A6083. Clinical Speech-Language Therapy Finds in a Cleft Lip and Palate Child: Case Report**

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**Introduction:** The cleft lip and palate is one of the most common malformations on human beings with the incidence of 1:600 to 1:700 in born children. The clinical guidance is the multidisciplinary intervention and monitoring since birth.

**Objectives:** To explore the clinical accompaniment of a cleft lip and palate child on the speech-language therapy (SLT) at a Pediatric Hospital of Porto Alegre. Research and Ethics Committee of University: 039/12.

**Resumed Report:** Girl, 3.1 years, with corrected cleft lip and palate unilateral in the right side, is being accompaniment on the SLT clinic since she was 24 days, with oral facial stimulation in cleft lip and palate. She performed cheiloplasty at 5 months old and palatoplasty at 14 months old. Between the surgeries, she was stimulated with oral blow direction and intra oral movements. Present language in acquisition with adequate phonetic and phonological levels; syntactic, with simple phrases elaboration and the usage of pronouns and semantics as expected. Oral facially observed the labial sealing and the dental arch closing, showing the adequate maxillary growth, and articulation with oral and nasal phonemes.

**Conclusion:** It was possible to improve the alimentation, oral hygiene and the oral facial motor aspects of the child since the orientations were taken. With the realization of tactile stimulations, through extraoral and intraoral digital manipulation started on the second month of life, before and after surgery, it was reached the lips the mobility and malleability, which reacted on the complete sealing and soften scar and adequate articulation.

**Keywords:** cleft lip and palate; children; speech-language therapy.
A6093. Automated Auditory Brainstem Response in Preterm and Full-Term Newborns with Neonatal Sepsis
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Introduction: Neonatal sepsis is a systemic in amatory response. The possible auditory system involvement makes newborns susceptible to damage on hearing. The central nervous system immaturity on preterm newborns may potentiate these effects. The Automated Auditory Brainstem Response helps with early identification of possible auditory damages.

Objectives: To compare responses of the Automated Auditory Brainstem Response in full-term and preterm newborns that had sepsis during the neonatal period.

Methods: Analytical, retrospective study carried out from the analysis of a public hospital database. This project was approved by the Research Ethics Committee. Newborns that had sepsis and were submitted to evaluation at the time of the Newborn Hearing Screening during the first month of life were selected. Infants who had other risk factors for retrocochlear hearing loss were excluded. The results of the first Automated Auditory Brainstem Response during the first month of life and returns due to failure in the first assessment were analyzed. The Fisher's exact test was used to compare categorical variables.

Results: Results of 108 children were analyzed, 38 were born at term and 70 preterm. There was no statistically significant difference of the results between groups (p = 0.88). Of the children who failed the first evaluation, 100% had normal responses at the time of the return.

Conclusion: The results of the Automated Auditory Brainstem Response were similar for both groups. It can be suggested that prematurity was not an additional risk factor for abnormal results in newborns with sepsis.

Keywords: sepsis; evoked potentials; auditory; newborn; hearing.

A6100. Speech Therapy Action in Patient with Acquired Immunodeficiency Syndrome: A Case Report
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Introduction: The Acquired Immune Deficiency Syndrome (AIDS) presents wide range of clinical manifestations, from the asymptomatic form to the developing severe opportunistic infections and potentially lethal.

Objectives: To describe the speech therapy to a patient with AIDS.

Resumed Report: A 32-year-old female patient presenting a history of AIDS, Miliary tuberculosis, cachexia and neurotoxoplasmosis hospitalized at a hospital in Porto Alegre. She referred frequent choking throughout feeding. A sensori-motor-orofacial assessment and Gugging Swallowing Screening (GUSS) was performed. Changes were identified in tonus and mobility in the tongue, hemiparesis in the left side, reduced mouth opening, ineffective cough, low pneumophonoarticulatory capacity and soporous voice; slow deglutition of solid, liquids and pasty consistency with cough, altered cervical auscultation for solid and liquid. The GUSS scale showed severe dysphagia and suggested to maintain the alternative feeding route and video fluoroscopy of deglutition. In therapy of swallowing was used strength and mobility exercises to tongue and airway protection maneuvers. The results of video fluoroscopy showed no aspirations. It was suggested that be released pasty liquefied diet with liquids by tube and speech therapy everyday. After 44 days of hospitalization, the speech therapy discharge was with tube feeding and oral pasty liquefied diet, better acceptance of oral feeding, weight gain and moderate dysphagia.

Conclusion: Patients with AIDS present swallowing alterations because of the development of diseases associated with their condition. In this case, there have been positive evolution in the degree of dysphagia, nutrition and discharge with orientations.

Keywords: acquired immune deficiency syndrome, dysphagia, deglutition.

A6101. Sensitivity Change in Patients with Dysphagia
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Introduction: The reduction or absence oral/or facial sensitivity is often associated with swallowing disorders. The reduction of sensitivity can provoke food accumulation in the oral cavity and, because it is not perceived, can facilitate early posterior escape and be aspirated before the swallowing reflex.

Objectives: To describe the changes of oral/or facial sensitivity with neurogenic and iatrogenic oropharyngeal dysphagia.

Methods: A descriptive, retrospective study. 37 subjects, from a database, participated in the study (ethics committee n° 41354). Ages between 21 and 93 years. Admitted to this study patients with dysphagia who had concluded swallowing test and had available data about Intraoral sensitivity and/or facial.

Results: Of the 37 subjects, 27 (72.97%) had preserved sensitivity, while 10 (27.03%) had abnormal sensitivity in some of intraoral and/or facial structures. Of the latter, 90% was in a neurogenic dysphagia and 10% iatrogenic. About intraoral sensitivity: 40% had right and/or left hemi tongue abnormal sensitivity; 30% tongue tip sensitivity change; 40% in the middle of the tongue; 40% on the back of the tongue and/or left cheek. About the sensitivity of the face, 10% showed alterations in tests of sensitivity and 20% chin change.

Conclusion: There is a percentage of dysphagia patients with changes in intra-oral and/or facial sensitivity. Of these most frequently identified intraoral changes. This may be a warning to potential negative repercussions in the swallowing process.

Keywords: dysphagia; sensibility; evaluation.

A6110. Voice Therapy Associated with Electromyography
Biofeedback Effectiveness on Dysphonic Women Quality of Life: Randomized Double-Blind Crossover Pilot Trial
Vanessa Veis Ribeiro, Amanda Gabriela de Oliveira, Eduardo Carvalho de Andrade, Pâmela Aparecida Medeiros Moreira, Kelly Silverio, Alice Ghedini Brasolotto, Jhonatan da Silva Vitor
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Introduction: Voice-related quality of life is subjective and multidimensional parameter revealing the subject perception about voice and the influence it has on daily life. Since it is important to know the therapy techniques effects on
patient’s quality of life is necessary to explore the electromyography biofeedback effect on dysphonic subject’s quality of life.

Objectives: To analyze voice therapy associated with electromyography biofeedback effectiveness on quality of life of dysphonic women.

Methods: Randomized double-blind crossover pilot trial (Research Ethics Committee 1aEM235aEM3463). Six women with behavioral dysphonia were divided in: Experimental Group â€“ three women treated with electromyographic biofeedback (software Biotrainer-Biotec®) in suprathyroid and sternocleidomastoid muscles associated with voice therapy (vibrant sounds, nasal sounds and fricatives); Placebo Group â€“ three women treated with placebo electromyography biofeedback (without muscle activity control during exercises) associated with voice therapy. The therapy program consisted by eight sessions of 30 minutes, twice a week. The Voice-Related Quality of Life and Voice Symptom Scale were addressed to the participants before and after the therapy sessions. The data were analyzed using two-way ANOVA (pâ‰¥0.05).

Results: There was significant decrease in physic domain of Voice Symptom Scale after therapy to both groups (p = .032). There was no difference after therapy and between groups in the other domains of Voice Symptom Scale and in Voice-Related Quality of Life.

Conclusion: The results showed improvement in physic domain of Voice Symptom Scale self-assessment, after voice therapy, regardless the electromyography biofeedback use.

A6113. The Influence of Smoking on the Smell and Taste: A Systematic Review of the Literature
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Introduction: The smell and taste are part of our sensory system and are important ways to detect dangerous situations - as in gas leak - and participate in functions such as chewing and swallowing. When the olfactory and gustatory systems are exposed to the substances present in cigarette smoke, they suffer structural and functional changes.

Objectives: To review systematically the findings in the literature about the influence of smoking on smell and taste.

Data Analysis: The data bases researched (between January 1980 and august 2014) were: MEDLINE (via PubMed), LILACS, Cochrane Library and SciELO. The research was conducted separately: one concerning smell and the other concerning taste. Every randomized trial that involved the study of the relation of smell and taste to smoking was analyzed.

Conclusion: Four studies were included, two of which were exclusively about smell: the first noticed the relation between the perception of strength of the puff and nicotine content; the second did not find any differences in the thresholds and discriminative capacity between smokers and non-smokers. One article considered only taste and supported the relation between smoking and avor, another considered both sensory modalities and observed positive results towards the relation immediately after quitting smoking. Three out of the four studies included feature positive results to the researched variables. More studies in this area are recommended.

A6116. Fonoaudiologic Approach in Syndrome of Obstructive Sleep Apnea
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Introduction: The Obstructive Sleep Apnea Syndrome is characterized by fragmented sleep and pauses in breathing (apnea). It is a public health problem due its high prevalence.

Objectives: To evaluate the contribution of fonoaudiologic therapy in the treatment of a patient with the Obstructive Sleep Apnea Syndrome (OSAS).

Resumed Report: A female, 42 years old patient, with increased apnea and hypopnea index (28.3/hour), using mask connected to continuous positive airway pressure (CPAP), underwent a fonoaudiologic therapy with significant improvement of apnea. She performed myofunctional evaluation and polysomnography pre and post therapy. The treatment plan included: orofacial complex manipulations; nasal inspiration and expiration; adequacy habitual position of the tongue and tongue force; strengthening and soft palate mobility; adequacy of sucking, chewing, swallowing and speaking. The therapy included 12 weekly sessions of therapy (during 40 minutes each), under direct supervision. Myofunctional exercises were also carried out daily by the patient, during 20 minutes, without supervision. Three months of exercise significantly reduced the apnea and hypopnea index from moderate (28.3 / hour) to mild (8.2 / hour), as indicated by the results of the second polysomnography. This occurred in conjunction with the reduction of snoring, daytime sleepiness and sleep quality. The use of CPAP was suspended.

Conclusion: Fonoaudiologic intervention may be considered as an alternative treatment for patients with obstructive sleep apnea.

A6118. Musculoskeletal Pain and Voice-Related Quality of Life of Dysphonic Subjects: Preliminary Results
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Introduction: Behavioral dysphonia may be related to body discomfort, especially neck and shoulders pain. These symptoms can impact on quality of life besides voice disorders. It is necessary to understand the relation between these symptoms and quality of life in voice to look for scientific evidence.

Objectives: to describe and to correlate musculoskeletal pain frequency and intensity to voice-related quality of life in dysphonic subjects.

Methods: Retrospective cross-sectional study (Ethics Committee 1aEM357aEM3432). Participated 38 adults with functional/organic-functional dysphonia (mean age 31.5). Were analyzed the answers of protocols Voice-Related Quality of Life and Musculoskeletal Pain Questionnaire. The Spearman Correlation Test was used (pâ‰¥0.05).

Results: Considering that the maximum score of Voice-Related Quality of Life is 100, the mean socio-emotional score was 75.26, physic score was 61.42, and total score was 67.33. About pain questionnaire, the maximum score of pain frequency is 4 and the maximum intensity of pain is 100. There was more frequency of pain in superior back region (mean = 2.05); larynx (mean = 1.36), low back region (mean 1.26), neck (mean = 1.26). Pain was more intense in superior back region (mean = 19.60), shoulders (mean = 18.47), larynx (mean = 18.15), low back region (mean = 17.89), neck (mean = 17.65). It was observed that as more intense the pain
in submandibular region, lower the quality of life in socio-emotional domain (r = -0.418; p = 0.009), physic domain (r = -0.471; p = 0.003), total (r = -0.502; p = 0.002). There was no significant correlation between the pain frequency and voice-related quality of life.

Conclusion: There was correlation between intensity of pain in submandibular area and voice-related quality of life in dysphonic subjects.

A6119. High-Speed Videolaryngoscopy: Characterization of Healthy Subjects
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Introduction: Several studies using laryngeal images from high-speed videolaryngoscopy of healthy subjects reveal the diversity of tools and metrics used for evaluate different population. Nevertheless, shortage of operational standardization and references of vocal fold parameters are evident.

Objectives: The main goals of this study are to obtain parameters of vocal dynamics using computational tools developed by our group and to characterize the vocal fold’s vibration pattern of healthy subjects using glottal area waveforms and high-speed kymography.

Methods: We evaluate the close, open and speed quotients of vocal fold vibratory cycle phases using the glottal area waveforms and high-speed kymography from 45 healthy subjects’ laryngeal images of high-speed videolaryngoscopy, 26 females and 19 males aging from 17 to 58 years old. Furthermore, qualitative parameters were analyzed according to visual pattern protocol.

Results: The glottal area waveforms values were: close quotients 0.14 (female) and 0.29 (male), open quotients 0.85 (female) and 0.70 (male), and speed quotients 1.16 (female) and 1.19 (male). Concerning the high-speed kymography, the results were: for the close quotients 0.37 (female) and 0.42 (male), open quotients 0.62 (female) and 0.57 (male), and for the speed quotients 1.02 (female) and 1.12 (male). The qualitative analyses showed 73% periodic signal on the glottal area waveforms, and 54% phase asymmetry on the high-speed kymography.

Conclusion: Using specific computational tools to analyze high-speed laryngeal images we obtained quantitative and qualitative parameters of glottal area waveforms and high-speed kymography that can be used as a standard reference data for healthy subjects.

A6120. Characterization of Presbyphonic Vocal Fold Vibration Using High-Speed Kymograph
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Results: In male elderly subjects, close and open quotients were 0.49 and 0.80, respectively. These values were higher than healthy young subjects (0.43 and 0.56). There were no differences for close and open quotients between female elderly and young healthy subjects. We obtained lower speed quotients in male (0.93) and female (0.98) presbyphonic voices than male (1.17) and female (1.08) healthy young voices.

Conclusion: High-speed kymograph is an effective tool to obtain parameters of vocal fold vibration of elderly people.

Keywords: vocal fold, high-speed kymograph, healthy subjects, elderly.

A6126. Progressive Oropharyngeal Dysphagia in Leigh Syndrome: Case Study
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Introduction: Leigh Syndrome is a rare neurodegenerative disease caused by a hereditary genetic disorder that causes mitochondrial dysfunction. The primary symptoms include muscle hypotonia, dystonia, seizures, ataxia, dysphagia, ptosis, apnea, rapid deterioration of cognitive and motor functions.

Objective: To report a case of progressive oropharyngeal dysphagia in a patient diagnosed with Leigh Syndrome.

Resumed Report: A previously healthy 2-year-old female patient was admitted to the pediatric ICU with excessive sleepiness, difficulty breathing and walking. At the 8th day of hospitalization, a standardized clinical bedside swallowing assessment was performed using the Protocol for Clinical Assessment of Pediatric Dysphagia. The patient presented normal swallowing function (level 1). A new clinical evaluation of swallowing was performed at the 24th day, and evidenced moderate/severe dysphagia (level 3). Thus, oral feeding training with thick puree-consistence foods was initiated, but suspended 3 days later, due to the onset of clinical signs of penetration/aspiration. At the 42th day, the patient was submitted to tracheostomy and mechanical ventilation. The Blue Dye Test was positive for saliva aspiration and saliva escape through the nostrils was also observed, evidencing severe oropharyngeal dysphagia (level 4). Tactile thermal oral stimulation was initiated in order to trigger saliva swallowing, but patient had no response, requiring xerostomic measures for saliva aspiration control. After discussion with the multidisciplinary team, gastrostomy was also indicated.

Conclusion: The use of standardized protocols is extremely important to both characterize dysphagia progression and provide more assertive intervention in children with neurodegenerative diseases.

Keywords: deglutition disorders, infant, Leigh syndrome.

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Introduction: In the school environment, we must pay attention to factors such as level of background noise, time of reverberation, and signal-to-noise ratio. These factors are directly connected to the understanding of information. When they are not adequate, there can be an impairment to the comprehension of information, and consequently, learning
A6180. Vocal Improvement after Voice Therapy in Severe Blunt Cervical Trauma: Case Report
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Introduction: A traumatic lesion in the larynx is a rare condition and may cause dysphonia. When there is a cervical hyperextension due to this fatality, the larynx becomes more exposed and more vulnerable, which might affect the upper airways.

Objectives: Report the rapid evolution of vocal function in a severe case of a blunt cervical trauma.

Resumed Report: A.M.R., a 42-year-old male, suffered a severe blunt trauma at C6-C7 level caused by the fall of a children’s attraction lift at a children’s party venue in July 2015. It provoked the tracheal laceration and bilateral abductor vocal fold paralysis. He arrived at the Speech Language Pathology practice at Veiga de Almeida Health Center in March 2016. The perceptual evaluation revealed bilateral voice quality, severe hoarseness and breathiness, lower pitch with tension and severe instabilities. The acoustics analysis showed great irregularity and voice cracks, besides poor harmonics. The objectives set were to promote glottal adduction for phonation, improve air support for emission and optimize the dissipation of sound energy in the vocal tract and vocal projection as consequence. The following vocal techniques were applied: pushing with emission of extended “b” sound, breathing and vocal semi-occluded vocal tract exercises making use of lax-vox, sustained emission of fricative sounds and humming technique.

Conclusion: After 06 sessions, laryngeal video-endoscopy image revealed improvement in vocal fold movement with medialization, absence of voice hoarseness and little breathiness, great tension reduction while emission, harmonic gain and emission regularity during acoustics analysis.

Keywords: dysphonia, cervical trauma, voice therapy.

A6190. Dysphagia, Cognition and Fragility in Amyotrophic Lateral Sclerosis: Cases Report
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Introduction: Amyotrophic lateral sclerosis is a neurodegenerative and disabling disease with loss of motor neurons in the cortex, brainstem and spinal cord.

Objective: To identify risk for dysphagia, cognitive alterations and fragility in patients with Amyotrophic Lateral Sclerosis.

Resumed Report: It was used the Mini-Mental State Examination for screening of cognition; Eating Assessment Tool to identify the risk of dysphagia; functional oral intake scale to check the type of the current food intake; Edmonton Frail Scale to detect fragility. Five patients with Amyotrophic Lateral Sclerosis were evaluated, three female, with an average age of 52 years (+8.2), average schooling of 9.4 years (+4.3), time of illness average of 2.7 years (+2.9). Average of the Mini-Mental State Examination was 24.6 points (+3.3), expected score for the average schooling. In the Eating Assessment Tool two patients presented risk for dysphagia with scores of 6 and 21 points. Regarding the functional oral intake scale, one patient had level 3 suggesting change in consistency of the food and the other showed level 7. Edmonton Frail Scale average was 6.2 (+2.1) representing apparent vulnerability, and from theses, an individual presented mild and moderate vulnerability. Apropos dysphagia and fragility was verified that an individual showed risk for dysphagia and moderate fragility. Another individual with little time of illness presented a high risk of dysphagia and apparent vulnerability.
Conclusion: The time of illness is directly related to fragility, but in this sample, it was not related to the risk of dysphagia.

A6210. Does Questionnaires tell you what you Customers Have in Mind?
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Introduction: Medical doctors, caregivers, therapists, academic researchers, administrators - all have interest about better results with patients no matter if they are in private or in public business. One gateway to obtain patient feedback is to ask them what they value the most. However, a questionnaire unexpectedly may not have merit because it cannot be legitimated by peers, by working class, by community. Hearing aids users can count up to a handful of validated questionnaires each one with its pros and cons. Satisfaction with Amplification in a Daily Life (SADL) questionnaire is one of those validated questionnaires. One questionnaire must give to inquire the answers on designing new processes to match patient’s best results.

Objectives: Inscribes one way on how patients weigh their satisfaction through SADL when a better fitting process were implemented in a public tertiary hearing rehab clinic in Brazil.

Methods: Patients were submitted to SADL after fitting based on functional gain (SADL1). Latter on they came back to receive fitting based on Real-Ear Insertion Gain (REIG) to express their thoughts based on SADL (SADL2). Both SADLs were then crossed to conclusions.

Results: Patients are sensitive when chances took place on the hearing rehab they are in.

Conclusion: Patient’s subjective answers through questionnaires help professionals in the process of hearing rehab for better results.

Keywords: hearing aids, patient satisfaction, surveys and questionnaires, rehabilitation.

A6211. Immediate Effect of Semi Occluded Vocal Tract Exercise (High Resistance Tube) in Parkinson’s Disease
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Introduction: Vocal exercises are used in the rehabilitation of individuals with Parkinson’s disease in order to improve voice quality.

Objective: To evaluate the immediate effect of high resistance tube exercise in the voice of these individuals.

Method: Observational study, which analyzed the record of the vowel /a/ and counting (1-20) pre and post exercise. Vocal evaluation: perceptual (GRBAS, wet voice, instability, pitch, loudness and breathing-speaking coordination), acoustic (VoxMetria and Praat softwares) and self-assessment. The effect of exercise was analyzed with interference of age, time of disease and staging (Hoehn & Yahr scale).

Statistical Analysis: numeric data, paired t-test or Wilcoxon; and for categorical, the marginal homogeneity test.

Results: 46 patients (28 men), age 70 ± 9.6 years, staging 2.9 ± 0.9 and time of diagnosis 8.2 ± 5.7 years. Pre and post averages, respectively, were: irregularity (4.9 ± 1.4/4.7 ± 1.6); glottal noise excitation (0.71 ± 0.2 / 0.72 ± 0.2); noise (1.5 ± 0.8 / 1.4 ± 0.7); intensity (53.1 ± 5.8 / 53.7 ± 5); noise-to-harmonics ratio (0.1 ± 0.2/0.1 ± 0.2); harmonics-to-noise-ratio (16.3 ± 7.3 / 17.1 ± 7.9); jitter (0.8 ± 1 / 0.7 ± 0.9); shimmer (4.8 ± 5.1 / 4.2 ± 4.5); fundamental frequency: 184.81 ± 31.78 / 187.01 ± 32.43 (female), and 130.8 ± 27.6 / 135.6 ± 30.4 (male). Exhibited improvement of higher frequencies of post-exercise: deviation diagram, global level of dysphonia, roughness, loudness, soreness and breathing-speaking coordination. 25 patients reported improvement in voice after the exercise. There was an association between vocal self-evaluation and staging (p = 0.045). There was statistical significance when comparing pre and post exercise: global level of dysphonia (p = 0.003), coordination between breathing and speaking (p = 0.004), harmonics-to-noise-ratio (p = 0.005), noise-to-harmonics ratio (p = 0.014), relative average perturbation (p = 0.049), pitch (p = 0.045) and irregularity (p = 0.03).

Conclusion: The semi occluded vocal tract exercise promotes positive changes in vocal noise parameters, vocal quality and breathing-speaking coordination in this population.

Keywords: voice, dysphonia, Parkinson disease, rehabilitation, speech acoustics

A6213. Cross-Cultural Adaptation of the Brazilian Version of the Vocal Fatigue Index – VFI
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Introduction: Cross-cultural adaptation is essential for protocols to be used in another language.

Objective: To develop the cultural adaptation of the Brazilian version of the Vocal Fatigue Index – VFI.

Methods: Two Brazilian bilingual speech-language pathologists – SLP translated the original version of the VFI in English to Portuguese. The translations were reviewed by a committee of 5 SLP, resulting in the final version of the instrument. A third bilingual SLP back translated the final version and the same committee reviewed the instrument. The VFI questionnaire was answered on categorical scale of 0-4 indicating the frequency of the symptoms: 0 = never, 1 = almost never, 2 = sometimes, 3 = almost always and 4 = always. For cultural equivalence, the option “not applicable” was added to the categorical scale and 20 subjects with vocal complaints and dysphonia completed the index. If any question was considered “not applicable” it would have been disregarded from the Brazilian version of the protocol.

Results: No question had to be removed from the instrument. The Brazilian Portuguese version was entitled “Índice de Fadiga Vocal – IFV” and features 19 questions, same as the original instrument. Of the 19 items, 11 were related to physical discomfort associated with voicing and three were related to improvement rest or lack thereof.

Conclusion: The Brazilian version of the VFI presents cultural and linguistic equivalence to the original instrument.

Keywords: voice; dysphonia; fatigue; protocols; translating.
A6235. Survey on Behavioral Assessment of auditory processing (Central) in Paraná
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This is a descriptive cross-sectional study through a survey. The answers were analyzed through the two proportions and chi-square test Equality test. The study included 23 speech therapists; 22 audiologists reported applying monaural tests low redundancy, and 19 use this Pediatric Speech Intelligibility with Competitive Message Ipsilateral, 9 Speech in Noise, 7 Filtered Speech and 3 this Pediatric Speech Intelligibility with Competitive Message Contralateral. 21 reported applying binaural interaction tests, and 15 using the differential Masking Threshold, 10 Binaural Fusion and 1 the location of the sound source. 22 apply temporal processing tests, and 19 using the Frequency Pattern Test, the 15 Random Intervals Detection Test, 10 Intervals Test in Noise and 1 Duration Pattern Test. All use dichotic listening tests, and 23 use the SSW test and Overlapping 20 the Listening with Digits, 11 Pediatric Test of Speech Intelligibility with Competitive Message Contralateral, 8 Dichotic Nonverbal, 3 Environmental Sounds Test Competitive and 2 Depending on the Member. Despite the limited number of audiologists in the survey, there are considerable differences as to how to carry out the assessment of central auditory processing, ordered complementary tests and referrals made, with agreement SSW test only.

A6257. Dysphonia Risk Screening Protocol – Applicability to the Singing Voice
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Introduction: Professionals who use the spoken voice and singing voice continuously in their work to reach a particular audience are more inclined to the risk of dysphonia. Special attention should be given to the choral singing, since many participants are not professional singers and often without proper guidance. Detailed assessment provides greater precision in treatment planning and effectiveness in the treatment of dysphonia, which can be facilitated by the use of developed research protocols and standardized for this population.

Objective: To analyze the applicability of dysphonia screening protocol for choral singers with and without vocal complaints.

Method: The Dysphonia Screening Risk Protocol-General (DRSP-General) and Complementary-Singing Voice (DRSP-Complementary) were applied along the 30 singers without complaint (NDG) and 30 singers with complaint (DG), matched by sex and age.

Results: In DRSP-General, the NDG had lower scores on the visual analogue scale and in the items: previous voice disorders, voice symptoms, sleep and sleep disorders, disease history as well as in the total score. In DRSP-Complementary, there were no differences between groups in both the final score as in the items separately.

Conclusion: It was proven the applicability of DRSP with singers of choral, differentiating the groups with and without vocal complaints especially with the DRSP-General. The score obtained with the DRSP-Complementary alone did not differentiate the groups, but both the general score and the sum of the general score with the complementary were higher in the group with complaints. In addition, the DRSP-Complementary contribute to qualitative analysis.

A6265. Teaching Activity: Voice and Noise
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Introduction: The index of dysphonia is high in teachers with in uences of factors like life habits and noise. It is necessary to investigate these factors to direct actions to minimize risks of dysphonia. Besides tracking protocols to risks of dysphonia, measuring the noise and the signal to noise ratio (SNR) are relevant to monitoring these risks.

Objective: To analyze teachers’ vocal resources in class and without this vocal demand and the SNR and noise levels of each classroom.

Methods: transversal and observational research with 23 teachers, divided in G1 (without dysphonia group) and G2 (with dysphonia).

Procedure: Voice recording in class situation (noise situation) e without this vocal demand (silence situation), SNR and noise levels classroom measures. It was used the software Audacity (free use) to analyze the perceptive-auditory, the acoustics and digital aspects. Then the data were submitted to statistical analysis. It was adopted 5% of significance level.

Results: About the vocal resources was found difference in production of abrupt vocal attack when compared the silence and the noise situations (p = 0.024). The risk of vocal attack in noise situation was 21.74% and in silence situation was 0%. It was found 91.3% of classes with inadequate SNR, with average of 16.1. The level noise average during the classes was 73 dB (A).

Conclusions: In the noise situation, it was found a bigger risk of abrupt vocal attack. This may constitute factor of risk to develop dysphonia. The SNR and the noise levels showed inappropriate in the most of classrooms.

A6270. Study of Temporal Aspects of Popular and Lyrical Singers
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Introduction: Studies showed the positive in uence of music on cognitive development and improvement of auditory abilities.

Objectives: To evaluate the auditory temporal aspects in lyrical and popular singers which play musical instruments.

Methodology: In this study, there was a sample of 40 singers, from both sexes, with age ranging from 19 to 55 years old. Group 1 had 10 lyrical singers and Group 2 had 15 popular singers, in both groups the singers played musical instruments. Group 3 had 15, which did not played any instruments.

Results: It was verified that the mean threshold for the temporal test “Gaps in Noise” in the group 1 was of 4.14ms in both ears. Group 2 had the mean threshold of 4.47ms in the right ear and 4.40ms in the left ear. The third group showed results of 5.2ms in the right ear and 5.53ms in the left ear. In the frequency pattern test, the average of correct answers in the groups was, respectively, of 97.61%, 95.7% and 82.3%.

Conclusion: It was verified that the lyrical singers and the popular singers that played musical instruments were the ones that presented the best results in the temporal aspects. The result found suggests that, independently of the musical gender, playing musical instruments have a positive in uence in the development of the auditory abilities of temporal sequencing and resolution.

Keywords: auditory perception; hearing tests; music.
A6272. Speech Therapy Intervention in Case of Cerebral Palsy Associated with Epilepsy and Dysphagia in Hospital
A male patient, eight years old diagnosed with Cerebral Palsy and Epilepsy. The cause of hospitalization was control of seizures after traumatic brain injury. According to examination of swallowing video uroscopy requested by the speech therapist, changes were observed in oral and laryngeal stasis in recesses in all consistencies and tracheal aspiration silent with liquids. During meals, the patient change in labial and exhaust extraoral with inefficient movement language. The patient’s mother demonstrated better understanding during hospitalization and after clarification of the importance of positioning, it understood the proper way to position such as inadequate control of head and neck support, which can affect oral motor, swallowing, patient remained feeding through the alternative route and indication of gastrostomy. It indicated the speech therapy in oral motor sensory stimulation in the case of congenital heart disease associated with Down syndrome, which can affect oral motor development.

Objectives: To describe the speech therapy in oral motor sensory stimulation in the case of congenital heart disease associated with Down syndrome.

Conclusion: The Down syndrome arises due to trisomy 21 and cardiac malformation is the most frequent congenital defect in these patients, the highly variable frequency in the literature. The defect Septal Atrioventricular (AVSD) is reported in US and European references as one of the most common congenital heart diseases in these cases, is present in 35-60%. The use of feeding tube, according to the literature, causes a delay in the organization nutritive sucking (NS) due to lack of sensory stimuli, which can affect oral motor development.

Objectives: To describe the speech therapy in oral motor sensory stimulation in the case of congenital heart disease associated with Down syndrome.

Conclusion: According to clinical evaluation of swallowing, patient remained feeding through the alternative route and indication of gastrostomy. It indicated the speech therapy in similar cases targeting an improvement in the child’s quality of life.

Keywords: deglutition disorders; Down syndrome; heart diseases.

A6273. Vestibular Rehabilitation in Machado-Joseph Disease - Case Report
Licia Assunção Cogo, Valdete Alves Valentins dos Santos Filha, Jayne Gutierrez de Mello, Thalisson Francisco Finamor da Silva
Introduction: Machado-Joseph Disease is a type of cerebellar ataxia, inherited, characterized by vestibular dysfunction associated with degenerative symptoms of nervous system. It provides deficiencies in motor responses, causing balance changes, difficulty coordinating movements, incoordination, and unsteady gait, among other symptoms. Vestibular Rehabilitation uses mechanisms related to neuroplasticity for body balance recovery.

Objective: To report the experience of a patient with Machado-Joseph disease underwent Vestibular Rehabilitation.

Resumed Report: Female patient with a diagnosis of Machado-Joseph disease underwent Vestibular Rehabilitation. It was presented ataxic gait in the static and dynamic testing; Romberg-Barré showed fall to the right side with eyes open, Unterberger with deviation less than 45° to the right and instability, Romberg and coordination testing had no particularities. The Dizziness Handicap Inventory scored 72 points, which 24 points for physical domain. The patient underwent Vestibular Rehabilitation for three and a half months, three times a day at home and weekly at the clinic, performing exercises in Romberg-Barré positions, associating unstable base and communicative actions progressively. After this period, the patient had no more vertigo; imbalance remained. In the static and dynamic testing: showed fall with eyes closed in the Romberg-Barré and instability in Unterberger, no more peculiarities. Concerning the Dizziness Handicap Inventory, it scored 44 points with two points in the physical domain.

Conclusion: Although the degeneration process of Machado-Joseph Disease, Vestibular Rehabilitation was effective in decreasing patient’s vertigo and the Dizziness Handicap Inventory scores obtained considerable progress.

Keywords: vestibular rehabilitation; ataxia; Machado-Joseph disease.
A6278. Psychotropic Drugs in Patients with Dizziness Complaint
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Introduction: Estimates of the use of psychotropic drugs in Brazil range from 3% to 12% with increasing incidence among patients with vestibular complaints.

Objectives: To identify and characterize the use of psychotropic drugs among patients with dizziness.

Methods: It was collected 342 examinations from female and male patients, diagnosed with vestibular disorder by a physician, all underwent to an interview to gather their previous history in a Neuro-otology Clinic from a public hospital in the period of 2012 to 2016. According to the exclusion criteria, it was discarded: 15 examinations which main complaint was not dizziness and 61 for lack of data regarding the use of medicines, totaling 266 patients.

Results: The patients age ranged from 15 to 88 years old (mean age of 57.32), which 190 (71.43%) were females and 76 (28.57%) males. From the selected sample, 167 (62.78%) had vertigo and 99 (37.22%) imbalance; 137 patients (51.50%) presented complain and/or psychiatric diagnosis (anxiety, depression or panic disorder), which 112 (81.75%) were female and 25 (18.25%) male. From these, 94 (35.34%) were treated by psychotropic drugs: 40 (42.55%) by Serotonin Reuptake Inhibitors, 22 (23.40%) Benzodiazepines, seven (7.45%) Tricyclic Antidepressants, five (5.32%) Anticonvulsants, seven (7.45%) using two pharmaceuticals concurrently and 13 (13.83%) did not identify by drug type.

Conclusion: It was observed greater use of psychotropic drugs among patients with dizziness complaint in relation to the general population, standing up the Serotonin Reuptake Inhibitors followed by benzodiazepines. It emphasizes the need of studies in order to identify possible causal relationship.

A6279. Dysphagia’s Influence in Perception of Symptoms by Individuals with Parkinson’s Disease
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Introduction: Dysphagia is a highly prevalent symptom in Parkinson’s disease. However, there is low awareness of people with this symptom.

Objectives: To investigate the relationship between dysphagia and the impact on the PD carrier perception.

Methods: It was included individuals diagnosed with Parkinson’s disease. Held videonasendoscopy swallowing for the diagnosis of dysphagia and applied the questionnaire Quality of Life in Swallowing Disorders to check the impact of dysphagia on the quality of life.

Results: The sample consisted of 17 subjects, with a mean age of 62.6 (8.7) years, disease duration of 10.8 (±6.3) years, education 8.9 (±6.5) years and the staging scale disease (Hoehn Yahr) 2.7 (±0.7). The average in the questionnaire domains were: 71.3 (±24.5) in domain 1; 77.8 (±26.3) in 2; 50.0 (±38.5) in 3; 67.2 (±13.3) in 4; 76.5 (±25.3) in 5; 45.6 (±21.6) in 6; 71.3 (±21.7) in 7; 77.1 (±27.0) in 8; 78.8 (±25.3) in 9; 36.0 (±40.5) in 10; 60.3 (±32.6) in 11; 64.7 (±16.3) in total domain. In the analysis of the average in the questionnaire domains between individuals with and without presence of dysphagia signs, there was a significant difference only in presence of a cough with domain 5 (p = 0.005), presence of penetration with the domain 4 (0.005) and 9 (<0.001), and individuals with signal presence had a worse perception of quality of life in these domains.

Conclusion: The perception of dysphagia is not related to presence of signs and symptoms of dysphagia in this sample.

A6280. Neurotologic Evaluation in Patients with Dizziness and Tinnitus
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Introduction: Due the diversity of etiological factors, it is questionable the existence of a common link between dizziness and tinnitus in normal hearing patients, which it has been used different assessments for both symptoms2,3.

Objective: To evaluate the Brainstem Auditory Evoked Potential and Nystagmography results of normal hearing subjects with and without dizziness and tinnitus complaints, as well as the Visual Analogue Scale, comparing itself.

Method: The sample was composed by 36 normal hearing subjects aged between 18 to 59 years old, six males and 30 females, which 18 subjects had dizziness and tinnitus complaints (study group) and 18 had no complaints (control group). All underwent by Brainstem Auditory Evoked Potential, Nystagmography and Visual Analogue Scale.

Results: There was no prevalence regarding dizziness type, however a prevalence of bilateral tinnitus with high pitch was obtained. Statistically significant difference was evident between the studied groups regarding abnormal results of Brainstem Auditory Evoked Potential and the caloric test results, from Nystagmography, associating normal and abnormal results, as well as when comparing the annoyance degree scores of subjects to dizziness and tinnitus complaints, between normal and abnormal results in Brainstem Auditory Evoked Potential and Nystagmography, respectively. The annoyance degree for dizziness and tinnitus was severe and moderate, respectively.

Conclusion: The study group presented lower performance for Brainstem Auditory Evoked Potential and caloric test results when comparing to control group. There was association between Brainstem Auditory Evoked Potential and the annoyance degree of dizziness, as well as Nystagmography and the tinnitus annoyance degree.

A6304. Nasalance in a Child with Repaired Cleft Palate: Does a Dehiscence Change the Speech Resonance? A Case Report
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Introduction: Dehiscence may occur after cleft palate surgical repair and in that case, hypernasality may arise due the velopharyngeal insufficiency. Nasometry is an instrumental technique to objectively assess speech nasality, minimizing the subjectivity of the perceptual assessment approach. The
method assumes that an increased nasalance, the acoustic correlate of nasality, in speech samples containing only oral sounds, is suggestive of hypernasality.

**Objectives:** To report nasalance changes in a child with dehiscence following cleft palate repair.

**Resumed Report:** One girl, 5 years of age, with isolated cleft of the soft palate, who underwent Furlow palatoplasty, presenting postoperative dehiscence had the speech resonance evaluated by means of nasometry. Nasalance was measured using a KayPentax Nasometer 6540 during the production of oral syllables, words and sentences. The results were compared to normal scores of nasalance (nl) from the laboratory. Mean nasalance values for the syllables /pa/, /pi/, /sa/, /si/, /la/, /li/ were 11%(nl:10 ± 4), 20%(nl:22 ± 7), 16% (nl:11 ± 5), 26%(nl:24 ± 11), 15%(nl:14 ± 13) and 20% (nl:25 ± 11), respectively. Mean nasalance was 17%(nl:19 ± 6) for the words and 14%(nl:13±2.7) for the sentences. Values for syllables, words and sentences were all in the normal range reported by us.

**Conclusion:** Despite surgical dehiscence, the child had normal resonance as shown by instrumental nasalance assessment. Nasal obstruction, hypertrophic adenoids, size of the palatal opening maybe factors involved.

**Keywords:** cleft palate, velopharyngeal insufficiency, speech.

**A6344. Swallowing Disorders in Patients with Obstructive Sleep Apnea Syndrome: Literature Review**

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**Introduction:** Once the breathing and swallowing share the pharynx such means, there must be precise coordination between the two functions and it is possible episodes of apnea and snoring can cause changes that compromise the pharynx and thus swallowing. In this context, studies have tried to understand the relationship between Obstructive Sleep Apnea Syndrome (OSAS) and Oropharyngeal dysphagia.

**Objectives:** Check in the literature which factors favor the emergence of swallowing disorders in patients with OSAS.

**Data Synthesis:** A literature review was carried out by consulting the database PubMed and using as inclusion criteria the selection of articles that had to analyze the relationship between swallowing function and sleep–disordered breathing in patients with OSAS. They were not considered unavailable full articles, review studies, to assess babies or children or do not contemplate the purpose of this review. The articles were analyzed for language, year of publication and instrumental methods used to evaluate the patients. After the search, were found seven articles in English and published between 1999 and 2015. As to the procedures used to understand this relationship, three studies used swallowing provocation test, three used nasofibroscopy one used video uroscopy and two used pharyngoesophageal manometry.

**Conclusion:** OSAS patients develop difficulty swallowing due to alteration of the permeability of the upper airways, changes in the swallowing reflex, lack of coordination between breathing and swallowing, repetitive apnea episodes that can compromise the central control of swallowing and breathing function and neuromuscular injury caused by snoring.

**Keywords:** deglutition disorders sleep apnea, obstructive, snoring.

**A6346. Knowledge of Those Responsible for Children Using Oral Habits on its Harmful Effects**

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**Introduction:** The harmful oral habits, depending on the frequency, duration, intensity and facial type, can generate the stomatognathic system changes. Oral habits are closely linked to breastfeeding, which when stimulated the baby, provides better functional conditions of the sensory-motor-oral system. At the time that this natural stimulus loses priority as food, can occur the installation of deleterious oral habit.

**Objectives:** To describe the knowledge of those responsible for children using oral habits on its harmful effects.

**Methods:** Cross-sectional, descriptive, prospective, and conducted from April to August 2015. The sample was random, consisting of heads of children 0-6 years old, waiting for service in a pediatric clinic. Data collection used a structured questionnaire developed by the researchers based on literature. Study approved by the Research Ethics Committee with number 1.020.168 opinion on 03/19/2015.

**Results:** Among the children surveyed, 47% of parents recognized the oral habit as a curse. Noteworthy is the data related to exclusive breastfeeding time be present in 66% of respondents and 44% of them refer to the need to remove as soon as the oral habit. However, 38% of respondents report having not thought about it, so not worried about the effects of the use of oral habits in their children.

**Conclusion:** The study showed that the occurrence of harmful oral habits is a reality of the studied child population and needs greater focus areas responsible to be a greater attenuation of this practice.

**Keywords:** breastfeeding; habits; speech therapy.

**A6351. Tinnitus Incidence of Unilateral Hearing Loss**

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**Introduction:** The existence of the correlation between the incidence of hearing loss (HL) and tinnitus is very accosted scientifically. There is high incidence of tinnitus in patients with unilateral hearing loss (UHL), being essential to deepen the studies in this population, since the complaint is recurrent.

**Objective:** Characterize the audiologic thresholds in individuals with UHL, with and without tinnitus of a hearing health service.
**Methods:** This is a pilot study that evaluated 30 subjects with UHL independently of the type and degree of impairment associated with tinnitus.

**Results:** Subjects were of both genders (64% female and 36% male) with an average age of 44.3 years (SD = 12.5). Relative to hearing, 60% had HL only in the right ear (RE) with a mean of 60.27 dB (SD = 17.32) and 40% in the left ear (LE) with a mean of 62.81 dB (SD = 21.34). It was observed the prevalence of tinnitus in 73% of patients, 26% not affected. There was the occurrence of tinnitus compatible with the laterality of hearing loss in most cases, 10 individuals complaining in RE and 9 subjects with complaints in LE being three individuals with bilateral tinnitus.

**Conclusions:** The study found that individuals with UHL and tinnitus should be investigated more deeply because of the elevated incidence of complaints associated in clinical practice. It is necessary to continue the studies of these individuals as well as in the auditory rehabilitation unilaterally in the presence of tinnitus in both ears.
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S1  Otorhinolaryngology
August 18, 2016, 08:00am to 06:00pm
Room: Megeve

S11  Speech, Language and Hearing Sciences
August 19, 2016, 08:00am to 06:00pm
Room: Megeve

E-Posters

S23  Otorhinolaryngology

S76  Speech, Language and Hearing Sciences
August 18 to August 20, 2016, 08:00am to 06:00pm
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