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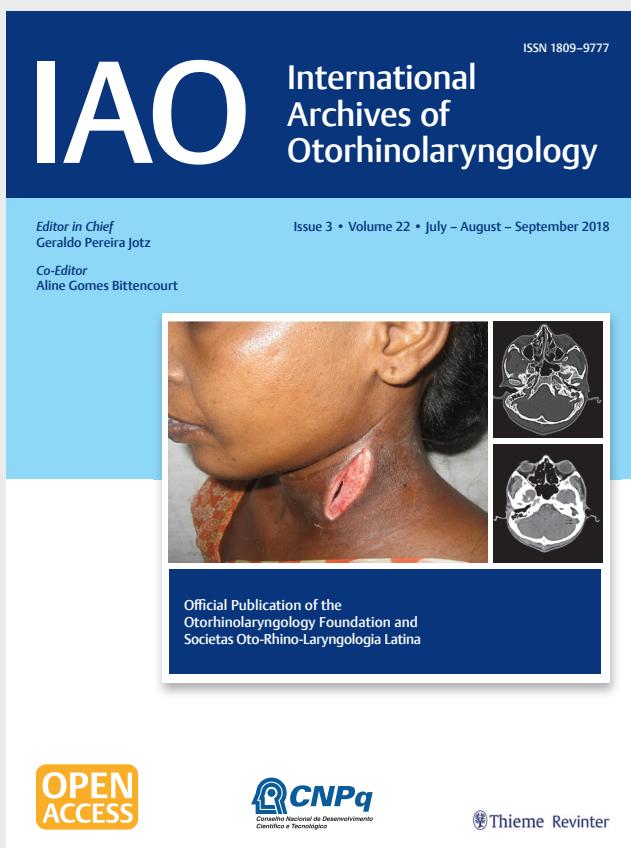
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Otorhinolaryngology

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Otorhinolaryngology

Oral Presentations

8047. Adhesion and Efficacy of Olfactory Training as a Treatment for Persistent Olfactory Loss

Marco Aurélio Fornazieri, Fábio de Rezende Pinna, Richard Louis Voegels, Isabela Naomi Iha Miyazawa, Ellen Cristine Duarte Garcia, Natália Medeiros Dias Lopes
Universidade Estadual de Londrina

Introduction: Although persistent olfactory loss may have physical and psychological consequences, there is no effective treatment for this deficit so far. Among emerging therapies, olfactory training has been proposed as a potential treatment for this disease. This therapy would improve olfaction by exposing patients repeatedly to odorants modulating this chemical sense. However, due to the long period of treatment necessary, the lack of adherence of the patients can compromise its effectiveness. **Objective:** To evaluate both adherence and efficacy of olfactory training as a method of treatment of patients with persistent post-infectious, post-traumatic and idiopathic olfactory loss. **Methods:** Twenty-five patients with persistent olfactory loss underwent olfactory training. Adherence and olfactory ability - through the University of Pennsylvania Smell Identification Test - were measured three and six months after the beginning of treatment. A minimum improvement of six points in the test was considered clinically significant. **Results:** Adherence at 3 months was 88% (CI 95%:74.3-101%) of patients and 56% (CI 95%:35.1-77%) at 6 months. Percentage of clinical improvement was 23.5% (CI 95%:1-46%) in both three and six months. There was no relationship between age, sex, time of olfactory loss, race, degree of olfactory loss, etiology, schooling, and type of training with adherence rate and treatment efficacy. **Conclusion:** Adherence to olfactory training remained high in the first three months. A moderate decrease occurred at six months. The main motive for abandoning therapy was delay in obtaining clinical benefit. Efficacy during this period of treatment was similar to spontaneous recovery rate.

8050. Relationship of Serum Levels of Total IgE and Skin Test of Immediate Hypersensitivity in the Evaluation of Respiratory Allergy

Carlos Eduardo Costa Maranhao, Letícia Raya Schiavon Kinasz, Maria Angélica Kurpel Diogo, Sergio Fabricio Maniglia, Vinícius Tomadon Bortoli, Vanessa Mazanek Santos
Hospital Paranaense de Otorrinolaringologiaipo

Introduction: Rhinitis is a global health problem and its incidence is increasing. The immediate hypersensitivity skin test (Prick-Test), because it is simple and fast, is widely used to determine the causal factors of allergies. However, we did not find in the literature any studies that verified possible correlations between the results of the allergic skin test and the amount of total serum IgE in the patients. **Objectives:** To compare and verify the concordance between serum total IgE levels and the Prick-test results for mites and pollens in patients of a private hospital. **Methodology:** Analysis and data collection in the IPO Hospital

database, specifically the patients submitted to the cutaneous test and serum total IgE dosage in the evaluation of respiratory allergy. **Results:** The concordance test for patients with high total IgE (> 156 IU / mL) and Prick-Test ≥ 5 mm for mites was considered weak for all three species of mites and ranged from very weak to weak for mites. **Conclusion:** Serum total IgE dosage, routinely requested in clinical practice, does not serve as a screening method for patients with allergic rhinitis to mites and pollens.

Keywords: allergens; pollen; mites; Immunoglobulin E; Immediate hypersensitivity.

8051. Seasonal Allergy? Study of Correlation Between the Reactivity of Allergic – Tests of Gramine Species in the Region of Curitiba

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Introduction: Seasonal allergic rhinitis or rhinitis is characterized by sensitization to the components of pollens, causing symptoms when contact occurs with the conjunctiva and with the mucosa of the respiratory tract of previously sensitized individuals. In Brazil, the *Lolium multiflorum* of the Poaceae family, known as annual ryegrass is the main pollinating grass. However, there are other species of allergenic grasses observed in the outskirts of cities such as *Dactylis glomerata* (Rhodes grass), *Festuca pratensis* (grass of the meadow), *Cynodon dactylon* (silk grass), among others. **Objective:** Was to correlate the reactivity of the allergic tests of grass species in the Curitiba region. **Methods:** We evaluated 381 medical records of patients from the Otorhinolaryngology Hospital from September 2013 to September 2016. The data collected were analyzed and tabulated in the Excel program. The results were presented in the form of tables and / or graphs and the hypotheses formulated from the results. The level of significance was set at $p < 0.05$. **Results:** There was a higher incidence and degree of reactivity of the grass *Dactyles glomerata*, followed by *Fuscata pratensis* and finally *Lolium multiflorium*. We observed that the mean age of the patients in the study period was 26.5 years, showing a trend of higher incidence of cases of allergic rhinopathy in the younger population. **Conclusion:** Understanding the process of sensitization to grass pollen allergens in susceptible individuals becomes a very important tool in the treatment and improvement of patients' quality of life.

Keywords: pollen, allergic rhinitis, grass.

8052. Study of the Relationship Between in Vitro and In Vivo Tests of Domestic Mites: *Blomia tropicalis*, *Dermatophagoides farinae* and *Dermatophagoides pteronyssinus*.

Lumi Caroline Yagueshita, Martinho da Palma e Mello Neto, Cintia Sophia Salvi, Sergio Fabricio Maniglia
Hospital Paranaense de Otorrinolaringologia Ipo

Introduction: *Dermatophagoides pteronyssinus* (Dp) and *Dermatophagoides farinae* (Df) are the most common domestic allergens around the world, causing allergic diseases such as allergic rhinitis and asthma. Sensitivity to an allergen is detected both by in vivo tests, such as the Prick test, and by in vitro techniques, represented by the de-



termination of the specific IgE of each allergen. In order to choose the best diagnostic method, it is important to know the differences and similarities between the specific serum IgE and the skin test. The objective of the present study is to compare the allergic skin test with the specific serum IgE for domestic mites: *Dermatophagoides farinae*, *Dermatophagoides pteronyssinus*, *Blomia tropicalis*. **Methodology:** A total of 346 records of patients with allergic rhinitis treated at the Rhinitis Center of an Otorhinolaryngology Hospital from January 2015 to September 2016 were analyzed, collecting the values of skin test and serum IgE specific for domestic mites. **Discussion:** The results show agreement between the allergic skin test and the specific IgE for the three types of mites, a result found even with stratification for gender and age. **Conclusion:** Since the skin test is the method of choice for the diagnosis of allergic diseases, in cases of contraindication or if it is not available, there would be no decrease in the diagnosis if the specific serum IgE test was performed.

Keywords: house mites; allergic rhinitis; household dust; skin test; allergic skin test.

8059. Horus Static Posturography with Dynamic tests: Reference Values for Functional Residual Equilibrium Index and Sensory Analyze

Pedro Luis Coser, Sabrina Silva dos Santos, Lucia Kazuko Nishino, Guilherme Dias Rocha, Thiago Silva, Monalisa Deboni
Universidade Federal de Santa Maria

Introduction: The Residual Functional Equilibrium and Sensory Analysis are unique to identify the contribution of the vision, somatosensory and vestibular system into the body equilibrium. The just released Horus posturograph made in Brazil evaluate the equilibrium based in the registration of body oscillations. **Objective:** Create reference values for these tests. **Methods:** A sample of 297 subjects, 172 females, 125 males were grouped by age from 20 to 59 years (141), 60 to 69 years (82) and 70 to 89 years (74). The subjects stood in Romberg position for 30 secs in stable situation for conditions 1 and 2. Next, in the unstable situation, they stood over conditions 3 to 7. **Results:** Residual Functional Equilibrium calculated as a percentage of the area of oscillation in relationship to the Limit of Stability for C1, C2, C3, C4, C5, C6, C7 condition, respectively, expressed in median percentage and percentile 05, for age 20-59 were: 99,7(98,8); 99,5(98,3); 98,5(94,4); 95,8(87,0); 97,2(92,6); 97,2(91,7); 97,2(92,5); for 60-69: 99,4(98,2); 99,0(97,1); 97,1(91,1); 91,1(79,1); 93,9(87,0); 93,8(84,0); 94,2(85,9). For 70-89: 99,0(97,4); 97,9(95,3); 94,3(87,8); 84,9(69,6); 90,6(78,8); 90,7(74,6); 90,2(80,0). Sensory Analysis for SOMATOSENSORIAL, VISUAL, VESTIBULAR, RIGHT VISUAL DEPENDENCE, LEFT VISUAL DEPENDENCE, TUNNEL VISUAL DEPENDENCE, respectively, for age 20-59 were: 99,8(99,2); 98,8(94,9); 96,1(87,6); 101,4(98,9); 101,4(99,0); 101,5(98,9); for 60-69: 99,6(97,9); 97,6(92,4); 91,7(79,6); 103,3(99,4); 102,1(97,8); 103,6(98,1); for 70-89: 99,1(96,9); 95,6(89,2); 86,0(70,4); 106,9(95,9); 104,2(93,8); 104,4(94,0). **Conclusion:** The results are a guide to detect equilibrium disorders by the Static Posturography with dynamic Tests HORUS as well to follow the evolution of the disorders providing objective results for therapies.

8063. Immunotherapy for Allergic Rhinitis: Non-Inferiority Study Between the Sublingual and Mucosal Oral Ways

Renata Vecentin Becker, Camila Sá de Melo Campos, Ana Cláudia Dias de Oliveira, Mariele Bolzan Lovato, Sergio Fabricio Maniglia, Flavio Massao Mizoguchi, Carolina Mantovani de Oliveira
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Introduction: The average prevalence of allergic rhinitis in Brazil is 12% in children and adolescents and 20% in adults. Currently, antigen specific immunotherapy is the only disease modifying treatment available for allergic rhinitis. Allergen extracts are available either by subcutaneous injection (SCIT) or by application to the sublingual mucosa (SLIT). However, adherence to immunotherapy is still a problem. SLIT also includes the difficulty of correct application of medication as well as transport and contamination of the immunotherapeutic flask. **Objectives:** To present the concept of oral mucosal immunotherapy (OMIT) and to determine the efficacy, safety and adherence of OMIT compared to sublingual immunotherapy (SLIT) in adult patients with allergic rhinitis. **Methodology:** prospective study, including 80 patients, who will be allocated randomly into two groups. One group will receive oral mucosal immunotherapy and the other will receive sublingual immunotherapy. They will be monitored for 12 months, with measurements of total IgE, specific IgE, prick test and IgG4. **Results:** Work in progress. **Conclusion:** In a pilot study already performed, OMIT and SLIT demonstrated similar safety profiles and a higher adherence rate in the group submitted to OMIT. Clinical efficacy measures improved for both groups, but only changes in IgG4 were statistically significant. These data from the pilot study provide sufficient evidence to proceed with a larger-scale investigation aiming for a more significant statistical significance to explore the role of OMIT in the long-term treatment of allergic rhinitis.

Keywords: allergic rhinitis, immunotherapy, sublingual, oral mucosa.

8067. Study of the Relationship Between Vitamin D in Patients Diagnosed with Rhinitis

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Introduction: Rhinitis is considered to be a disease that affects adults and children, and has a major impact on global public health, as well as hypovitaminosis D. Vitamin D has been the focus of several studies for its immunomodulatory function and consequently its influence on the mechanisms that Allergic diseases. Few studies have been conducted to date comparing vitamin D concentrations in patients with rhinitis, which motivated this research. **Objective:** To analyze whether there is a relationship between allergic and non-allergic rhinitis with vitamin D deficiency. **Methodology:** Retrospective study by reviewing the electronic medical records of patients in Curitiba and metropolitan region, who performed the vitamin D dosage, and the examination Prick test, in a center specialized in Rhinitis and Allergy (CRA), from September 2013 to August 2016. **Results:** Allergic patients, prick-positive, had 74.6% of their sample with sufficient vitamin D , Whereas non-allergic patients, negative prick, accounted for 74.1%. Patients with prick negative test were represented by 69.4% female. **Conclusion:** The concentration of vitamin D presented insufficient average levels in the months of April, July, August, September and October. It was statistically verified in this study

that there is no significant difference in vitamin D levels between the two groups studied.

Keywords: rhinitis, vitamin D, Prick Test (skin test).

8086. Development of a Mobile App for Monitoring Clinical Response to Immunotherapy in Patients with Allergic Rhinitis in a Reference Center in the South of Brazil

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Hospital Ipo Hospital Paranaense de Otorrinolaringologia

Introduction: Allergic rhinitis (RA) is a worldwide public health problem because it affects the quality of life of patients. There is great concern about its correct diagnosis, as well as the elaboration of adequate instruments for its monitoring. The use of applications on smartphones and tablets has profoundly affected medicine. A natural tendency of modern medicine is the empowerment of patients, motivating them and educating them so that they become able to better know their disease and treat it. **Objective:** This is an original study aimed at the development of a specific application for monitoring clinical response to immunotherapy in patients with allergic rhinitis. **Methods:** In the developed application, three questionnaires were included, inspired by studies already validated in the literature such as ISAAC and ARIA, with simple questions and accessible to patients. **Results:** Through the data collection, through this application, stratification can be made for allergic and non-allergic symptoms, age range at the onset of the disease, RA trigger factors, environmental context, comorbidities, in addition to factors related to immunotherapeutic use, frequency of use, adverse events, and need for rescue medications. **Conclusion:** It was possible to develop an application to monitor allergic rhinitis in patients submitted to immunotherapy. However, it is necessary that the present study be effectively applied in patients so that it is effective. In addition, it is necessary to validate your original questionnaires so that possible adaptations and comparisons are made.

Keywords: allergic rhinitis; immunotherapy; technology in medicine.

8127. Association Between Caffeine Consumption and Dizziness – A Pilot Study

Hava Mara Moreira Ramos Bomfim, Ricardo Rodrigues Figueiredo, Gabriela Dalboni Amante Soares, Danieli Sales Luz, Maria Luiza Catta Preta de Oliveira, Stefanie Larrhiu Viana

Faculdade de Medicina de Valença-RJ

Introduction: Many symptoms, such as vertigo, imbalance, instability and other forms of dizzines, may be related to vestibular system malfunctions. Caffeine is the most consumed psychoactive substance worldwide, and larger intakes (over 150 ml daily) have been linked to worsening of vestibular symptoms, due to caffeine excitatory effects and vasoconstriction. **OBJETIVO:** To analyze caffeine consumption in subjects with and without dizziness. **Method:** Pilot transversal case-control study. Dizziness patients were clinically evaluated, and only patients with vestibular related dizziness were selected. Control group was paired to the study group concerning gender and age. Data was statistically analyzed to compare caffeine consumption by both groups. **Results:** Twenty-seven patients were included, thirteen in the study group and 14 in the control group. Caffeine average daily intake was 234.6 ml in the study group and 271.4 ml in the control group (p value = 0.62). According

to this data, the sample size determined for the complete study is 229 patients for each group. **DISCUSSION:** Excessive consumption of caffeine is believed to be a relevant factor of vestibular symptoms worsening, and the recommended daily consumption should not exceed 150 ml. According to this pilot study data, there is no statistically significant difference on the average caffeine consumption between both groups. **Conclusion:** This pilot study failed to demonstrate a statistically significant difference on caffeine consumption by patients with and without vestibular symptoms. These data should be confirmed by a larger sample study.

Keywords: caffeine, dizziness, vertigo, vestibular diseases.

8152. Identification of Gene Expression Profile in TNFa Metabolic Pathway After Noise Exposure

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Introduction: Exposure to high levels of sound pressure is the second most common cause of acquired sensorineural hearing loss. It is related to mechanical and/or metabolic damage, with TNFA release and degeneration of cochlear structures, such as ciliary cells, mainly external, as well as support cells and afferent fibers of the cochlear nerve. In this context, this study aimed to identify the expression profile in the metabolic pathway of this gene after noise exposure. **Methodology:** Young male Wistar rats with 50 dB SPL threshold in auditory brainstem responses click (ABR) were included in this study and exposed to 120 dB SPL of white noise for 3h. ABR was measured and the cochleae were dissected and used for the extraction of total RNA to obtain cDNA and conduct evaluations of the Tnfa metabolic pathway gene expression by qRT-PCR. **Results:** Noise exposure promoted increased expression of the Tnfa gene and its receptor, Tnfrsf1A, 24h after exposure, associated with increased expression of genes related to apoptosis and decreased expression of genes related to cell survival. **Conclusion:** Noise exposure promoted increased in Tnfa gene expression as well as in genes involved in apoptosis, associated with hearing loss in an experimental model.

8171. Sleep Quality and Vertigo in Teachers: A Probable Risk Factor

Gloria Marchiori, Luciana Lozza de Moraes Marchiori, Caroline Domingues Nepomuceno, Carla Juliana Lotti Félix, Jessica Aparecida Bazoni, Daiane Soares de Almeida Ciquinato

Pitágoras Unopar/UEL

Introduction: Chronic vertigo often results from metabolic and circulatory changes affecting the inner ear and may be associated with changes in sleep. Teachers constitute a group that is susceptible to changes in sleep, due to the pressure and stress in the classroom, the heavy workload, and lack of time for physical activities and other health care. **Objective:** to compare the vertigo complaint with the individual perception about the quality of sleep in teachers. **Methods:** A cross-sectional study approved by the Ethics Committee with a sample of 68 teachers, with a mean age of 48.2 years, who responded to the Quality Index of the Pittsburgh Sleep with item verification referring to the subjective quality of sleep, considering with unsatisfactory sleep perception all those who had the bad or very bad response. The visual-analog scale was used to verify vertigo complaint. Statistical analysis was performed using a Chi-square

test with a confidence interval of 95% and significance level of 5%. **Results:** It was verified that of these 68 teachers, 35 (51.47%) rated the quality of their sleep as unsatisfactory, of these 21 teachers present vertigo complaint. There was significant association between vertigo and sleep quality in this population of teachers with $p < 0,001$. **Conclusion:** It was verified that in this population the individual perception regarding sleep quality was related to the vertigo, however, there is a need of more studies with larger populations and a detailed evaluation of the characteristics of vertigo to prove these association. Support: FUNADESP.

8172. Training and Acquisition of Skills in Nasal Endoscopic Surgeries in Lamb's Head Model

Henrique Fernandes de Oliveira, Wilma Terezinha Anselmo Lima, Marcio Nakanishi, Carlos Augusto Costa Pires de Oliveira

Faculdade de Medicina da Universidade de Brasília - Unb

Introduction: Training in nasal endoscopic surgery is a challenge for those who are learning and for those who teach. Dissection into human cadavers, though ideal, is becoming increasingly expensive and difficult due to ethical and legal issues. The lamb's head model is an option already validated. **Objective:** To evaluated the acquisition of surgical skills in resident doctors of otolaryngology and established the minimum number of dissections in lamb's model to be performed before practicing in human patients. **Methods:** Nineteen second-year otolaryngology residents performed ten dissections each, five for each nasal cavity, always practicing the same three surgeries on the lamb. The training of each student lasted two months, and the entire training intervention lasted four years, reaching four generations of residents. All dissections were recorded and all of them were randomly selected to be examined by two independent otolaryngology surgeons other than the researchers. The assessment of the 190 dissections were based on an instrument validated for surgical training of medical residents. **Results:** For a level of significance of 5%", statistical analysis revealed an increase in performance, and satisfactory results were observed after the sixth dissection. Additionally, after the eighth dissection, skill acquisition was relevant and sustained. **Conclusion:** Training in nasal endoscopic surgery on a lamb's head model improves surgical skills and handling of surgical instruments. Our results showed the relevance of the lamb model for otolaryngology surgical training, impacting on patient safety.

Keywords: skills acquisition, endoscopic sinus surgery, lamb model, patient safety, medical training.

8173. Relationship between Sleep Quality and Tinnitus in Teachers

Gloria Marchiori, Luciana Lozza de Moraes Marchiori, Paula Carolina Dias Gibrin, Marcelo Yugi Doi, Denise Vieira de Araujo Athayde, Glenda Ventura de Souza, Sara Gabriele de Freitas

Pitágoras Unopar/UEL

Introduction: Teachers constitute a group susceptible to changes in sleep, due to the great demands of work. Restful sleep can prevent emotional, cardiovascular and metabolic disorders and contribute to tinnitus improvement, while chronic tinnitus often arises caused by metabolic and circulatory changes. **Objective:** to compare tinnitus complaint with individual perception about sleep quality in teachers. **Methods:** A cross-sectional study approved by the Ethics Committee with a sample of 60 teach-

ers, with a mean age of 48.2 years, who responded to the Quality Index of the Pittsburgh Sleep with item verification referring to the subjective quality of sleep, considering with unsatisfactory sleep perception all those who had the bad or very bad response. The visual-analog scale was used to verify tinnitus. Statistical analysis was performed using a Chi-square test with a confidence interval of 95% and significance level of 5%. **Results:** There was no significant association between tinnitus complaint and sleep quality. **Conclusion:** It was verified that in this population, the individual perception regarding the quality of the sleep was not related to the complaint of tinnitus, however, there is a need for further studies with larger populations and thorough evaluation of tinnitus characteristics to prove these probable associations. The possible risk factors for tinnitus in teachers and their population relevance needs to be addressed to design preventive strategies. Support: FUNADESP

8178. Prevention of Noise-induced Hearing Loss from the Use of TNF $\tilde{\alpha}$ Gene Silencing

Janaina Cândida Rodrigues, Roberto Miquelino de Oliveira Beck, Signe Schuster Grasel, Rubens Vuono de Brito Neto

Hospital das Clínicas Faculdade de Medicina Usp

Exposure to noise is the second most common cause of acquired sensorineural hearing loss. It is related to mechanical and metabolic damage causing increased in proinflammatory cytokine. Here, we document that knockdown of Tnfa using short interfering (si) RNA preserved threshold shifts in auditory brainstem responses (ABRs) in wistar rats protecting from noise hearing loss. TnfasiRNA was transtympanic delivered in one ear and the scramble siRNA in the contralateral ear, with subsequent exposure to 120dB SPL of white noise for 3h. Hearing was assessed by recording auditory brainstem responses before and 24 hours after the noise exposure, at this moment cochlear samples were taken and RT-qPCR were performed. The knockdow procedure was validated by in vitro experiment with rat fibroblast cell culture and analysed with High-content screening. Results indicated that transtympanic administration of TnfasiRNA promotes the preservation of the electrophysiological threshold and the amplitude of wave I, II and IV in the ABR click, after exposure to intense noise, suggesting that this inhibition may be a promising auditory preservation strategy. The Tnfa knockdown inhibited cochlear dysfunction after acoustic injury, suggesting that this protein plays an important role in noise induced hearing loss and should be considered a therapeutic target in auditory preservation strategies.

8180. Hearing Loss and Cognitive Decline of Memory in the Elderly Population

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Universidade de Taubaté

Introduction: Some frequent elderly complaints are hearing and memory loss, which have a devastating impact on communication process. Previous studies showed that hearing loss has association with cognitive decline acceleration. The present study is justified by the need to develop programs of early hearing loss detection and rehabilitation to prevent cognitive deficit development. **Objectives:** Analyze the relation between moderate and moderately severe hearing loss and memory deficit in the elders assisted at Hearing Health Program of the Hospital Universitário de Taubaté (Taubaté, SP). **Methods:** This research was

cross-sectional with primary data collection by audiometry previously identified in medical records, summarized anamnesis and application of a cognition test called Mini Mental State Examination (MMSE) in 60-75 year-olds, presenting bilateral hearing loss, without knowledge of previous mental illness nor previous hearing aid use. **Results:** Sixty-one elderly patients were interviewed and 59% of the sample had an abnormality in the test. Moderately severe hearing loss was found in 36% of this population and 22% of the sample scored for dementia. This deaf population took an average of 10 years to seek care due to hearing loss complaint. In addition, another 23% of the total sample presented results on the cutoff normality range of the exam, showing the tendency towards a cognitive decline. **Conclusion:** The results between cognitive deficit, dementia and normal memory in deaf elderly patients using Mini Mental test were statistically significant ($p < 0.05$). Hearing loss is a public health problem and requires early diagnosis and intervention.

Keywords: hearing loss; memory; cognitive decline.

8184. Identification and Genotyping of Human Papillomavirus in Recurrent Respiratory Papillomatosis
Marcelo Cardoso Figueiredo, Jose Renato Coelho Alves de Castro, Juliana Teixeira Pereira, Mariana Chantre Justino, Maria Helena Faria Ornellas de Souza, Ana Carolina Soares Succar
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Introduction: Recurrent respiratory papillomatosis (RRP) is a disease of viral etiology manifested by exophytic lesions in the airways caused by human papillomavirus (HPV). HPV types 6 and 11 are the most commonly found and rarely HPV 16 and 18. RRP usually involves the larynx and it causes dysphonia. In more severe cases, dyspnoea may occur because of respiratory obstruction and/or PRR progression. The histopathological diagnosis of biopsies provides only a suggestive result of HPV, such as the presence of koilocytosis. Through the polymerase chain reaction (PCR) technique is possible to detect the HPV DNA and the type involved. **Objectives:** Identification and genotyping of HPV in RRP patients. **Methods:** The ten patients attended at the ENT Service of Pedro Ernesto University Hospital were submitted to direct laryngoscopy, under general anesthesia, for achievement of lesions resection. Viral DNA identification and genotyping of HPV-6, HPV-11, HPV-16 and HPV-18 were performed by the PCR technique using specific primers. **Results:** The dysphonia was present in 100% of cases. Dyspnea was present in 60% of patients, while extralaryngeal disease wasn't seen. One patient was submitted to tracheostomy, because of respiratory obstruction and one diagnosed with laryngeal cancer but associated with tobacco. In our study, was found three patients with HPV-6, two patients with HPV-11 and five patients with association of both types. **Conclusion:** All cases was positive for HPV-6 and/or HPV-11 according the literature. The co-infection of HPV types 6 and 11 was observed in 50% of cases.

Keywords: papillomatosis; respiratory; human papillomavirus.

8228. Comparison between the Perception of Nasal Obstruction Symptom Measured by NOSE Scale and Anterior Rhinoscopy in Medical Students of a University in the South of Brazil
Bibiana Pedroso da Mota, Renato Roithmann, Nicole Kraemer Redeker
Ulbra

Introduction: Nasal obstruction is a prevalent symptom with difficult subjective and objective measurement. Faced with this, for an adequate evaluation it is necessary objective and subjective instruments, and detailed examination. The NOSE scale is a recent and validated questionnaire to determine the subjective perception of nasal permeability. **Objectives:** To evaluate the comparison between the subjective perception of nasal obstruction with the NOSE scale and the findings of previous rhinoscopy. As there are no studies with this comparison, such an evaluation becomes relevant. **Methods:** Cross-sectional descriptive study in the ambulatory of the University Hospital of the south of the country, with the voluntary participation of 46 medical students, with or without complaints of nasal obstruction. The NOSE scale questionnaire was filled in and an anterior rhinoscopy was realized. **Results:** No significant difference was observed in the comparison between the NOSE scale values and the findings of previous rhinoscopy in the total number of participants ($p = 0.567$). Likewise, no significant difference was observed between the NOSE scale in the participants with or without nasal obstruction when compared to the anterior rhinoscopy ($p = 0.443$ and $p = 0.894$, respectively). However, the study showed a significant difference when comparing clinical history findings and NOSE scale findings ($p = 0.001$). **Conclusion:** The present study showed that the NOSE scale is positively related and complements numerically the findings of the clinical history. However, it was not related to the findings of the previous rhinoscopy.

Keywords: nasal obstruction; nose diseases; airway obstruction.

8237. Revision Cochlear Implant in Adults
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Introduction: Cochlear implant (CI) surgery may present problems requiring revision surgeries. **Objective:** To identify the incidence of cochlear revision surgeries in adults, the main causes that led to these surgeries and to verify the improvement of the audiological results of these patients after the revision surgeries. **Method:** Retrospective study of patients older than 18 submitted to CI surgery from 2004 to 2016 at a Public Hospital in Brazil. The data collected were: age at the time of implantation, sex, etiology of deafness, audiological characteristics of each patient in the pre and postoperative period, and whether there was a need for surgical revision and reason for it. **Results:** One hundred and fifty-eight CI surgeries were performed in 137 patients. Seven patients underwent bilateral CI and 10 required revision surgery, of which six were female and four were male. Fourteen revision surgeries were necessary in these 10 patients (8.9% of the total surgeries). The most frequent cause that needed for revision surgery was the displacement of the internal unit (three cases) that needed to be repositioned. The mean age at first surgery was 46.9 years and the mean age at revision surgery was 47.3 years. The outcome of the audiometric threshold in the pre-IC phase was 112, 4 dB

and post-revision surgery of HF was 33.1 dB. **Conclusion:** The revision surgery of the IC is infrequent and was effective in most cases.

Keywords: cochlear implant, revision surgery, deafness.

8239. Long Latency Evoked Potentials (P300) Outcomes in Patients with Unilateral Cochlear Implants

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Introduction: P300 is an objective test capable of assessing cortical cognitive function. **Objective:** Evaluate the behavior of the cortical auditory potential (P300) in Cochlear Implant (CI) users, identifying the improvement of cognition. **Methods:** The Institutional Review Board under number 38224814.2.0000.5440 approved this study. We selected adults, with severe and/or profound bilateral post-lingual deafness. The subjects' data was collected regarding age, sex, hearing loss etiology, audiological characteristics in the phases pre-CI, CI activation and 6 months after surgery. P300 measurements were taken at the three fases also. The auditory stimulus generated to elicit P 300 was presented in free field, at the frequencies of 1000 e 2000Hz with an intensity of 90dBHL. **Results:** Twenty-one subjects were evaluated; the mean age was 50 years old. The mean hearing threshold, obtained with pure-tone audiometry, was 112,5 dB HL in the pre-CI phase, 58,8dBHL in the CI activation phase and 38,2 dBHL six months after the surgery. The P300 latency mean value in the pre-CI phase was 351,1ms, in the CI activation phase; it was 364,8 ms and six months after the surgery was 336ms. The P300 amplitude mean value was not differet at the three fases. We noticed a significant increase in the subjects' mean latency values when CI activation and after six-month phases were compared ($p = 0,0248$ - paired t-test) **Conclusion:** The P300 shows lower latency six months after CI activation. The study suggests that latency decreases due to improved cognition of the individual six months after the CI surgery.

8248. Contralateral Suppression of Otoacoustic Emissions in Gasoline Station Workers

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Introduction: the BTEX solvent compounds (benzene, toluene, ethylbenzene and xylene) is present in the gasoline composition, is highly harmful to health, and even without noise exposure, the contact with these solvents can cause otoneurotoxic effects. The suppression effect analysis can serve as an important instrument of early detection of hearing loss of retrocochlear origin in accordance with Portaria GM/MS 776/2004 that suggests the use of otoacoustic emissions as a complementary test in the hearing evaluation. **Objectives:** assess the effect of contralateral suppression otoacoustic emissions in gasoline station workers in the city of Rio de Janeiro. **Methods:** 29 gasoline station workers were submitted to transient evoked otoacoustic emissions evaluation in both ears, in the presence and in the absence of contralateral white noise, in a signal/noise ratio of 0dB, with the noise at 65dB SPL, to verify the suppression effect. **Results:** 35% of the workers presented TOAE suppression in both ears, 65% had absence of TOAE suppression, being 27% absent in both ears, 21% absent on right ear and 17% on the

left. **Conclusion:** the medial olivocochlear system is found impaired in 65% of the analyzed workers, suggesting the existence of a neurotoxic action of the BTEX compound on the hearing, affecting particularly the retrocochlear portion of the auditory pathway and causing a distinct lesion from that provoked by the noise.

8262. Inlay Tympanoplasty: a Comparison between the Endoscopic and Microscopic Technique

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Tympanoplasty is an otologic surgery introduced in 1956 with the aim of reconstructing the perforated tympanic membrane (TM). The inlay method, discovered by Roland Eavey in 1998, is widely used today and can be performed by two techniques, the microscopic, older and considered the gold standard for many years and the endoscopic, more current. **Objective:** Compare the two techniques, endoscopic and microscopic, in patients submitted to inlay tympanoplasty, in relation to auditory thresholds before and after surgery and to pre and postoperative otoscopy. A cross-sectional case series study was accomplished based on the analysis of medical records of 20 patients with simple chronic otitis media (COM) who underwent inlay tympanoplasty, 10 by the endoscopic technique and 10 by the microscopic technique, in the period from 2013 to 2017 attended at the Otorhinolaryngology ambulatory of the Faculty of ABC Medicine. The endoscopic technique provided complete closure of TM of all patients and reduction of hearing loss in 42.8%, with a 38.2% decrease in medium SRT in patients submitted to this technique. On the other hand, 20% of the patients submitted to the microscopic technique remained with perforated TM after surgery and 50% remained with hearing loss, although there was a reduction of hearing loss in 37.5%, with a 13.2% decrease in medium SRT. Endoscopic inlay tympanoplasty was more advantageous for complete closure of TM and auditory improvement of patients with tympanic perforation as a sequela of the COM when compared to microscopic inlay tympanoplasty.

Keywords: tympanoplasty, endoscope, tympanic membrane, hearing loss.

8276. Quantification of the Suction Profile in Infants by Microcontrolled Device

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Introduction: The sucking is a necessary for the proper oral motor development function and efficient oral feeding. To this end, it should be coordinated and harmonious, requiring, among other factors: rooting reflex and suction; lip seal; adequate movement of the tongue and jaw; sucking rhythm, alternating sucking bursts with pauses; coordination between sucking, swallowing and breathing. **Objectives:** To present a microcontrolled device used for objective evaluation of the suction profile in infants. **Methods:** The developed device is composed of a microcontroller that reads pressure variations from a sensor connected to a silicone pacifier. Variation data can be observed on a display built into the device and stored in stick memory for off-line analysis. Data processing was performed using Kalman filters and neural network. **Results:** With the use of the device it was possible to evaluate the variables amplitude, width in

the half of the amplitude, frequency of the hold and the interval between them. In a preliminary study in infants with and without ankyloglossia, when classified with a multilayer neural network - Perceptron Multilayer, with topology of 5, 10 and 20 neurons in the hidden layer, they did not present any segregation in the classified groups, that is, no difference was found among them, with R (0.98) indicating a strong correlation between the groups. **Conclusion:** The development of the device, brings objectivity to the assessments of the oral motor development of infants, presenting diverse clinical applicability, such as the evaluation in premature infants, infants with ankyloglossia and other oral malformations.

8312. Device Model for Hemostasis of Cold Tonsilectomy with Suture Ligature

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Introduction: The use of simulator to training the techniques of surgical practice is increasing in medical residency programs and is paramount for the training and safety of the procedures to be performed by the professionals in training. Simulation models can range from simple, low cost materials to high fidelity mannequins. In otolaryngology, these modalities become necessary due to the physical limitation of the surgical fields, which creates difficulties for the resident untrained. **Objectives:** To demonstrate that, through simple materials, it is possible to promote the training of surgical techniques and thus increase medical skills and patient safety. **Methods:** A larger 14 x 7.5 cm PVC tube and a 6 x 5.4 cm PVC tube, 3 x 7.6 cm sponge, glue, a curved Kelly clamp, a Mayo Hegar needle holder, a threaded catgut 2.0 wire, a straight-blunt Metzembbaum scissor and a Doctus HL8000 5w headlight. The tubes and the sponge were cut and adapted to the model in order to simulate the oral cavity and the tonsillar fossa. The smaller tube was internally positioned to the largest to promote restriction of the operative field. **Results:** The gadget can simulate the restricted surgical field and optimize hemostasis training in tonsils stores through simple dots. **Conclusion:** It is possible to create low cost devices that can aid in the teaching of the safe operative technique and suitable for training residents, interfering positively in their learning curve.

Keywords: simulator, hemostasis, tonsillectomy.

8317. Otoacotis Emissions in Premature Neonates Exposed to Ototoxic Antibiotics

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Introduction: Premature children are a high risk group for hearing disorders and are frequently exposed to ototoxic drugs. **Objectives:** To evaluate the ototoxic effects of aminoglycoside in neonates born at Hospital Antônio Pedro (HUAP) located in the city of Niterói, Rio de Janeiro. **Methods:** case-control performed from March 2017 to February 2018. Preterm newborns with gestational age <36 weeks of the combined accommodation and neonatal ICU of the HUAP were selected. The children were divided into two groups: exposed group, composed of NB who received ami-

noglycoside and an unexposed group, formed by NB who did not receive aminoglycoside. The auditory evaluation was performed in both groups through transient stimulus (TE) otoacoustic emissions using Otoread SCR of the Interacoustics brand. Factor exposure time was not considered in this study. Preterm infants with extremely low birth weight (<= 1.5kg), congenital neonatal infections, exsanguineo-transfusion and severe depression at birth were excluded. All children were referred for BAEP (brainstem auditory potential) and the data will be described in a later study. **Results:** 51 premature NB were evaluated, 33.3% were exposed to aminoglycosid and 66,6% were not. In exposed group and in no exposed group 11,7% and 41,1% respectively FAILED at least one ear. The difference between them was statistically significant. **Conclusion:** This study suggests that prematurity is a potential risk factor for hearing problems, however We can't blame hearing loss in prematures that use aminoglycosides in neonatal period.

8352. The Effects of Adenotonsillectomy on the Smell Perception of Children

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Introduction: Severe smell loss is directly related to safety and quality of life issues. In this study, we employed a novel children's olfactory test in order to more accurately assess the association between nasopharyngeal obstruction and odor identification ability. **Objectives:** This study quantified the impact of adenotonsillectomy on olfactory function, established whether the influences of the operation were related to the pre-operative amount of nasopharyngeal obstruction, and determined whether sex influenced olfactory measures. **Methods:** Fifty-three boys and 23 girls were administered a standardized children's olfactory test before and 45 days after adenotonsillectomy. They ranged from 5 to 12 years old and exhibited varying degrees of adenotonsilar hypertrophy and histories of recurrent adenotonsillitis. Pediatric Smell WheelTM score was used to measure olfactory function. A radiography of the nasopharynx was used to grade the nasopharyngeal obstruction. **Results:** Significant post-operative improvement in smell function was more frequent in children with > 50% pre-op obstruction of the nasopharynx. In this group, average function improved 28.5% after surgery (CI 95%: 21.6% to 35.4%). Improvement on nine of the 11 odors was present, with significant differences occurring for the odors of soap, mint, baby powder, and cinnamon. No sex differences were evident. **Conclusion:** Olfactory dysfunction occurs primarily in children whose nasopharyngeal obstruction is > 50%. Removal of the hypertrophied adenoids and tonsils returned smell function back to normal in these cases. This study suggests that smell loss may be valuable in decisions regarding whether or not to perform adenotonsillectomy in children with nasopharyngeal obstruction.

8383. Evaluation of Nasal Mucosa Lesion's Severity in Patients with Leishmaniasis taking into Account the History of the Previous Cutaneous Lesion

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Introduction: American tegumentary leishmaniasis is a zoonotic disease that affects man with a significant morbidity and mortality rate. It can be classified in several ways, with cutaneous leishmaniasis being the most prevalent. In endemic areas, on average, 3% of patients with cutaneous leishmaniasis will develop the mucosal form. **Objective:** To analyze the nasal mucosal lesion stages, comparing the incidence of mucosal leishmaniasis in the early stages (grades I and II) and advanced stages (grades III, IV and V) among the groups of patients who presented and who did not present a cutaneous lesion. **Methods:** Retrospective descriptive study. Patients with a confirmed diagnosis of mucosal leishmaniasis were included in the study. The mucosal lesions were staged according to severity, following the criteria proposed by LESSA et al. In 2002. These patients were divided into two groups, considering the presence or absence of a previous cutaneous lesion. **Results:** The sample consisted of 284 patients, of whom 179 had a previous skin lesion history. In the group of patients with previous cutaneous lesions, 64.20% developed advanced mucosal lesions, while in the group with no prior cutaneous lesion, 52.40% developed this degree of mucosal lesion. This difference was statistically significant at $p = 0.049$. **Conclusion:** Considering the data obtained, there seems to be a relationship between the existence of a previous cutaneous lesion and the development of mucosal lesions of advanced degree of staging. The importance of early diagnosis and active follow-up of patients who have already developed cutaneous leishmaniasis is reinforced.

8385. Is there a Correlation between Nasal Permeability and Obstructive Sleep Apnea in Children?

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Introduction: The nose is responsible for the highest resistance in airflow, nasal permeability might have an influence on obstructive sleep apnea (OSA) in children. The aim of this study was to evaluate the nasal permeability of the airflow in OSA children. **Methods:** The study protocol was approved by the local ethic commission, all participants and responsible signed a written consent. We enrolled 51 children with and without respiratory complaints, aged 4 to 11 years, mean 7 ± 2 years old, excluding children with major craniofacial disorders or genetic syndromes. All children realized a full-night polysomnography ($AHI > 5.6$ as OSA). Nasal permeability was evaluated by the expiratory flow projected on the Altmann mirror, images computer scanned and the area was calculated by software ImageJ. The symmetry of the nasal flow was classified as 0-symmetric, 1-asymmetric, or 2-absence of flow in at least one nostril. The children were divided: N-OSA Group ($AHI < 5.6$ events/hour, $n = 15$) and OSA Group ($AHI \geq 5.6$ events/hour, $n=36$). Results were described and correlated. **Results:** 60% N-OSA children had symmetric flow, 40% asymmetric; OSA children showed 44% and 56%, respectively. Mean nasal area was 22 ± 14 cm² (N-OSA Group) and 17 ± 7 cm² (OSA Group), ($p=0.32$). There was no correlation between nasal area and

AHI , but between nasal area and flow symmetry, the more asymmetric the flow, the smaller nasal area ($p=0.016$, $r=-0.336$). **Conclusion:** These results strengthen that OSA children have decreased nasal patency compared to children without OSA, evaluation using Altmann mirror being more feasible and less expensive than volume airway analysis.

8392. Epidemiological Profile of Patients with Disseminated Leishmaniasis and Mucosal Involvement in an Endemic Area of Leishmania Viannia braziliensis over a 20-year period

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Introduction: Disseminated Leishmaniasis (LD) is a clinical spectrum of American cutaneous leishmaniasis, which stands out because it can present hundreds of lesions in a single patient. In addition, about 38% of the patients with LD have involvement in the mucosa, mainly the nasal one. **Objective:** To evaluate the clinical-epidemiological profile of LD cases with mucosal involvement in the endemic region for a period of 20 years. **Methodology:** Retrospective descriptive study. Patients with confirmed diagnosis of LD, evaluated during the 20 years, were included in the study. With clinical description referring to the data collected at the time of diagnosis. **Results:** 66 patients with LD and muco-sal involvement, of these 43 patients in the second decade of the study. There were 84.8% males and an average age of 30.4 years. Of the patients, 65 (98.5%) presented lesions in the nasal mucosa. In the staging of the nasal mucosa lesion, 22 (33.3%) patients were classified as Stage I, 26 (39.4%) in Stage II, 14 (21.2%) in Stage III, 1 (1.5%), in stage IV and stage 2 (3.0%) in stage V. All patients were treated with Glucantime 20mgSb / kg / day, during a period of 30 days. Cutaneous recurrences were more prevalent in the group with only one treatment cycle, and were recorded in 17 (25.7%) cases. **Conclusion:** The study showed an absolute increase in cases in the last decade. Most lesions on the nasal mucosa were classified as mild. A low therapeutic response was observed.

8426. Weight, but not Age or Sex, Can Distinguish Positional from Non-Positional Obstructive Sleep Apnea

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Objective: To verify if positional-predominant obstructive sleep apnea (POSA) patients are younger, thinner and with less severe OSA compared with non-POSA patients diagnosed in a tertiary care center. **Methods:** Retrospective, cross-sectional study of patients screened for OSA with full night in-lab polysomnography at our institution from April 2017 to March 2018. All sleep studies were scored by the same sleep physician. POSA was defined as a total apnea-hypopnea index ($AHI \geq 5$) and a ratio supine AHI /non-supine $AHI \geq 2$. We compared POSA with non-POSA patients regarding age, sex, body mass index (BMI) and polysomnographic parameters. **Results:** Out of 251 patients studied, 203 had OSA (80.9%), from which 110 presented POSA (54.2%). There was no significant difference between POSA and non-POSA patients regarding age (51.9 versus 52.6 years, $p=0.72$) and sex ($p=0.69$). POSA patients had a lower BMI (29.9 versus 31.9 kg/m², $p = 0.017$) and a lower AHI

(24.3 versus 36.3, p= 0.0003). POSA patients also had significantly better amounts of Stage 3 sleep, total sleep time with saturation below 90%, minimal oxyhemoglobin saturation, oxygen desaturation index for $\geq 4\%$, and arousal index. There were no significant differences between those groups regarding total sleep time, sleep efficiency and the amounts of REM sleep. Conclusions: OSA presented as POSA in 54% of the cases, which distinguished from non-POSA patients for being thinner and scoring less severe respiratory and sleep parameters in polysomnography. Age and sex distribution were not significantly different between those groups.

Keywords: obstructive sleep apnea; positional OSA; Apnea-hypopnea index.

8562. The Transmastoid Retrolabyrinthine Approach in Acoustic Neurinoma Surgery

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Introduction: Hearing preservation has become the goal in surgery for acoustic neuromas, as we can today remove the tumor with a very low risk for the patient and preserving the facial nerve. The criteria for useful hearing is controversial, but most of the authors consider that patients with a speech reception threshold (SRT) better than 50 dB and a discrimination better than 50% are good candidates for a hearing preservation approach during the surgery. **Objectives:** To present 189 cases of acoustic neuromas surgery hearing preservation operated through the retrolabyrinthine approach in our department, discussing the technique and the results. **Methods:** The study was a prospective analysis of all acoustic neuroma cases operated by a retrolabyrinthine approach. **Results:** This study was conducted at a University Hospital. 22 patients with acoustic neuroma and useful hearing. The average age was 35 years and there were 12 females and 7 males. All patients had unilateral tumors, 8 of them occurring in the right ear and 11 in the left ear. A retrolabyrinthine approach was performed in all patients. Main Outcome Measures: Patients with small acoustic neuroma and a speech reception threshold (SRT) better than 50 dB and a discrimination of better than 50%. A good exposure of the internal auditory canal was possible in our cases, with total removal of the tumor in all patients. Hearing was preserved in 53% of the cases. Conclusions: The retrolabyrinthine approach offer security to the facial nerve, no morbidity and good percentage of hearing preservation.

8584. Predictive Factors of Difficult Laryngeal Exposure

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Objective: To identify the existence of predictive factors of difficulty in laryngeal exposure, to quantify them and assess their relationships with difficult exposure. **Methodology:** This is a cross-sectional retrospective study, based on the analysis of 30 records of patients with laryngeal lesions, between the years of 2014 and 2015, treated surgically at the Otorhinolaryngology Service of a Philanthropic Hospital of the State of Sergipe. We collected the record of their measurements of cervical circumference, oral opening, thyromental distance, whether or not micrognathia was present, laryngeal anteriorization and modified Mallampatti Index. The surgical technique used was recorded, if conventional or variant. The data were statistically analyzed by

means of simple and percentage frequencies when categorical variable, or mean and standard deviation when continuous variable. **Results:** The presence of micrognathia (p = 0.005) and laryngeal anteriorization (p = 0.005) were identified as predictive factors of difficult laryngeal exposure, both with a 9 times greater risk of difficult laryngeal exposure; the measurement of the cervical circumference above 40 cm (p = 0.041), with a 5 times increased risk of difficult laryngeal exposure and the Mallampati Index III and IV (p = 0.009), with a 10 times higher risk of laryngeal exposure. **Conclusion:** The predictive factors identified were directly related to difficult laryngeal exposure. The combination of these four predictive factors has a sensitivity of 100% and a specificity of 85% to predict a difficulty in laryngeal exposure.

8587. Sensibility and Specificity of the "SLEEP CLINICAL RECORD" Protocol in Brazilian Children

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Introduction: Polysomnography (PSG) is the gold standard for the diagnosis of Obstructive Sleep Apnea (OSA), but costs difficult its use, screening protocols being highly needed for optimization AIMS: To test the protocol "Sleep Clinical Record" (SCR) in Brazilian children with respiratory complaints. **Methods:** SCR was applied to 51 children with obstructive breathing disorders, aged 4 to 11 years old. SCR evaluates 11 topics of symptoms and medical exams, scoring from 0 to 18 points, 6.5 being considered positive. The higher the score, the more likely the chance for OSA. SCR scores were compared to PSG, sensitivity, and specificity were analyzed. **Results:** 51 children, 26 girls, mean age 6.92 ± 2.08 years, were included, 61% being overweight, 70% diagnosed moderate to severe OSA. SCR score varied from 2 to 15.5, being considered positive for 46.2% mild, for 77.8% moderate and 70% for severe OSA children. High scores were seen for nasal obstruction, oral breathing, tonsillar hypertrophy, Friedman and malocclusion. Sensitivity for OSA was 0.89, specificity was 0.19. **Conclusion:** SCR showed no cultural difficulty for its application. Sensitivity was good, however, specificity was still low. There is a need for more investigation for OSA screening protocols in children.

8660. Prevalence of Otorhinolaryngological Complaints at the Medical Service of the International Airport Luiz Eduardo Magalhães located in Salvador-Bahia

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Introduction: Aviation as a means of transportation has increased significantly, and with this, also increased the possibilities of medical intercurrences, mainly related to barometric changes. Reducing air pressure at high altitude is the main etiological factor of middle ear traumatic inflammation and this condition can generate symptoms such as fullness, otalgia and vertigo. **Objective:** To describe the prevalence of patients' otorhinolaryngological complaints during medical service of the Salvador-BA International Airport. **Methods:** The data were obtained with the purpose of evaluating the profile of patients attended at the airport, from May to September 2015, and recorded

in a protocol form, structured for this research. The SPSS (Statistical Package for Social Science v. 21.0) Software was used for statistical analysis and database. **Results:** A total of 129 patients were included, 70 (54.3%) were female and 59 (45.7%) were male, and the average age was 41.9 ± 15.9 years (20.0 - 83.0). Otorhinolaryngological complaints totaled 20 patients, with otalgia being the most prevalent complaint by 10 patients. The diagnosis of barotrauma occurred in 6 patients who sought medical service of the researched airport. The most frequent diagnoses were: Gastroenterocolitis (15.5%), followed by headache (8.5%). **Conclusion:** The presence of otorhinolaryngological complaints is important at this airport medical service, with barotrauma being the most worrying diagnosis. There are few surveys that establish the profile of people who need medical attention at airports. Health professionals need to have a better understanding of the changes that occur in the human body due to changes in the air environment.

8661. Variant of the Technique for Laryngeal Microsurgery in Difficult Laryngoscopy

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Introduction: Due to the low exposure of the larynx of this region, microsurgery can be difficult or impossible. The application of rigid and contact endoscopy allowed the oblique and retrograde angled visualization, allowing visualization and trans-operative staging with greater reach of the anatomical areas. However, there is difficulty or even impossibility of performing the surgical act, due to the incompatibility of the angled path with the straight surgical tool. **Objective:** To demonstrate the efficiency of the variant of the technique for laryngeal microsurgery with difficult laryngoscopy, besides analyzing the new surgical instrument specific to the endoscopic procedure. **Methods:** This is a cross-sectional retrospective study, based on the analysis of 30 medical records, between the years of 2014 and 2015, treated surgically at a Philanthropic Hospital of the State of Sergipe. **Results:** The technical variant used 30 and 70 degree endoscopes that provided complete oblique view of the endolarynx. The association of angled instruments (forceps, suction pumps, retractors and scissors) enabled the execution of the surgical procedures. **Conclusion:** The association of rigid endoscopy with angled instruments promoted full visualization of the surgical lesion and operative resolution.

8664. The Ultrasonic Piezosurgery in Closed Rhinoplasty

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Introduction: The use of Piezosurgery in Rhinoplasty allows a precise performance of the osteotomy and causes no mucosal tearing. In addition, if an excessive force is used, the Piezo tip stops working. Also, performing a lateral osteotomy it preserves the support of the periosteum, decreases lateral nasal wall collapse and minimizes hemorrhages and edema. **Objectives:** To describe a series of cases using Piezoelectric Instrumentation (PEI) in lateral osteotomies and bony hump resection in closed rhinoplasty. Resumed Report: Three closed rhinoplasties were performed in our service using PEI. The duration of the lateral osteotomies were 5 to 10 minutes on each side. An assistant was

required only during the saline suction part. The post operative results were satisfactory, with insignificant edema and hematoma. One of the disadvantages of PEI is its cost. **Conclusion:** The use of Piezosurgery-based scalpel is a feasible approach to decrease the risk of damage to soft tissues, nerves, and vessels. It also decreases edema and ecchymosis in closed rhinoplasties. Although this technique could increase the duration of lateral osteotomy and hump resection when compared to the open approach, it can be a safer and more precise procedure when performed by an experienced surgeon. Our postoperative results were satisfactory and promising in expanding the use of Piezoelectrical instrumentation in closed rhinoplasty.

8706. Comparative Analysis of Cases of Hearing Loss

Among Brazilian Regions in the Last 5 Years

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Introduction: Hearing loss usually occurs gradually and often delays being diagnosed. Immediate and early treatment promotes more favorable results. There are three types of hearing loss: conductive, when the sound can not reach the internal auditory system, sensorineural, characterized by a dysfunction of the cochlear nerve or the inner ear, and mixed, where the two types occur concomitantly. **Objective:** To perform a comparative analysis of cases of hearing loss in the Brazilian states. **Method:** This is an ecological, descriptive study based on data from the Hospital Information System (SIH / SUS) between March 2013 and March 2018, associated with literature review in the PubMed, MedLine and SCIELO databases. **Results:** Southeastern Brazil was the most prevalent (3,294 cases) related to hearing loss, while the North presented the lowest incidence, with only 79 cases. Among the analyzed years, 2017 had the highest number of hospitalizations: 1,103 cases in a total of 4,920 cases. In relation to the age groups, the Southeast region presented 1,061 cases in a total of 1,559 for 20 to 59 years, and 209 cases in a total of 410 for those over 60 years. Women represented the majority of the cases, being 70.3% in the southeast region. **Conclusion:** It can be inferred that as a consequence of the largest population contingent and the presence of risk factors such as high noise pollution and high rates of infectious diseases, the Southeast region predominates over other regions in cases of hearing loss.

Keywords: hearing loss, otorhinolaryngology, epidemiology.

8747. Quantitative Analysis of Body Balance in Patients Undergoing Cochlear Implantation

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Researches produced in order to analyze the vestibular system in implants demonstrated plurality in the results of the alterations and symptomatologies observed in the post-surgical evaluation. Concerning the complications caused by the implantation of the electrodes in the cochlea, the most probable are the trauma in vestibular sensory structures or surgery-induced inflammation, which may lead to imminent pathological changes in the inner ear with subsequent dysfunction of the structures, resulting in alterations vestibular disorders and balance disorders. There is

a need to evaluate and coordinate the static and dynamic balance, and to increase postural stability through assisted technology in order to optimize system performance. The aim of is to analyze and demonstrate the performance of high reliability tests and tests (Vectroelectronystagmography, VHIT and Dynamic Posturography) and the use of application software developed during the two-year period, quantitative indicators of balance disorders in patients with cochlear implants, which present short and long term complaints and symptoms of vestibular changes.

8819. Analysis of Hearing Results in Patients Submitted to Stapedotomy

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Introduction: Otosclerosis is characterized by disorganized bone resorption and neoformation in the labyrinthic optic capsule. The diagnosis is made by the patient's anamnesis, which presents complaints such as hypoacusis and tinnitus, associated with physical and complementary exams such as tonal and vocal audiometry. Although there are other effective therapeutic modalities, stapedotomy is the first-line treatment. The ideal stapes prosthesis is the reconstruction of the physiological mechanism of hearing without a foreign body reaction. Teflon, Teflon-Platinum and Titanium prosthesis are used for this purpose. **Objective:** to evaluate the auditory results after the stapedotomy and to compare the effectiveness of the three types of prosthesis used in the surgery. **Method:** This is a longitudinal, retrospective cohort study of the analysis of the hearing results of patients submitted to stapedotomy performed from January 2007 to May 2018. It was realized a collection of the following data of patients' birth, date of surgery, operated side, type of prosthesis, and results of pre and post operative audiological exams. This research was approved by the Ethics and Research Committee with protocol 78515617.4.0000.5553. **Results:** From January 2007 to May 2018, 336 patients were operated. Approximately 58% (196 patients) of surgeries was used the Titanium prosthesis. In about 34% (115 patients) of stapedectomies was used the Teflon platinum prosthesis and in 25 patients (7%) the Teflon prosthesis. **Conclusion:** This service uses in most of its surgeries the titanium prosthesis. Excellent postoperative results have been obtained with auditory improvement and patients' quality of life.

Keywords: otosclerosis, stapes prosthesis, stapedotomy.

8847. Epidemiological Pattern of Hearing Losses in Brazil: The Importance of Sex, Age and Ethnicity

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Introduction: The hearing loss varies with its etiology, can be sensorineural (damage or lack of sensory cells in the cochlea or injury to the auditory nerve), conductive (obstruction of sound passage through the external and middle ear) or mixed. **Objective:** To evaluate the epidemiological pattern of hearing loss its ethnicity, age and sex in the Brazilian states over 5 years. **Method:** This is an ecological, descriptive study, based on data from the Hospital Information System (SIH/SUS) between 2013 and 2017, associated with literature review in the PubMed, MedLine and SCIE-

LO databases. **Results:** Brazil had 4,766 hospitalizations, the Southeast Region (SE) was predominant, with 2,807 cases, especially São Paulo with 2,010 cases, 91.59% more hospitalizations than the North Region (NO), the lowest with only 169 hospitalizations. The predominant age group was 1-4 years, 1,712 hospitalizations (35.92%), 956 cases in the SE, compared to only 66 in the NO. The least affected age group was less than 1 year, with 39 hospitalizations (0.81%). The female population was the most affected, with 2,406 hospitalizations (50.48%), and the white, with 2,642 hospitalizations, 1,847 in the SE, and 87 hospitalizations in the NO. The least indiscernibly was the Indigenous population, with only 1 hospitalization, being this, in the SE. **Conclusion:** The Brazilian region with more hospitalizations due to hearing loss was the SE, especially the state of São Paulo, where the largest population numbers in the country are concentrated. In addition, female, children and white ethnicity lead incidence rates.

Keywords: hearing loss, otorhinolaryngology, epidemiology.

8888. Cervical Vestibular Evoked Myogenic Potentials and Video Head Impulse Test in Ménière Disease

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Introduction: Ménière's disease is among the most frequent causes of vestibular disorders. Even being a clinical diagnosis, understand the pathophysiology and clinical course of the disease through tests, allows to improve prognosis and more effective treatments. **Objectives:** To describe the results of the Cervical Vestibular Evoked Myogenic and Video-Head Impulse Test in patients diagnosed with Definite Ménière's Disease and to correlate with clinical-demographic characteristics. **Methods:** The sample was constituted of 50 participants, of which 29 were the study group and 21 were the control group. The patients were submitted to a questionnaire, otoscopy, audiometry and vestibular function assessment through Cervical Vestibular Evoked Myogenic and Video Head Impulse Test. **Results:** For Video Head Impulse Test, the lateral canal gain values below 0.77 were considered altered and for the vertical channels below 0.61; the percentages of normality were 82.76% lateral, 89.65% posterior and 91.37% anterior. For Cervical Vestibular Evoked Myogenic Potential, the upper limits of the latencies were 18.07ms for p13 and 28.47ms for n23; 19.57% prolongation of p13 and 4.35% of n23 and 20.68% were absent. **Conclusions:** For Video Head Impulse Test a decreased gain of the vestibulo-ocular reflex for the lateral canal, with a higher incidence of overt type corrective saccades in comparison with the control group. For Cervical Vestibular Evoked Myogenic Potential, there was a significant difference between the groups for the Inter-amplitude parameter, including for asymptomatic ear. The results of the tests showed no correlation with the clinical-demographic characteristics of the patients.

8902. In situ study of RNA Respiratory Virus Infection and Replication Fixed in Tissues of Patients with Chronic Rhinosinusitis

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Introducion: Chronic rhinosinusitis (CRS) is an inflammation of the nasal mucosa and paranasal sinuses, which often leads to surgery to remove some tissues from that region. Several respiratory viruses are detected in biopsies of nasal polyp, middle concha and mucosa of the sinus face of patients with the disease, but their role in triggering chronic inflammation is unclear. **Objectives:** The present study aimed to detect the replication of rhinovirus, metapneumovirus and respiratory syncytial virus in the nasal polyp, middle concha and mucosa of the face surgically removed from patients with chronic rhinosinusitis. **Methods:** To evaluate the replicative activity, viral capsid proteins were detected by immunohistochemistry (IHC). After the detection of the proteins of these respiratory viruses, the samples will have their tested phenotypes, mucus producing cells and hairy epithelial, mast cells, eosinophils and lymphocytes through the SIMPLE technique. **Conclusion:** The present study demonstrates the presence of rhinovirus, metapneumovirus and respiratory syncytial virus replication within the nasal polyp, middle shell and mucosa of the facial sinus, revealing a possible persistence of HRS, HRSV and HMPV in the tissues of patients with chronic rhinosinusitis, which can thus be reservoirs of virus in the absence of symptoms of acute infection.

Keywords: chronic rhinosinusitis disease, virus, infection, replication.

8915. Major Facial Aesthetic Complaints of the Elderly

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Introduction: A progressive increase in elderly population occurs in the whole world. Among the alterations that come with aging there are the changes in facial aesthetics. The first facial manifestations of senescence happen as from 35 years old. And, with 80 years, these alterations become more evident. **Objective:** To determine the more frequent aesthetics complaints of the elderly population and the socioeconomic characteristics of them. **Methods:** A cross-sectional, analytical, comparative study was enrolled with 249 elderly, between January-July 2017, in a hospital in Curitiba, Paraná state, Brazil. A questionnaire with 14 queries and 3 facial figures with aging marks was applied.

Results: The mean age of the interviewers was 69.9 years old, with female predominance (66,3%). 61.9% was satisfied with its facial aesthetics. Discomfort with wrinkles was present in 63.2% of the female group and in 38.6% among the males. The more mentioned facial areas were frontal (51.6%) and periocular (45.1%). Higher education ($p<0.003$ /OR:2.35/CI 95%:1.34-4.12) or wage income > 5 minimum wage ($p<0.001$ /OR:3.5/CI 95%:1.88-6.48) are related to higher chances of wishing to do a facial aesthetic procedure, as well as being female, independent of the educational level ($p<0.001$ /OR:5.45/CI 95%:2.89-10.3) or personal income ($p<0.001$ /OR:7.23/CI 95%:3.62-14.4). **Conclusion:** Individuals of the third age, especially females, presents complaints related to the aging process. Superior facial area is the more troublesome to people > 60 years old. Elderly with higher education, higher personal income and of the female gender have more chances to perform facial plastic surgery.

Keywords: elderly; facial aesthetic; facial aging.

Otorhinolaryngology

E-Posters

8049. Diode Laser for Subglottic Stenosis due to Granulomatosis with Polyangiitis: A Case Report

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Introduction: Granulomatosis with Polyangiitis (GPA) or Wegener's granulomatosis is a rare disease, affecting 3 in 100,000 people. It's an idiopathic systemic inflammatory disease characterized by necrotizing granulomatous inflammation and vasculitis, affecting upper and lower airways and kidneys. Drug treatment includes glucocorticoids and/or immunosuppressants, like cyclophosphamide. **Objectives:** Report a case of subglottic stenosis, caused by GPA, treated with Diode laser **Resumed Report:** M.C.L, female, 43 years old, was diagnosed with GPA in 2012, presenting recurrent upper airways infections, pauci-immune crescentic glomerulonephritis, cutaneous lesions and C-ANCA positive. The initial condition complicated with dyspnea, and subglottic stenosis was diagnosed. Treated with successive dilatations due to the stenosis recurrence, requiring a tracheostomy in May 2014. She received pulses of cyclophosphamide and the maintenance is with azathioprine and prednisone, with good clinical and laboratory disease control. In 2018, diode laser surgery was performed. The patient presented satisfactory evolution after the procedure and the decannulation was initiated on the twelfth post-operative day, remaining asymptomatic up to thirty-fifth, when she presented an episode of upper airways infection, with respiratory repercussion. It was initiated budesonide 200 mcg oral inhalation twice a day and she was submitted to airway dilation successfully. **Conclusion:** Subglottic stenosis in GPA occurs in about 9% to 16% of patients, being more common in young people. Its treatment is complex and multidisciplinary, with high recurrence rates. In this case was used diode laser treatment, in order to obtain good hemostasis and little tissue lesion.

Keywords: subglottic stenosis, granulomatosis with polyangiitis, wegener.

8053. Cavernous Hemangioma In Oropharynx

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Infantile hemangiomas are the most common vascular benign tumors. They have a congenital origin, characterized by the formation of large vascular spaces filled with blood, attacking the region of the head and neck in 60% of the times. They have as preferential localization in the face: buccal mucous, lips and tongue; but rare attack oropharynx and larynx. They usually cause symptoms with months of life and the possibility of airway hemangioma must be considered in any child that develops progressive hoarseness or stridor to respiratory failure, cough and cyanosis. However, some lesions may ulcerate, leading to pain, bleeding, scarring or infection. **Objectives:** We reported a case of Cavernous Hemangioma of airway attended in the Institute of Neurocirurgy in Curitiba. **Summarized Report:** A 5-year-old male started with progressive snoring and mouth breathing. In cavum was showed: blue rounded lesion, 2cm diameter, below adenoid

tissue. Computadorized tomography: solid lesion expansive in the posterior wall of oropharynx lobulated contours 6cm3 capturing contrast. Magnetic resonance: hyperintense signal in Short Tau Inversion Recovery sequence, obliterating the air column. We decided to start propanolol 5mg-day for 1 year, however, without remission of symptoms. So we did an endoscopic surgical resection with exeresis and cauterization. Anatomopathological proved it was cavernous hemangioma. **Conclusion:** We emphasize the importance of physical examination and valuing differential diagnoses. They have good prognosis, and the treatment varies with the size and risk of a rupture, as well the symptoms. It may be expectant, surgical resection, artery embolization, surgical enucleation or radiotherapy.

Keywords: hemangioma, cavernous hemangioma, neoplasms.

8057. Proposal for Systematization of Closed Surgical Technique for Nasal Tip Structuring in Caucasian Patients

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Introduction: Even today, rhinoplasty poses a challenge for the surgeon. In nasal tip surgery, adequate definition, projection and rotation are sought. In the analysis of the nasal tip, it is essential to evaluate the characteristics of the nasal cartilage, the skin type and the subcutaneous tissue of each patient. Better long-term results are more likely to occur when the tip support structures are preserved and reinforced. **Objective:** To suggest to the surgeon a surgical algorithm for structuring the nasal tip of Caucasian patients and to review the main surgical maneuvers used in this algorithm. **Method:** Approximately 3,000 Caucasian patients were divided according to their type of nasal tip structure. And, according to this division, a specific surgical management was proposed: I - Low definition and adequate support: Interdomal suture; II - Low definition and regular support: Interdomal suture and lateral Strut; III - Low definition with poor support: Interdomal suture, retrograde strut and tongue-in-groove (TIG); IV - Without definition and without support: Interdomal suture, retrograde strut, tongue-in-groove, nasal base suture and cerclage suture. **Conclusion:** The review of the 30-year results of the senior author using the algorithm presented for nasal tip structuring shows that this systematization is reliable, with long-lasting results and minimal revision rate.

Keywords: rhinoplasty, nasal tip, tongue-in-groove, columellar strut, domal suture.

8065. Case Report: Juvenile Angiofibroma and the Early Diagnosis Importance

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Introduction: The juvenile angiofibroma is a rare tumor, benign and locally invasive. It's accounts for 0,5% of the head and neck tumors. It's affects the male sex around 14 and 16 years in average. Recurrent epistaxis and unilateral nasal obstruction are the classical symptoms. The early diagnosis could detain the tumor progress. **Objective:** To describe the importance of the early diagnosis suspicion in young men with current epistaxis. **Resumed Report:** GSO, 14 years, male, caucasian, complains of right epistaxis and nasal obstruction 7 days ago. Previously healthy, he had currents epistaxis and progressive right obstruction nasal for 4

years. He has been treated as a common childhood epistaxis, sinusitis and allergic rhinitis. The rhinoscopy shows a nasal septum lateralized to the left, a reddish softened lesion and a thick secretion in the left nasal cavity; no active bleeding at the moment. The face tomography shows an expansive formation with a soft tissue attenuation localized at the right pterygopalatine cave. He was forwarded to the head and neck surgery team, a switch maxillary surgery with a weber ferguson incision was made and the hole tumor has been removed. Medical release was given 5 days after with clinical improvement to get ambulatory segment. **Conclusion:** The typical and discriminative case of unilateral nasal obstruction and current epistaxis in male teenager needs to have the juvenile angiomyxoma as a differential diagnosis. The non-appreciation of it must harm the treatment and prognosis having a progressive growth tumor.

Keywords: nasopharyngeal neoplasms, angiomyxoma, epistaxis, nasal obstruction.

8069. A Case Report of Pituitary Macroadenoma and the Transsphenoidal Surgical Approach

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Introduction: Most clinically nonfunctioning pituitary adenomas are of gonadotroph cell origin, however seldom express with clinical signs or symptoms associated to gonadotropin excess. Headaches, visual field compromise and low visual acuity, are the most common and prompted by pressure of the tumor near structures. The main treatment goal is the tissue decompression, being efficiently achieved in most cases through transsphenoidal excision of the tumor. **Objectives:** This study intends to show a case report of a patient with a pituitary macroadenoma that resulted in the compression of the optic chiasm. **Resumed Report:** F. N. C., a 37 year-old mixed race male, presented superior hemianopsia of both eyes for six months. A magnetic resonance of the skull and of the sella turcica showed the presence of an expansive lesion with the aspect of pituitary macroadenoma, compressing the optic chiasm. The patient was operated in September of 2014, using endonasal access to the skull base. After the surgery, F.N.C. recovered well. In March of 2016, occurred a new relapse of the lesion, with the same clinical symptoms that were shown before. In that occasion, succeed a surgical reintervention with excision and debulking of the tumor. The patient is stable and presents no sequels. **Conclusion:** The debulking technique was used with a transsphenoidal approach for this case because they are considered the most effective surgical treatment for full removal of nonfunctioning pituitary macroadenoma, and indicated for patients with visual field defects due to the compression of the optic chiasm.

Keywords: pituitary adenoma; debulking technique; macroadenoma.

8070. Incidence of Central Diabetes Insipidus After Removal of Tumor in the Anterior Base of Skull

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Introduction: Central diabetes insipidus is a clinical condition that affects the hypothalamic-pituitary axis, caused by a decrease in the hormone arginine-vasopressin. The tumor of the base of the cerebral skull is a benign or malignant tissue growth that originates from the structures of the base of the skull. The clinical presentation of these tumors varies according to the affected location, usually involving cranial nerves.

Objectives: Demonstrate the incidence of central diabetes insipidus in patients submitted to surgical procedure for removal of tumor in the anterior base of the skull by transsphenoidal access. **Method:** The sample consists of 212 cases submitted to pituitary tumor surgeries, between 2002 and March 2018, performed in 3 general hospitals of Paraíba. A retrospective study was conducted with consultation of the clinical processes of the respective patients and excluded all tumors of pituitary glands treated by the transcranial route. **Results:** A total of 212 patients underwent transsphenoidal surgery of the anterior cranial base. Among tumor types, 182 (85.8%) were nonfunctioning and 30 (14.2%) were functioning (secretory) tumors. Mortality was 1.4% (3 deaths). Of the remaining patients, 38 (17.9%) had central postoperative diabetes insipidus, which was the greatest complication found in this type of procedure. Of these patients, all of them progressed with central diabetes insipidus remission within weeks of the diagnosis. **Conclusion:** Diabetes insipidus is one of the most frequent complications after transsphenoidal manipulation of the Turkish saddle. If left untreated, the patient may develop with dehydration, hyperglycemia and hypernatremia.

Keywords: diabetes, adenoma, pituitary tumor.

8071. Extracapsular Resection of Pituitary Adenoma: Our Experience

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Introduction: Among sellar and parasellar tumors pituitary adenomas are the most common lesion. Different surgical techniques were described to facilitate resection of these tumors. The presence of pseudocapsule allows en bloc resection in this plane. **Objectives:** The aim of this study is to assess the efficacy of extracapsular resection technique as regards the feasibility, value, extent of resection, biochemical remission and the incidence of postoperative complications. **Methods:**

No special inclusion or exclusion criteria were used. The decision to use extra capsular technique was an intra operative choice. All patients had MRI of the sella and CT of the paranasal sinuses before operation. Post-operative assessment of the extent of resection was done by MRI on regular follow-up periods. Post-operative hormonal assay was routinely done. **Results:** Twelve patients were excised by this technique in the period between 2014 and 2018. 8 were hormone active and the other 4 were non-functioning adenomas. Total resection was achieved in 10 cases. Two cases had hypofunction and 27% had temporary Diabetes Insipidus (DI) postoperatively with no cases of permanent DI. **Conclusion:** extracapsular resection is a safe and effective technique in resection of pituitary adenomas especially in hormone active tumors.

Keywords: Pituitary macroadenoma, extracapsular resection, sellar tumors.

8072. Nasosinusal Polyposis with unusual Location: A Case Report
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Introduction: Nasal polyposis is a chronic inflammatory disease of the nasal mucosa or paranasal sinuses characterized by the formation of benign polyps. The pathogenesis is not known, although nasal polyps are associated with several systemic diseases, with asthma being the most frequent. **Objectives:** to describe an atypical location of the nasosinusal polyp besides reinforcing a better understanding of these lesions. **Resumed Report:** Woman, ex-smoker, 58 years old, with complaint of bilateral nasal obstruction, dry cough and dysphagia for solids and liquids beginning 4 years ago. Negative weight loss and epistaxis. Absence of alterations in the physical examination and the upper digestive videendoscopy. The videoendoscopy revealed presence of mass occupying 95% of the nasopharynx to the right, obstructing ostium ipsilateral tubal. Endonasal removal was performed through the mass pedicle located in the cavum region and a smooth surface pink lesion was seen. A biopsy was performed and histopathological examination revealed polypoid formation lined by cylindrical cells accompanied by lymphoepithelial infiltrate. At outpatient return 1 month after the surgical procedure, the patient presented improvement of the symptoms. **Conclusion:** The most common sites of origin reported in the literature are the middle concha, ethmoidal bulla, uncinate process and ostium of the maxillary or ethmoidal sinuses. Other locations are rare. The main goals of treatment are to eliminate symptoms, establish oral breathing and prevent recurrence of polyps.

8076. Sleep Quality and Daytime Sleepiness in Asthmatic Patients: A Systematic Review

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Introduction: John Floyer was the first to describe the events related to nocturnal asthma in 1698. However it was not until recently that studies have begun to describe the effect of asthma on sleep quality and daytime sleepiness. Sleep impairment can have strong effects on daytime productivity and life quality. The fragilities of the actual knowledge about this topic justify this systematic review on its most recent data. **Objective:** to report the most recent data concerning sleep quality and daytime sleepiness in asthmatic patients and its instruments of evaluation. **Data synthesis:** 103 articles were found and seven of them were selected according to the inclusion criteria. Most studies utilized Asthma control questionnaire and Epworth scale to evaluate daytime sleepiness, but other methods like sleep diary and actigraphy were used as well. Adults and children of varied asthma severity were included. The results of the evaluated studies showed that those individuals presented altered sleep function, including: Those with non-controlled asthma took longer to fall asleep at night; Poorer sleep quality was associated with worse asthma control, except for asthmatic children; More daytime sleepiness, difficulty in maintaining sleep and early morning awakening; Children with asthma had more sleepiness during their activities and more frequent school absences. **Conclusions:** The results showed that asthmatic patient had worse sleep quality, fewer hours of sleep and more daytime sleepiness with impairment of their activities, independently of their age.

8085. Postoperative Care in Septoplasty: Current Clinical Evidence
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Introduction: Septoplasty is one of the oldest and most common surgeries performed by otolaryngologists. However, to date, we have observed that postoperative care still varies greatly according to the experience and preferences of the surgeon, to the detriment of the scientific evidence. **Objective:** To review the most recent studies on the subject in order to provide reliable and easily accessible information, allowing surgeons in the area to offer the best medical practice. **Methodology:** Relevant bibliographic systematic review, in which research published in the last ten years evaluating the risk of complications, pain, discomfort and nasal obstruction after septoplasty will be investigated, comparing with the care adopted after surgery and perioperative, regardless of the technique used. **Results:** As with the review studies by Chen et al. (2017), Yilmaz et al. (2008) also evaluated a perioperative factor with the goal of subsequent pain control. In this case the variable was the use of levo-bupivacaine as a local anesthetic. This drug, the levorotatory enantiomer of bupivacaine, has lower cardio and neurotoxicity, despite maintaining the analgesic potency of bupivacaine. **Conclusion:** The use of antibiotic prophylaxis is unnecessary, but when indicated, a single dose of intravenous cefazolin 1g should be used soon after the procedure. In the perioperative period pregabalin prescription is indicated before surgery, levo-bupivacaine infiltration at the beginning and suture at the end of the bed. The nasal lavage should be performed with hypertonic saline or association of saline with fluticasone propionate in high volume and low pressure.

Keywords: septoplasty; post-operative care; analgesia.

8087. Juvenile Recurrent Respiratory Papillomatosis, an Unusual Presentation of Stridor: A Case Report

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Introduction: Recurrent respiratory papillomatosis is the most common benign, often multi-focal laryngeal neoplasm, caused by the human papilloma virus, primarily of the subtypes 6 and 11, which constitute 90% of all recurrent respiratory papillomatosis cases. Juvenile recurrent respiratory papillomatosis conventionally refers to the subset of recurrent respiratory papillomatosis with onset of disease occurring at or below the age of 12 years and remains the most common benign neoplasm of the larynx in children. The most common presentation of recurrent respiratory papillomatosis is hoarseness, but may also present weak cry, chronic cough, stridor or even complete aphonia. The stridor can be confused with the expiratory wheeze associated with asthma. A child with respiratory distress requiring urgent intervention is rare. **Objectives:** Report a case of laryngeal papillomatosis presenting stridor **Resumed Report:** Female patient, 10 years old, admitted for dyspnea and inspiratory stridor investigation, refractory to clinical treatment. Videolaryngoscopy showed a papillomatous lesion in the vocal folds, obstructing about 80% of the lumen. Larynx microsurgery was performed for resection of the lesion, without intercurrences. On the 5th postoperative day, she was discharged from hospital without complications. On the 8th postoperative day, another videolaryngoscopy was performed showing

symmetrical vocal folds and absence of new lesions, evolving without complaints or dysphonia. **Conclusion:** This case highlights the importance of defining the quality of stridor. Laryngeal papillomatosis is rare, but due to its morbidity it must always be included in the differential diagnosis of recurrent paediatric stridor.

Keywords: pediatric laryngeal disease; recurrent respiratory papillomatosis; stridor.

8091. cVEMP (Cervical Vestibular Evoked Myogenic Potential) on the Diagnose of the Cerebellopontine Angle Schwannoma
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Introduction: Vestibular Evoked Myogenic Potential is a method of evaluation of the vestibular-spinal reflexes. When applied to the sternocleidomastoid muscle it can evaluate the integrity of the vestibular-cervical reflex path, from the sacule through the inferior vestibular nerve, spinal nerves to the neuromuscular plate. Often the reflex absence, or an asymmetrical response (interaural difference- IA) can show an injury at any point of this path, while latency delays are typically described as retro labyrinth lesions, such as cerebellopontine schwannomas. **Objective:** To correlate the results of cVEMP on cerebellopontine schwannoma patients. **Methods:** Data analysis, at an ENT specialized center, of the cVEMP results on cerebellopontine schwannoma patients in comparison to the findings of cVEMP on a control group; volunteers from a reference study at the institution, with no vestibular or cochlear clinical alterations. **Results:** There were 18 patients at the Schwannoma group, which, 2 had normal cVEMP results; 12 showed reflex absence; 3 significant IA; and just 1 showed latency delay as an abnormal result. At the Control group there were 60 individuals, which only 8 indicated abnormal **Results:** 3 showed significant IA, 5 had latency delays, and no absence of the reflex was found at the control group. **Conclusion:** An abnormal cVEMP, and the finding of absence of the cervical-vestibular reflex, individually, showed significant difference between the Schwannoma group and the Control group. No similar description of this use of cVEMP was found on literature; showing statistical significant findings at the use of this method on cerebellopontine Schwannoma patients.

Keywords: cVEMP, Schwannoma, vestibular reflexes.

8102. Case report: Open Rhinoseptoplasty in Teenage Patient
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Introduction: Rhinoseptoplasty is the repair of the nasal pyramid associated with the surgery of the nasal septum, in order to improve aesthetic and functional complaints. The crooked nose's major component is the developmental defect of the nasal septum. In this correction, the septum should be the main target of the treatment in conjunction with cartilage grafts for the camouflage and osteotomies. To allow proper growth and development of the nasomaxillary complex, deformities should be corrected as early as possible. **Objectives:** To present results of an open functional rhinoseptoplasty in a thirteen year old patient with congenital crooked nose. **Resumed Report:** Thirteen year old boy with a congenital crooked nose submitted to an open functional rhinoseptoplasty. The surgical approach of the crooked nose in this patient was performed with an open technique and correction of the septum as described by Goodman. The

nasal tip was defined with a Strut, placement of Spreader Graft on the concave side of the septum by subpericondrial tunnel and lateral, paramedian and transverse osteotomies. **Conclusion:** Deviation of the bone and cartilaginous pyramid may favor the appearance of septal deviations and cause an intense worsening of the patient's breathing. Conservative modifications of the nasal septum and the performance of osteotomies in children do not alter facial growth, therefore, deformities should be corrected as soon as possible to provide harmonious growth and avoid the severe sequelae found in mouth breathing.

Keywords: rhinoseptoplasty, nasal septum deviation, teenage, crooked nose.

8133. Nasopharyngeal Stenosis After Adenotonsillectomy

How to Approach

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Introduction: Adenotonsillectomy is one of the most performed surgeries in otorhinolaryngology, and is considered safe. But it can also present complications. This case is about a nasopharyngeal stenosis due to an unnecessary exposition or excessive cauterization causing adhesions in the posterior wall of oropharynx and nasopharynx to the tonsilar pillars. **Objective:** Present the surgical choice of treatment from this department to solve the nasopharyngeal stenosis due to adenotonsillectomy. Abstract: P.A.L, male, 15 came to us in 2017 with nasal obstruction, posterior rhinorrhea, nasal speech and snoring after adenotonsillectomy with septoplasty and turbinatectomy in 2014. Endoscopic examination showed soft palate stenosis with nasopharynx almost in its totality, with swallowing muscles preserved. A CT scan was made and the following surgical procedure was performed: mouth opener inserted and soft palate stressed with vesical catheter. With a 45 degree sinuscope, transoral and nasal visualization was possible, dissection of the posterior wall with electrocautery saving the palatal area anteriorly using four hands in the field. Folley catheter was placed preventing new stenosis. Immediately post-operative showed ear fullness, dysphagia and neck ache. Five months later snoring and nasal speech remains. Six months later the same technique was applied, with no cautery or catheter used, a number 12 blade was introduced and lateral sphenoid removed. **Conclusion:** Nasopharyngeal stenosis after adenotonsillectomy is rare but should be avoided with careful techniques preserving at least one of the surfaces of the palate. When it does occur, surgeon reestablish the nasopharyngeal function as palatopharyngoplasty is the guide for a successful surgery

8135. Epidemiological Evaluation of Blefaroplasty in Cajuru Universitary from Hospital from 2016 to 2018

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Introduction The eyes and periorbital region play an important role in facial harmonization, congenital alteration, trauma and palpebral aging may be responsible for low self-esteem and patient dissatisfaction. **Objectives** Compare variants of age, sex and topography of blepharoplasty at Hospital Universitário Cajuru from 2016 to 2018. **Methodology** A total of 26 cases of blepharoplasty were analyzed in the Hospital Universitário Cajuru - Curitiba / PR between 2016 and 2018. These records were obtained, according to the year

of the procedure, from the surgical registry of the specialty. This data was then tabulated and analyzed in a Microsoft® Excel spreadsheet. **Results** Of the total of 26 patients, 85% are female. Approximately 77% of cases occurred in people over 50 years of age, of whom half were 60 years or older. Regarding topography, 61% involved procedure in the upper and lower eyelid, while only the lower one was present in 8% of the cases. **Conclusion** The indication for blepharoplasty in our service was mostly for patients 50 years of age or older. The prevalent gender was the female, being superior and inferior procedure the most indicated

8138. Nasal Foreign Body with 6 Years of Evolution: A Case Report of Rhinolithiasis

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Introduction: Foreign bodies in otorhinolaryngology is quite common. Children usually omit their parents' introduction and can then progress to rhinolithiasis, which is the deposition of limestone around them. **Objective:** The objective was to present a case of rhinolith occasionally diagnosed in a child attended by the Hospital Universitário Cajuru, Curitiba, Paraná. **Case report:** T.B.P., 9 years old, female, with nasal obstruction and unilateral rhinorrhea for 6 years. Topical treatment for allergic rhinitis was started, with no therapeutic success, and then cavum radiography was requested. Radiopaque image with a metal screw-like shape was found, which the patient's mother believes was introduced with 3 years old. Next day, patient was admitted to the Hospital for removal, in a surgical center, with patient under general anesthesia. The rhinolith was located in the left nasal fossa, between inferior turbinate, septum and nasal floor, well adhered to mucosa. The procedure was performed under direct vision, using nasal speculum and bayonet forceps. There was no complications. Patient was discharged hospital on the same day, with symptoms improved, received guidelines for nasal lavage and topical antibiotic use. **Conclusion:** Although there are few cases described, rhinoliths should always be included in the differential diagnosis of unilateral nasal obstruction, rhinorrhea, chronic headache, epistaxis and cacosmia. Detailed anamnesis and otorhinolaryngological examination are required, and there may be a need for complementary imaging methods. Treatment is based in a complete removal of the lesion and cleaning of surrounding granulation tissue.

Keywords: nasal obstruction; rhinitis; nose diseases.

8140. Cervical Tropical Pyomyositis: A Case Report

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Introduction: Tropical Pyomyositis is a suppurative process of skeletal musculature caused by *Staphylococcus aureus*(90%), with preference by men between 10 and 40 years. Commonly involved muscles are lower limb musculature, as quadriceps and glutei. **Objectives:** Case report of cervical tropical pyomyositis in a patient attended in the Santa Casa Hospital of Curitiba, Paraná, in February, 2018. **Resumed Report:** F.L.F., male, 34 years-old, complaining of right lymph node enlargement since 90 days ago, evolved to significant local increase, phlogistic signs and fever in the last 6 days. Physical exam showed right cervical volume increase, local

heat, redness and pain. At day one of hospitalization, ceftriaxone, clindamycin and hydrocortisone were started; laboratorial exams showed leukocytosis and increased C-reactive protein. Contrast tomography showed thickening and densification of the subcutaneous plane in the right posterior cervical region and thickening of the musculature, with no signs of collections; Cerebral and cervical vessels angiographies were normal. At day seven, neck resonance confirmed the diagnosis of tropical pyomyositis, revealing posterior paravertebral and right suboccipital musculature collection and soft tissues edema. Patient was discharged on the seventh day of admission with significant clinical improvement and progressive decrease of inflammatory and infectious laboratorial markers. There was no need for surgical drainage. **Conclusion:** This case was an atypical presentation of Tropical Pyomyositis. Cervical musculature infection is rare. Besides, the patient did not carry any immunosuppression condition, commonly described in Tropical Pyomyositis. Treatment consists of antibiotic therapy and surgical drainage of the abscess, if necessary.

Keywords: piomyositis; abscess; torticollis; cervicalgia.

8141. RNA Extraction from Wistar Rat Cochlea for qRT-PCR

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Otology research has developed considerably in recent years and molecular analysis is crucial to identify metabolic pathways and therapeutic targets. However, the structure of the cochlea limits the amount of cell mass and special care is required for the extraction of RNA. Studies related to this technique in the cochlea are scarce in the literature with difficulties for researchers in this area. In this way, we describe a method for extracting RNA in Wistar rats for qRT-PCR in order to clarify some aspects and obtain a good quality material.

8143. Deep Penetrating Trauma in Oropharyngeal Isthmus by Cotton Candy Stick: Case Report

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Introduction: Parapharyngeal space is an important way of disseminating infections in the head and neck. Traumas in this are very deadly. **Objective:** The objective was to report a case of a patient who presented deep penetrating trauma in oropharyngeal isthmus by with a cotton candy stick. **Resumed Report:** Male, 5 years old, with same-level fall with a cotton candy stick inside the mouth, evolving with deep penetrating trauma in anterior tonsillar pillar to the right. In the tomography, radiophonic material was found in oropharyngeal isthmus into parapharyngeal area, with the presence of air in parapharyngeal space. Contrast tomography was performed, and vessel lesion was discarded. Then was done to the traction of the cotton candy stick in surgical center, under general anesthesia, besides the mucosa division and local exploration. Hemostasis performed with simple catgut 4.0, without occluding operative wound, and bis-muth subgalate. Patient progresses with improvement of oral opening, making use of liquid and cold diet, antibiotic and steroid therapy. Ultrasonography was performed, demonstrating skin, subcutaneous and musculature with normal sonographic aspect, without masses or organized collections, and then being hospital discharge. With one month postop-

erative, patient developed granuloma with wound of about 0.4cm, without denying masticatory changes and painless. It was then chosen by conservative treatment. **Conclusion:** Deep penetrating trauma in the parapharyngeal space can easily compromise vessels of the head and neck and spread infections. The early diagnosis and appropriate treatment are imperative to the opportunist chance of survival of patients.

Keywords: pharynx; stomatognathic system; oropharynx; palatine tonsil.

8144. Congenital Cervical Cleft of Midline: Case Report of a Rare Malformation

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Introduction: A rare congenital anomaly of the anterior neck region, common in caucasian women. Caused by failure of the fusion of derivatives of the first and second gill arches in the intrauterine period, during the third and fourth week of intrauterine life. Although present at birth, it is often overlooked or misdiagnosed. **Objective:** To report a case of congenital midline cervical fistula treated at the Otorhinolaryngology Service of InstitutoPenidoBurnier, Campinas - SP, in 2017. **Resumed Report:** Female child, 5 years old, fibrotic and hyperemic, with a slightly desquamative appearance, with absence of ulcerated or locally infiltrating areas. A lesion approximately 6 cm long and about 1.5 cm wide, extending from the superior border of the sternum bone to the submental region near the symphysis of the mandible, with a slight limitation of the neck extension. Imaging examinations were requested, such as cervical ultrasonography and computed tomography of the neck, which showed a linear structure in the cervical midline, with soft tissue densities and no inflammatory signs compatible with congenital cervical line fistula. Opted for surgical treatment through the z-plasty technique. **Conclusion:** Numerous congenital malformations can affect the anterior portion of the neck. Congenital midline cervical cleft represents a rare defect, often erroneously diagnosed at birth as an anomaly of the thyroglossal duct, dermoid cyst or other branchial cleft anomaly, delaying diagnosis and correct therapeutic intervention. Immediate clinical diagnosis and surgical treatment during childhood are essential to ensure the functionality and aesthetics of the patient.

Keywords: congenital cleft; cervical; midline; craniofacial malformation.

8148. Mandibular Keratocyst a Case Report

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Introduction: Keratocyst is an odontogenic cyst with aggressive and relapsing behavior. Due to these characteristics, invasive procedures can be adopted to reduce recurrence. **Objective:** Report the case of a patient with a tumor in the mandible body, the diagnostic strategies used and the therapeutic possibilities for conducting the pathology. **Case Summary:** 35 years old, male, previously healthy, reported a growth painless lesion in the left side of the jaw for the last 8 months. Physical examination revealed an expansive lesion in the left half of mandible body. A CT scan showed a hypoattenuating nodular formation in the back segment of left mandible body and segments, extending posteriorly to the ascending portion of the mandible, resulting in discreet bone

expansion and cortical tapering. It was observed dehiscence on the occlusal face of the alveolar process back to the left second molar, in addition to reduction of the caliber and caudal displacement of the left inferior alveolar nerve canal. Previously it maintained contact with the posterior face of the roots of the second lower left molar and average about 4.0 X 2.1 X 1.7 cm. We adopted an incisional biopsy with anatomopathological study reporting the presence of membranous and greenish mucus secretion, compatible with odontogenic keratocyst with fibrosis and xanthomatous inflammatory reaction. **Conclusion:** Due to the behavior of the odontogenic keratocyst, it's better to perform an invasive procedure with the purpose of reducing recurrence. In this pathology, resection or enucleation with or without peripheral osteotomy can be chosen a lower chance of recurrence.

8150. Relationship of Socioeconomic Status to Olfactory Function

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Socioeconomic status is one of five determinants of health. To what degree education and other socioeconomic factors influence the chemical sense of olfaction is not clear. Most studies that have assessed such influences come from countries lacking large disparities in education and income and generally view such measures as nuisance variables to be controlled for statistically. In this study, we evaluated the influences of education and income on odor identification in a diverse sample of subjects from Brazil, a society where large disparities in both income and education are present. The 40-item University of Pennsylvania Smell Identification Test (UP-SIT) was administered to 1572 healthy Brazilian citizens with no reported olfactory deficits and for whom detailed socioeconomic and educational status data were available. Univariate and multivariate models were employed to examine the influence of socioeconomic status on the test scores. After controlling for age, sex, ethnicity, and smoking behavior, income and educational level were positively and independently related to the olfactory test scores (respective $p < 0.001$ & 0.01). Both linear and quadratic functions described the relationship between the UPSIT scores and the levels of education and socioeconomic status. Individuals of lower socioeconomic status performed significantly worse than those of higher socioeconomic status on 20 of the 40 odorant items. This study clearly demonstrates socioeconomic status significantly influence the ability to identify odors. The degree to which this reflects differential exposures to xenobiotic agents, cultural differences, familiarity with odors or their names, cognitive development, or other factors requires further investigation.

8153. Large Vestibular Schwannoma Compressing the Central Nervous System: Case Report

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Introduction: vestibular schwannomas expand slowly in the internal auditory canal, in the cerebellopontine angle, inside the cochlear and the labyrinth. The majority of "acoustic neuromas" presents with unilateral hearing, tinnitus, decreased word understanding, vertigo, headaches, and facial numbness. Larger tumors can displace and compress the brainstem. Upholding or improving quality of life is the

central concern in counseling and treating a patient with vestibular schwannoma. **Objectives:** to describe a case of vestibular schwannoma initially diagnosed only as idiopathic sudden deafness. **Resumed case report:** we present a case of a 29 years old female patient, with left severe hearing loss, initially attributed to the sequel of idiopathic sudden deafness, based on clinical and audiometric data only. Her symptoms progressively worsened during the following year. She then sought our service for second opinion, when we identified alterations in clinical tests: stepping test deviation to the left, grade one left facial palsy, left dysmetria and external acoustic meatus paresthesia. Magnetic resonance imaging showed lesion up to six centimeters in diameter in the left CP. The patient maintained the preoperative pattern of facial movement, worsening of dizziness in the first fortnight and moderate headache intensity up to the present moment. **Conclusion:** more accurate clinical evaluation allowed revising the diagnostic hypothesis and proceeding to a more in-depth examination. Slow-growing tumors are a diagnostic challenge. However, excessive delay in diagnosis can impair the person's quality of life and greatly increase the morbidity of treatment, in addition to hindering postoperative recovery.

8155. Fungal Rhinosinusitis - A Case Report

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Introduction: Fungal rhinosinusitis has been receiving due attention, with increased diagnostic suspicion. Its classification, based on the immunological relationship between the fungus and its host and the degree of invasion of the mucosa. Knowledge of the type of fungal flora, prevalence, symptomatic presentation, physical exam aspects in patients with chronic rhinosinusitis will allow a better understanding of the disease. **Objectives:** To report a case of fungal rhinosinusitis submitted to surgical treatment. **Resumed Report:** B.S.S, 34 years old, born in Itaperuna, RJ. It presents chronic rhinosinusitis with a 6-month course in treatment with different antibiotics without significant symptom improvement (dry cough, facial pain, etc.). Computed Tomography of sinuses on the face showed a veiling of the frontal sinus, ethmoidal and left maxillary sinuses. Patient was submitted to the surgical treatment in which it evolved without intercurrences. **Conclusion:** Allergic fungal sinusitis should be remembered in all atopic patients with chronic sinusopathy, and should be investigated especially in those reporting the elimination of thick and dark mucus buffers, and / or when there are extensive and characteristic tomographic changes. Its treatment requires a clinical-surgical approach with interdisciplinary follow-up, involving the otorhinolaryngologist and the allergist-immunologist. Increasing our knowledge and understanding of fungal disease will improve the clinical suspicion, the accuracy of the diagnosis and the effectiveness of the treatments, providing a better prognosis for the patients.

Keywords: fungal rhinosinusitis, atopy, sinusopathy.

8156. Choanal Atresia – A Case Report

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Introduction: Congenital disease uncommon, more frequent in females. Unilateral anatomical defects are more common, with the right nostril twice more affected. There

are several explanatory theories for this condition: persistence of the oropharyngeal membrane; of the buconasal membrane; mesodermal adhesion and misalignment of mesodermal flow secondary to local genetic factors. **Objectives:** Record clinical case of choanal atresia in the otorhinolaryngology. **Resumed Report:** Q.M.P, 16 years old, native of Bom Jesus-RJ. It looks for the otorhinolaryngology service with complaint of nasal obstruction and serous secretion, worse in the right nostril. A tomography of the breasts was submitted to the face, where it was revealed choanal collabent. Patient was directed to the surgery to correct the malformation through the endonasal, followed without intercurrences and with significant improvement of the postoperative symptoms. **Conclusion:** The diagnosis is based on the clinical history; which varies according to the atresia. Bilateral presents with complete nasal obstruction - leading to immediate respiratory insufficiency, stridor, increased respiratory effort and cyclic cyanosis; the unilateral, has the most frequent clinical finding of unilateral late mucoid discharge. Diagnostic confirmation through complementary examinations such as computed tomography of the nose and sinuses and nasal fibroscopy is fundamental, since they allow the surgical planning to topograph the lesion, evaluate its extension and classify it as bone, membranous or mixed. The immediate treatment aims at adequate maintenance of the airways for patient stabilization and scheduling of surgical correction.

8157. Nasopharyngeal Angiofibroma – A Case Report

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Introduction: It is a benign vascular tumor, rare of great local destructive potential, originated in the region of the sphenopalatine foramen. It presents as a lobed submucosal mass with reddish coloration, supplied by the ipsilateral or bilateral internal maxillary artery, the most common symptomatology is epistaxis with unilateral nasal obstruction and also unilateral rhinorrhea. **Objectives:** To report case of juvenile Nasopharyngeal angiofibroma evaluated by otorhinolaryngology service of Hospital São José do Avaí. **Resumed Report:** H.S.M., 18 years old, male for two years presenting recurrent epistaxis in the right nostril, headache and nasal obstruction. Subjected to multiple nasal tamponade and oral medications with partial resolution of the frame. CT was performed with contrast that showed mass in the right nostril extending to the sphenoid sinus with enlargement of the pterygopalatine fossa. Rhinoscopy: mass in the right nostril. Absence of facial deformities and ocular symptoms. Tumor classified as type II on the Chandler and Cols scale. Patient referred to hemodynamics for arteriography with embolization of the tumor and subsequent surgical excision by videoendoscopy and nasal tamponade. It evolved with good general condition and undergone endoscopic postoperative revisions without complications. **Conclusion:** Nasopharyngeal angiofibroma consists of a benign fibrovascular lesion found in young males. It totalizes, approximately 0,05% of the tumors of head and neck. The diagnosis is based on the clinical picture and radiological findings. The majority of the treatment is surgical, with embolization, hormonal therapy and radiotherapy as adjuvant treatment.

Keywords: tumor, sphenopalatine, nasal obstruction.

8158. Schwanoma Vestibular – A Case Report

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Introduction: It is the most common benign tumor among tumors of the cerebellar point angle, occurring in about 80 to 90% of cases, originating in the posterior cranial fossa. Among all intracranial tumors, the 8-pair schwannoma accounts for 2 to 7% of the permanent literature. Unilateral hearing loss is the earliest and most frequent symptom, tinnitus is the second most frequent complaint, vestibular symptoms such as vertigo and imbalance may be present. **Objectives:** To report a case of vestibular schwannoma evaluated by the otorhinolaryngology team of Hospital São José do Avaí. **Resumed Report:** C.T.P, 55 years old, male, native of Itaperuna-RJ. He sought the otorhinolaryngology service referring hypoacusis to the left for two years accompanied by vertigo. Computed Tomography scan of the skull revealed an expansive hyperdense lesion with a compressive effect on the brainstem. Physical examination and otoscopy without other changes. He was referred to the surgical center along with neurosurgery for total resection of the tumor. Patient progressed well without complications. **Conclusion:** The diagnosis can be made through audiometric tests and brainstem auditory evoked potential. Audiometry may present progressive or sudden loss, and the most characteristic is poor discrimination that is not compatible with the patient's hearing loss. Surgical treatment has been showing better results compared to expectant treatment and radiosurgery, not only from the point of view of total resection of the lesions but also from the postoperative morbidity.

Keywords: benign, unilateral hearing loss, tinnitus.

8159. Schwannoma of the Facial Nervous - A Case Report

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Introduction: Schwannoma of the facial nerve is a rare condition, but of great interest, in the differential diagnosis of the causes of peripheral facial paralysis. They are benign neoplasms, developed in Schwann cells. The disease triggers peripheral facial palsy, compromising innumerable nerve branches slowly or suddenly. It progressively violates the middle ear and the posterior wall of the external auditory canal, causing dysacusis. **Objectives:** Report case of facial nerve Schwannoma in our institution. **Resumed Report:** A.S.B.S., 32 years old, male, native of Miracema-RJ. He was referred to the Hospital São José do Avaí for otorhinolaryngological evaluation. Patient started facial paresthesia two years ago rapidly evolving with right facial paralysis. It was submitted to Computer Tomography and Magnetic Resonance Imaging of the skull, evidencing a globular expansive lesion extending the facial nerve canal, externalizing as mass in the retropharyngeal space. The biopsy was done via the right external auditory canal that confirmed the Schwannoma. Afterwards, the patient was referred to INCA for follow-up. **Conclusion:** Schwannoma of the facial is a rare entity that manifests itself with facial paralysis and is often misdiagnosed or poorly conducted. The patient may present with vestibular symptoms, dysacusis, and facial paralysis. Its treatment is specific, includes surgery for resection and even radiotherapy. But facial paralysis is sequelae due to degeneration of the facial nerve.

Keywords: Schwannoma, paralysis, dysacusis.

8160. Bilateral Nasolabial Cyst – A Case Report

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Introduction: Nasolabial cyst is a rare lesion located near the nasal alar cartilage and extending to the inferior nasal meatus and superior gingival-labial sulcus. This lesion has slow growth and variable dimensions (1.5-3cm). It is clinically characterized by fluctuating swelling in the region of the nasolabial sulcus, causing elevation of the upper lip. Its diagnosis can be made basically by the clinical picture and documented preferably by computed tomography. **Objectives:** We present a case of bilateral nasolabial cyst experienced in our institution, in order to discuss and highlight this rare bilateral case. **Resumed Report:** C.S.R., 24 years old, student, native of Itaperuna-RJ. She had reported for five months bulging in the lower region of both nostrils, especially the left nostril. Referred to the Hospital São José do Avaí for otorhinolaryngological evaluation. Rhinoscopy: Compressible smooth ablation of the bilateral nasal floor, bilateral nasolabial groove erasure. Patient referred to the surgical center for sublabial incision surgery in the gingivolabial sulcus to enable enucleation when his cystic capsule was removed. It evolved with good general condition, without any post-surgical complications. The post-surgical review was submitted after seven days, in perfect convalescence. **Conclusion:** Nasolabial cysts are infrequent lesions. The majority presents with unilaterally, well-located volume increase, local pain and nasal obstruction. Enucleation is the treatment of choice with low rates of recurrence. The highlight of the case is bilateral, which makes it even rarer.

8161. Infestation Of Myiasis In Oral Cavity - A Case Report

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Introduction: Myiasis is a relatively common occurrence that usually affects bedridden, elderly and psychiatric patients, but also healthy patients. The larvae lay their eggs in diseased or intact tissues, and their treatment consists in the mechanical collection of the larvae, an unpleasant and painful process. **Objectives:** To report infestation of myiasis in oral and nasal cavities in our institution. **Resumed Report:** C.S.R., 36 years old, male, native of Padua-RJ. He was referred to the Hospital São José do Avaí for otorhinolaryngological evaluation. A patient with psychiatric disease, he had infestation of myiasis in the oral cavity, affecting hard palate, soft palate and nasal cavity, with erosion communicating both cavities. It was submitted to mechanical collection of larvae in a surgical center, and then to ivermectin and prophylactic antibiotic therapy against secondary infection. He was hospitalized for six days and was taken to the surgical center daily for collection of the remaining larvae until discharge. **Conclusion:** Myiasis is an aggressive infestation, capable of degrading tissues easily, devastating mucous membranes, cavities and varied tissues. His injuries spread without limits until there is a resolutive intervention. We wish to emphasize the need for attention in the care of psychiatric patients, the elderly, bedridden or any population modality whose autonomic defense is impaired. In the treatment, the expulsion of the larvae and the use of ivermectin are indispensable.

Keywords: larvae, infestation, mucosae.

8162. Laryngeal Paracoccidioidomycosis - A Case Report

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Hospital São José do Avaí

Introduction: It is the most frequent systemic mycosis in Latin America, caused by the fungus, Paracoccidioides brasiliensis. Regarding the occupational distribution reveals a predilection for agricultural workers. The widespread chronic form is the most common, accounting for 60 to 70% of cases in adults, reaching mainly male patients over 30 years. The most frequent lesions are in the lung and oral mucosa. When there is laryngeal involvement, the vocal cords mainly occur, with dysphonia being the main complaint. **Objectives:** Report case of laryngeal paracoccidioidomycosis. **Resumed Report:** W.J.C, 54 years old, native of Itaperuna-RJ, resident of rural area and agricultural worker. He sought the otorhinolaryngological service of this unit with complaints of hoarseness for years, without any other clinical manifestation. A videolaryngoscopy was performed, which showed diffuse alteration in both vocal cords, with increased volume and color change. Thereafter, it was submitted to laryngeal microsurgery for resection and biopsy of the lesion. Evolving without any postoperative complications. **Conclusion:** All patients with suspected or diagnosed PCM should undergo an otorhinolaryngological evaluation and indirect laryngoscopy. The definitive diagnosis of the disease can be made by direct mycological examination, culture, histopathological examination and serologies. The gold standard is the identification of the fungus in the lesion. The presence of thick-walled yeasts and multiple budding identify Paracoccidioides brasiliensis.

Keywords: Paracoccidioides brasiliensis, mycosis, dysphonia.

8163. Esthesioneuroblastoma – A Case Report

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Hospital São José do Avaí

Introduction: Esthesioneuroblastoma or olfactory neuroblastoma is a rare neoplasm, originating in the olfactory epithelium. It is classified as a neuroectodermal tumor and differs from other neuroblast tumors by adult preference, with a bimodal age distribution. The symptoms are non-specific, which usually implies an advanced staging and worse prognosis. **Objectives:** To report a case of Esthesioneuroblastoma evaluated by the otorhinolaryngology service of Hospital São José do Avaí. **Resumed Report:** T.M.P, male, 47 years old, from Campos-RJ, sought the otorhinolaryngology service, reporting nasal obstruction three years ago, intermittent epistaxis and anosmia, mainly in the right nostril. We requested CT of the breasts of the face, which demonstrated extensive mass occupying all right nostrils, paranasal cavities and erosion of the cribriform lamina on the right. MRI confirmed a large and expansive tumor lesion with intracranial invasion. Patient submitted to nasal endoscopic surgery, proceeding to the removal of the tumor. After surgical procedure, nasal packing was placed in the right nostril. The collected material was sent for anatomopathological analysis and performed immunohistochemistry, evidencing olfactory neuroblastoma. He was referred to the Oncology service, performing chemotherapy treatment. **Conclusion:** Esthesioneuroblastoma is an extremely rare tumor, constituting 4% to 6% of the malignant neoplasms of the nasal fossae, and which derives embryologically from the cells of the neural crests. It

is important to note that CT and MRI complement the study, but because the microscopic characteristics are rather non-specific, it is important that the diagnosis be well established by immunohistochemistry.

Keywords: neuroblastoma, rare, epistaxis.

8164. Waardenburg Syndrome: A Case Report

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Hospital São José do Avaí

Introduction: Waardenburg syndrome is an autosomal dominant condition that presents variable penetrance and expressiveness of its characters. The most frequent clinical signs are: lateral displacement of the inner corners of the eyes (telecanthus), hyperplasia of the medial portion of the eyelids (sinofris), prominent and widened nasal base, changes in iris and skin pigmentation, congenital deafness, early graying. **Objectives:** Report case of Waardenburg syndrome in otorhinolaryngology. **Resumed Report:** F.J.M, three years old, from Cantagalo-RJ, was referred to otorhinolaryngology for the investigation of deafness, apraxia and behavioral alteration. On examination, he had a difference in iris pigmentation and some white hair. In the Otoacoustic Emission no emissions were found in the accomplishment of the same ones. Free field audiology did not respond positively. After confirmation, the patient is accompanied by specialized service. **Conclusion:** The diagnosis is clinical and has classification criteria. More than 90% of individuals with diagnostic criteria for type I Waardenburg Syndrome have identifiable mutations in the PAX3 gene. This is the only known gene associated with the syndrome and therefore is used in genetic counseling. We emphasize the importance of the detailed clinical study, including ophthalmological and otological examinations, of relatives of patients with this syndrome, for genetic counseling purposes. Family history and genetic testing are important because, in the case of autosomal dominant inheritance, most carriers have an affected relative. The prognosis for patients with dysacusis depends on adequate intervention, such as early amplification and educational intervention.

Keywords: Waardenburg, incarnate, sinofris.

8166. Widal Syndrome: Case Report

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Summary: Widal (SW) syndrome or Samter triad is composed of moderate / severe asthma, chronic rhinosinusitis with nasal polypsis, and intolerance to acetylsalicylic acid (AAS) or non-steroidal anti-inflammatory drugs (AINS) 1,2. It presents clinically as an evolutionary disease, with a characteristic pattern in the appearance of symptoms2. The onset of symptoms is usually in adulthood1. It can present as a rhinitis, initially, that evolves to pansinusitis and nasal polyps appearing1,2. Asthma may already be present from childhood or in adulthood1,2. The gold-standard diagnosis is the challenge test of the asthmatic crisis after contact with aspirin1. Treatment of these patients is performed through nasal surgeries associated with treatment with nasal corticosteroids for a prolonged time and systemic anti-leukotrienes associated with desensitization to AAS1. **Objective:** to understand the importance of the diagnosis of Widal syndrome and identify in patients with chronic rhinosinusitis.

Case report: CRT, 52 years old, arrived at the Otorrino Hospital of Cuiabá - MT referring to rhinitis and recurrent sinusitis in 2016 with adequate treatment. Reports follow-up with pulmonologist due to severe asthma and allergy to ASA and NSAIDs. She returns in April 2018 presenting recurrent rhinosinusitis. In the same consultation, a breast CT scan of the face was started, evidencing pansinusitis. Thus, pansinusectomy was proposed. In the intraoperative period, we found pansinusitis and bilateral nasal polypsis. Polypectomy and sinusectomy were performed. Equivalent to Widal's syndrome. **Conclusion:** an otorhinolaryngologist has a greater contact with patients with SW complaints. Thus proper diagnosis and treatment offer a better quality of life.

8167. Rhinolith Causing Chronic Nasal Obstruction

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Introduction: Rhinoliths are an uncommon condition which can present itself clinically causing symptoms of nasal obstruction, foul-smelling rhinorrhea, halitosis, headaches, and many others. Most cases are asymptomatic and found incidentally during clinical investigation. All age groups can be affected, and associated local diseases are common. **Objectives:** This report aims to describe and emphasize one rare but possible cause of nasal obstruction, as well as discuss the principles of investigation and treatment. **Resumed Report:** A 31-year-old woman presents with a long history of nasal obstruction, rhinorrhea, snoring, and daily sneezing crises, often resulting in epistaxis. Past medical history significant for few emergency admissions due to foreign bodies in nasal cavity during childhood. Physical exam showed moderate right inferior turbinate hypertrophy and rightward septal deviation. Paranasal sinuses CT scan showed a soft-tissue density material with calcification spots obliterating the right nasal fossa, sclerosis of the greater wing of the right sphenoid bone and of the posterior aspect of the nasal septum. Endonasal endoscopy confirmed the existence of rightward septal deviation and middle meatus swelling adjacent to dark stony material, bringing up the hypotheses of rhinolith or foreign body. Surgical removal of such material was then indicated, along with septoplasty, and ethmoid-maxillary sinusectomies. On same day post-operative report noses, the patient reported improvement of nasal air flow and no pain, bleeding or halitosis. **Conclusion:** This case exemplifies that rhinoliths, albeit rare, should be remembered as a differential diagnosis for chronic nasal obstruction.

Keywords: Rhinoliths, nasal, obstruction.

8174. Primary Inner Ear Schwannoma: Intracochlear Case Report

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Introduction: on rare occasions, vestibular schwannomas may present in the terminal branches of the eighth cranial nerve, being considered an intralabyrinthine schwannoma or primary inner ear schwannoma. Its diagnosis is related to hearing loss and to particular characteristics in imaging tests such as magnetic resonance imaging. The treatment, in turn, is dependent on the location and evolution of the lesion. **Objectives:** To report a case of a primary inner ear schwannoma with intracochlear involvement describing its

main characteristics. **Resumed Report:** A 65-year-old male patient without comorbidities complained of progressive right hearing loss beginning 12 years ago with persistent ipsilateral tinnitus. Otoscopy and otoneurological examination without alterations. The audiological examination showed moderate to profound sensorineural asymmetric hearing loss. At high resolution magnetic resonance imaging was observed material with gadolinium hypercaptation and low signal in the sequence fast imaging employing steady state acquisition (FIESTA) compromising the tympanic scale of the basal turn of the right cochlea, measuring 8.0mm x 2.5mm; cisterns of point-cerebellar angles and internal auditory conducts both free; the diagnosis was intracochlear schwannoma and the treatment of choice was conservative. **Conclusion:** According to the above, due to the location and size of the tumor, its growth index and the absence of important auditory and vestibular impairment, it was decided to continue with the vigilant conduct for the patient in question.

Keywords: schwannoma; intracochlear; hearing loss.

8175. Pharyngeal Actinomycosis Treated with Antibiotic Therapy

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Introduction: Actinomycosis is a rare suppurative and granulomatous infection. Cervicofacial involvement is the most common site, where 50% of cases occur. Symptomatology may mimic a number of other conditions, especially neoplasms and other infections. Should be included in the differential diagnosis of expansive lesions in the head and neck. The middle ear invasion is extremely rare. Diagnosis is obtained by biopsy of the lesion and / or culture. Treatment consists of surgical drainage of major lesions and antibiotic therapy for an extended period. **Objectives:** to report a clinical case of pharyngeal actinomycosis with methods of diagnosis, clinical evolution and treatment. **Resumed Report:** a 72-year-old male with viral liver cirrhosis (C virus) and type 2 insulin dependent diabetes mellitus, with progressive disease two years ago consisting mainly of severe transference dysphagia with weight loss, severe left otalgia with sporadic purulent otorrhea and dysphonia. He was submitted to the diagnostic investigation initially with neck tomography and retropharyngeal space biopsy that evidenced a chronic granulomatous inflammatory process with granules of actinomycetes. Stipulated treatment was ambulatory follow-up and prolonged antibiotic therapy, with good therapeutic response. **Conclusion:** Pharyngeal actinomycosis is an uncommon infection and difficult to diagnose requiring histopathological confirmation or culture. The prognosis is good, and the treatment with prolonged antibiotic therapy shows a progressive and significant improvement of the symptomatology.

Keywords: actinomycosis; pharyngeal; dysphagia.

8177. Safety and Efficacy in Obtaining Olfactory Epithelium in Biopsies from the Superior Turbinate

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Introduction: Olfactory epithelium biopsy has been shown to be a promising procedure for studying various diseases and obtaining stem cells. However, it is not established

a standard procedure to collect olfactory epithelium samples and its safety for olfactory function. **Objectives:** This study aimed to determine the efficacy of obtaining integral olfactory epithelium proper for pathological analysis from the medial surface of the superior turbinate and evaluate safety of this procedure for the total, unilateral and specific olfactory function. **Methods:** Thirty-one individuals without olfactory complaints underwent biopsy of the olfactory epithelium during septoplasty. Olfactory function was assessed before and one month after the biopsy using University of Pennsylvania Smell Identification Test. Specimens were analyzed with immunohistochemistry for Olfactory Marker Protein (specific marker for mature olfactory neurons). Confidence intervals were used for the comparisons between the olfactory test scores before and after of biopsy. **Results:** Proper olfactory epithelium for analysis was obtained in 62% of the patients. There was no deterioration of bilateral and unilateral olfactory function. Moreover, identification of individual odorants was maintained without any selective anosmia. **Conclusion:** Biopsies of the medial surface of the superior turbinate are safe and efficient for obtaining non-deteriorated olfactory epithelium proper for pathological analysis.

Keywords: smell, immunohistochemistry, biopsy, olfactory epithelium.

8179. Normative Data for Auditory Brainstem Response in Wistar rats

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Objective: The purpose of this study was to evaluate click-evoked auditory brainstem response parameters in Wistar rats in order to obtain a standard model for future research. **Design:** Sixty ears from thirty young male Wistar rats weighing between 50 and 250 g with positive Preyer's reflex under controlled conditions were analyzed. ABR recordings were performed with the TDT 3 RZ6 system in open field under isoflurane anesthesia. **Results:** The mean hearing threshold of the animals was of 42.5dB SPL (SD = 4.7dB SPL), 95% normality Interval was 33.2 to 51.8dB SPL. Wave II was the most constant and indicated to determine threshold, this wave can have two morphologic characteristics depend on the electrode position. The I-IV interpeak was the most stable to be used in brainstem integrity assessments. Latency increased and amplitude decreased in relation to stimulus decreases and the morphological aspects were better evaluated at 80dB SPL. **Conclusions:** In Wistar rats wave II was the most stable and reliable wave to determine threshold using click ABR. Latencies of waves II, IV and the I-IV interpeak interval were the best parameters to evaluate neural integrity of the auditory pathways. These normative data indicate that this animal model is suitable for audiological studies and neurological brainstem evaluation.

8182. Late Approach to Post-Traumatic Facial Paralysis: A Case Report

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Introduction: Facial paralysis is a common disorder of variable etiology, being traumatic facial paralysis the second most common cause. In post-traumatic facial paralysis, the types of fractures of the temporal bone (longitudinal,

transverse, comminuted or fragmented) and the time of onset of paralysis after the trauma (initial or late) are observed. **Objective:** To report a clinical case of temporal bone fracture causing compression of the facial nerve after traumatic brain injury and to evaluate the late surgical approach. **Case report:** A 33-year-old male patient, with otorrhea and grade V facial palsy (House-Brackmann scale) in the left hemiface after secondary traumatic brain injury (TBI). He was submitted to a late surgical approach with decompression of the facial nerve, showing a significant improvement of the degree of facial paralysis. **Conclusion:** The early surgical approach is a prognostic factor, however we also can visualize a satisfactory answer in patients submitted to a late surgical approach.

8190. Epidemiological Profile of Face Fractures in Patients at a University Hospital of Curitiba / Paraná

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Introduction: Trauma remains a major cause of morbidity and mortality among young adults. The prevalence of traumatic lesions on the face is high because of the enormous exposure of this region and its low protection. **Objective:** To evaluate the etiology, age, gender, location and symptoms of facial trauma victims with the need for surgical correction of patients attended by the Otorhinolaryngology Department of the of Cajuru University Hospital. **Methods:** It's a retrospective study that analyzed all patients with facial fractures who underwent a surgical approach by the Otorhinolaryngology Department of the Cajuru University Hospital, from January 2015 to May 2018. **Results:** The study comprised 80 patients, the male gender was 61 patients (76.25%). The mechanisms of trauma were: physical aggression predominated (15 cases - 18.75%), falls (14 cases - 17.5%) and motorcycle accidents (11 cases - 13.75%). The mean age was 36.35 years (2 to 78 years). The nose was the most affected site (37 cases), followed by orbit and jaw. The most fractured site on the mandible was the angle, followed by the branch. Pain and edema were the most common symptoms, followed by masticatory problems, nasal obstruction and epistaxis. **Conclusion:** The epidemiological profile of the patient with facial fracture is of a young, masculine adult, victim of physical aggression, with a fracture and clinical condition of this type of lesion.

Keywords: facial injuries; aggression; facial bones, nose.

8191. Histoplasmosis in the Nasal Mucosa with Pulmonary Involvement in a Patient Without Acquired Immunodeficiency Syndrome: Case Report

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Introduction: Histoplasmosis is a disease caused by a dimorphic fungus called *Histoplasma capsulatum*, which grows in mycelium form on the soil (its natural habitat), in the presence of birds, bats and chickens' feces¹. Infection begins after inhalation of the pathogen's microspores and it's asymptomatic or has mild and non-specific symptoms in most individuals. Mucocutaneous histoplasmosis is not uncommon in cases of immunosuppression, but it is rare in immunocompetent patients². **Objective:** This study aims to de-

scribe a case of nasal mucosa affection by histoplasmosis in a non-AIDS patient. **Resumed Report:** Female, 22 years old, perceived a progressive increase of a lesion in the left nasal fossa, without bleeding or pain, with yellowish ipsilateral secretion and intermittent nasal obstruction. She claims weight loss (06kg / 06months), productive cough with yellowish discharge and daily afternoon fever. She mentioned biweekly contact with birds and rural environment. The initial suspicion was pulmonary tuberculosis. The tests were negative molecular rapid test for tuberculosis, negative serologies for HIV I and II, CMV, HTLV and Toxoplasmosis and VDRL 1:32. After nasal cutaneous lesion culture for fungi, Histoplasma capsulatum was found. She started treatment with Amphotericin B 50mg/day/14 days and later Itraconazole 200mg 12/12h for 03 months. In primary immunodeficiency research by Immunology. **Conclusion:** Histoplasmosis with nasal involvement should be considered as a possibility, although rare, in non-AIDS patients, such as the case presented. The early diagnostic investigation by the fungus culture is fundamental for a better prognosis of the patient.

Keywords: fungi, histoplasmosis, nasal obstruction.

8197. Indifferential Nasofaringe Carcinoma: Case Report

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Hospital Federal dos Servidores do Estado

Introduction: The malignant neoplasm of the nasopharynx corresponds to 2% of the tumors of the region of the head and neck (HN), being rare throughout the world except for Asia. Undifferentiated carcinoma is the most usual category among Nasopharynx carcinomas (NC). The most common initial symptom is the appearance of asymptomatic cervical mass followed by choana obstruction, rhinorrhea, and epistaxis. It presents one of the worst prognoses among the malignant tumors of HN due to the proximity of the skull base, the invasive nature of the tumor, for causing late symptoms and difficulty in the examination of the nasopharynx. **Objective:** Report a disease that in the initial framework presents unspecific and unsuspecting symptoms, and once diagnosed can be in advanced stage and bad prognosis. **Resumed Report:** Male patient, 47 years old, with complaint of mass appearance in cervical region to the left and weight loss. To the exam, multiple cervical lymph nodes on the left levels II and III. Nasal endoscopy: vegetative lesion in cavum on the left. Otoscope: Presence of otitis media in left ear. CT: lesion with expansive and infiltration characteristics of poorly defined boundaries, compromising structures of the nasopharynx to the left, obliterating left torus tubarius. Cervical lymph node biopsy: undifferentiated carcinoma. Stay as T4N3M0 and referred to radiotherapy and chemotherapy. Last control, after six months of treatment, with complete response. **Conclusion:** NC is a rare tumor. The initial symptoms are non-specific and should be suspected in patients with epistaxis, nasal obstruction and cervical lymphadenopathy.

8204. Bilateral Vocal Fold Paralysis due to Rheumatoid Arthritis: Case Report

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Introduction: Rheumatoid arthritis is an autoimmune systemic disease, with a female predominance in the age range between 30 and 50 years. It can present with artic-

ular and extra-articular lesions, which can even affect the cricoarytenoid joint. The prevalence of laryngeal involvement ranges from 13 to 75%, but it is usually subclinical and benign. The first symptoms are hoarseness, globus pharyngeus and sensation of a foreign body. Later, it can occur odynophagia, sore throat, cough and dyspnea. Cricoarytenoid joint involvement has been described in 26-86% of the cases, with the vocal fold paralysis being an unusual complication. **Objectives:** We report a case of bilateral vocal fold paralysis in a young patient with rheumatoid arthritis. **Resumed Report:** A 33-year-old woman who was previously diagnosed with rheumatoid arthritis, presenting with progressive dyspnea about one year ago, associated with intermittent dysphonia, stridor and dysphagia for 8 months. Laryngoscopy evidenced bilateral paralysis of vocal cord, fixed in adduction. She underwent emergency tracheostomy, uneventfully. Neck CT revealed a fluid collection related to right aryepiglottic fold, being adjacent to ipsilateral cricoarytenoid joint, and contralateral fluid collection. The patient progressed with improvement of dyspnea, dysphonia and stridor, but continued to complain of dysphagia. **Conclusion:** Cricoarytenoid joint involvement in rheumatoid arthritis is uncommon. It can be asymptomatic or symptoms can be vague. The early recognition of signs of cricoarytenoid arthritis, especially vocal fold paralysis, is essential for appropriate management.

Keywords: vocal fold paralysis, rheumatoid arthritis, cricoarytenoid joint.

8208. Nasosinusal Myxoma - A Challenging Case

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Introduction: Myxomas are benign mesenchymal tumors mostly originated from the maxilla and mandible but may arise from the nasosinusal tract. It frequently affects young women, is locally invasive and its high rate of recurrence is mostly related to incomplete resection. Nasosinusal myxomas are rare, with few cases reported in the literature and it should be remembered as a differential diagnosis in nasosinusal tumors. **Objective:** To report a case of nasosinusal myxoma with endonasal endoscopic surgical approach using centripetal technique combined with Caldwell-Luc procedure. **Case:** 49 years old, female, with nasal obstruction, more severe on the left side, and hyposmia started in 2008. Diagnosed with nasosinusal polyposis in another ENT service and submitted to a subsequent surgical approach. Patient came to our Institute in 2016 with same symptoms but worse condition, evidencing through endoscopic nose examination a tumor in the left nasal cavity. CT scan showed an expansive lesion in the left paranasal sinuses extending to the pterygo-palatine fossa. Endonasal endoscopic surgery was performed with centripetal technique combined with the Caldwell-Luc procedure, and complete tumor resection. Histological study confirmed nasosinusal myxoma. Follow-up showed clinical improvement and magnetic resonance imaging without evidence of recurrence so far. **Conclusion:** Myxomas have a potential for continued growth and bone destruction representing a challenge to surgeons. Sometimes combined procedures are essential for proper visualization and complete tumor resection. Therefore, a definitive surgical planning and experienced surgical team are essential to avoid reappearance. Advanced imaging and surgical techniques available tend to decrease recurrence in the future.

8215. University Adaptation of a Student with Hearing Disability in a Course of Active Methodology: A Possible Reality?

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Introduction: More and more students with special needs are seeking and reaching higher education, one of the teaching models that emerge in this environment is the Active Methodology. In this model the student ceases to be a passive agent (who only listens) and becomes an active member in the construction of knowledge, the interaction between peers being the most important moment, which requires an even greater adaptation for students with disabilities hearing. **Objective:** To describe the inclusion of a hearing impaired student at a public university with an active methodology in Sergipe. **Resume Report:** A semi-structured interview was conducted with a former student with severe bilateral hearing loss who graduated in Nutrition at a University using active methodologies, followed by content analysis. The results describe the challenge of the adaptation of the hearing deficiency student in a mostly listener universe, the lack of preparation of the mediators in the new methodologies and the students in the inclusion of the practices in group. Pedagogical or psychological support was fragile on the part of the university. The inclusion of this student was due to family support, coping, interpersonal relationships and resilience. **Conclusion:** for being a new model of teaching, there are few reports of university adaptation in active methodology. Inclusion actions through the academic community are essential, strengthening the importance of relating to differences in this teaching strategy. Further studies should be performed with a larger sample.

Keywords: hearing deficiency; university adaptation; active methodology.

8216. Spontaneous Amygdala Bleeding: A Case Report

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Ulbra

Introduction: Spontaneous bleeding of amygdala is a rare complication of acute or chronic tonsillitis, which may be caused by the early use of antibiotics. It may be associated with various pathologies, such as viral infections, parapharyngeal and retropharyngeal abscesses, vascular malformation, Von Willebrand disease and tonsillar cancer, being bacterial or viral infection the most important cause. Hemorrhages can be explained due to acute hypertrophy with increased blood flow to tonsils. **Objectives:** Report a case of spontaneous amygdala bleeding. **Resumed Report:** A 21-year-old female patient sought service with pain and bleeding in the right tonsil 7 days after treatment of tonsillitis with azithromycin and nimesulide. At examination, right tonsil had superficial vessels. Cauterization was performed and amoxicillin initiated. In the next day, patient returned with bleeding and was used trichloracetic acid. In the day after that, came with the same symptoms and at the examination, bleeding vessel in the upper pole of the right tonsil. A new cauterization was performed and requested CT of the cervical region. Patient was hospitalized for 3 days, using intravenous clindamycin and prednisolone, and had only minor bleeds in this period. Received discharge with a plan for tonsillectomy. **Conclusion:** This complication is often underdiagnosed and has controversial management. Treatment usually consists of local intervention with chemical cauterization, electrocoagula-

tion or nebulization with adrenaline, and tonsillectomy may also be indicated in case of local control failure, severe or suspected malignancy.

Keywords: amygdala, tonsillectomy, bleeding.

8226. Tympanicum Glomus Tumor: Case Report

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Ulbra Canoas

Introduction: The glomus tumor is a vascular neoplasm, which may present in the jugular, tympanic or jugulotympanic form. Classically, they present as red-colored lesions of the middle ear, characterized by pulsatile tinnitus and unilateral hearing losses. The treatment of this tumor is not consensual. The range of therapeutic options considered valid extends from simple clinical surveillance, to radiotherapy and to surgical exeresis. In the literature, cases with survival over 40 years without any treatment are described. **Objectives:** Report a case of tympanic glomus and review conduct in cases such as this. **Resumed Report:** A 65-year-old female patient sought the otorhinolaryngology service with complaints of pulsatile tinnitus and hearing loss in the left ear. The patient presented, in otoscopy, a significant retraction of the tympanic membrane and presence of non-pulsatile tympanic glomus with movement of the tympanic membrane. An MRI of the skull was made that diagnosed tympanic glomus. The patient maintained ambulatory follow-up and performed audiometric tests with immittance control that were maintained. The patient is aware of the diagnosis of tympanic glomus and opted for clinical follow-up even with surgical indication. **Conclusion:** The glomus tumor suggests an individual analysis of each case, so that the comorbidities of the patient in question, the impact of the symptoms on the patient's quality of life and the characteristics of the tumor itself (localization and extension) are considered. Thus, regardless of the therapeutic option, clinical follow-up is necessary due to the high relapse rate in 10 years.

Keywords: glomus tumor, tinnitus, tympanic.

8229. Nasosinusal Melanoma: A Differential Diagnosis for Unilateral Nasal Obstruction or Epistaxis

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Ulbra

Introduction: The sinonasal melanoma is an extremely rare tumor. It accounts for less than 1% of malignancies of the head and the neck region. Its most common sites are the middle and lower turbinates and the nasal septum, and the most frequent sinus locations are at the maxillary and ethmoidal sinus levels. The patient often has a history of unilateral nasal obstruction and epistaxis. The definitive diagnosis is made by anatomopathological and immunohistochemical study of the lesion. **Objectives:** Report a case of sinonasal melanoma and review the literature available about the subject. **Case report:** Male patient, 85 years old, presented a complaint of unilateral nasal obstruction and epistaxis about 6 months. In anterior rhinoscopy, there was a hardened lesion obliterating completely the left nasal cavity. The computed tomography of the sinuses face revealed a polypoid image with soft tissue density obliterating the left nasal cavity. An incisional biopsy was performed for anatomopathological analysis, which diagnosed sinonasal melanoma. The lesion was extensively resected endoscopically. Due to the patient's age, the procedure was limited to the nasal cavity with com-

plementary treatment by oncologist. **Conclusions:** The treatment of this tumor consists of complete resection of the lesion. In general, the prognosis is reserved. The 5-year survival rate is between 12 and 30% for primary lesions. Although it is an uncommon condition, the sinonasal melanoma should always be considered a differential diagnosis in patients with unilateral nasal obstruction or epistaxis.

Keywords: melanoma, nasal mucosa, nasal obstruction.

8231. Glomus Jugular Tumor: Case Report

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Ulbra

Introduction: Tumors of the glomo jugular are all common, beginners on average, promoting sounds like pulsatile and hearing loss. The patient may have facial paralysis, because with its growth it can affect the facial nerve². The most effective treatment is surgical. **Objective:** To know more about the glomus jugular tumor and the form of treatment. **Resumed Report:** P.A., 63 years old, male, sought care for hypoacusis and intermittent tinnitus in the left ear. Complains of vertigo episodes when getting out of bed, lying down or changing position. It reports dysphonia, dysphagia and halitosis. Angioresonance found an expansive lesion with soft tissue density, heterogeneous and intense enhancement, extending from the carotid bifurcation to the left cerebellar-angle; enlargement of the left jugular foramen, remodeling of the ipsilateral jugular tuber, and involvement of the left internal acoustic meatus. The nasofibrolaryngoscopy confirmed the paralysis of the arytenoid complex and vocal folds to the left. At otoscopy, a pulsatile reddish structure was visualized in the lower portion of the middle ear. **Conclusion:** The management of jugular glomus tumors requires a thorough knowledge of the temporal bone, cervical anatomy and intracranial anatomy to assess the extent, tumor progression and type of surgical approach required⁵. Surgery is the most commonly used option in patients and the intention is total tumor excision⁶. Radiosurgery can achieve excellent long-term tumor control with a low morbidity rate in the treatment of jugular glom tumors⁶.

Keywords: Glomus jugular tumor; treatment; pulsatile tinnitus.

8232. Inverted Papilloma: Case Report and Classic Imaging Findings

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Ulbra

Introduction: Inverted papilloma (IP) is an uncommon benign tumor. The incidence is 0.2 to 0.6 cases per 100,000 patients per year. It becomes malignant in 10% of cases and has a high rate of recurrence- 25% after surgery. The most common primary site is the lateral nasal wall (89%) and in cases of recurrence, is the maxillary sinus (30.1%). The symptoms most associated with IP are unilateral nasal obstruction and epistaxis. **Objectives:** Report a case of recurrence of inverted papilloma with presence of osteitis. **Resumed Report:** A 55-year-old female patient sought service with continuous unilateral nasal obstruction. She reported previous surgery for resection of an IP 18 months ago. At the nasal examination on the left, there was a polypoid lesion protruding from the maxillary sinus. Computed tomography (CT) showed lesion occupying left maxillary sinus, going to the interior of the nasal cavity, as well as an osteitis area in the lateral wall of the left maxillary sinus. Anatomopathological examination diag-

nosed inverted papilloma. Combined surgery was performed through the endonasal and canine fossa vias. This permitted complete tumor resection and identification of the primary site on the osteitis area identified on CT. **Conclusion:** The majority of recurrences occurred in the same original tumor site and is often related to incomplete resection. Therefore, it is important to make an appropriate preoperative evaluation to try to predict the original site of the tumor. Signs of osteitis and neo-osteogenesis on CT are important marks for this.

Keywords: inverted papilloma, osteitis, epistaxis.

8233. Profile of Patients Assessed for Cochlear Implantation in Brazil: Systematic Review

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Centro Universitário do Estado do Pará - Cesupa

Introduction: The cochlear implantation provides global benefits on hearing perception, and consequently on expressive and receptive language, allowing the development of communication in its users. The changes in public health policies on hearing care allowed an increase in the number of services for cochlear implant surgery in Brazil, especially after the creation of ordinances of October 20, 1999, and an ordinance from 2004 that defined the National Policy of Hearing Health Care. The knowledge of population's characteristics as well as those related to hearing loss are extremely important because they allow etiological identification, prognostic factors and strategic planning for interventions in public health.

Objective: To review available evidence to answer the query: "What is the profile of the patient assessed for the cochlear implantation in Brazil?". **Data Synthesis:** A systematic review of the literature was performed using five key-words: cochlear implantation, hearing loss, health profile, epidemiology, Brazil. The bibliographic research was performed in the databases SciELO, MEDLINE, Cochrane Library, LILACS, Digital library of theses and dissertations of the Universidade de São Paulo, and CAPES's digital library of theses and dissertations, considering publications from 2010 to 2018. The most relevant titles to respond to the systematic review were retrieved and revised using a data analysis protocol. Four studies fulfilled the requirements and were included in the systematic review. **Conclusion:** Patients assessed for cochlear implantation are mostly males, aged between 1 and 4 years, with prelingual deafness and unknown etiology.

Keywords: cochlear implantation; health profile; hearing loss; epidemiology; Brazil.

8238. P300 Response to Tones and Speech Sounds in a Cochlear Implant User

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Introduction: The P300 cortical auditory evoked potential is generated by the expectation of rare stimuli among other frequent stimuli (Oddball paradigm) and it can be used in clinical practice to assess cortical function of individuals with cognitive function impairment related pathologies. **Objectives:** The objective of this project is to study the behavior of the P300 in unilateral Cochlear Implant users verifying the changes presented in the wave register in the different phases, verifying the improvement of the cognition of the implanted subject **Resumed Report:** Female, 77 years old, with bilateral sensorineural hearing loss for the past 20 years,

etiology under investigation. She was submitted to CI surgery with a device from the MED-EL brand. P300 testing was conducted in the phases pre CI surgery, during CI activation and after 6 months of device use. To obtain P300 responses, speech sounds and tone burst stimuli were presented in free field. For both pre CI and CI activation phases, the patient was unable to discriminate the different sound stimuli presented. After 6 months of CI use, the P300 wave response was traced for the speech sounds and pure tone stimuli. The P300 latencies for speech sounds were higher than for pure tone stimulation. **Conclusion:** P300 is a non-invasive objective test and in this particular case it showed the improvement of a patient's cognitive function after CI surgery. The increased latency for speech sound stimulation could represent a higher listening effort for this stimulus.

Keywords: cochlear implant, P300, cortical auditory evoked potential.

8240. Bilateral Vocal Fold Paralysis: the Signal that led to the Diagnosis of Amyotrophic Lateral Sclerosis

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Introduction: Vocal fold paralysis can be classified as central (10%) or peripheral (90%), unilateral or bilateral and complete or incomplete. Central palsies are usually bilateral and incomplete with severe prognosis and should be diagnosed quickly when seen. Amyotrophic lateral sclerosis is a progressive disease of neurodegenerative disorder that usually evolves with bilateral vocal fold paralysis in advanced stages.

Objectives: Relate a case of bilateral vocal cord paralysis that stimulated the patient to seek the otorhinolaryngology service, and from that, to diagnose amyotrophic lateral sclerosis.

Resumed Report: A 36-years-old male patient with a complaint of dysphonia for 8 months not related to vocal abuse. After, progressing with weight loss, fluid gagging, fatigue during phonation and weakness of the lower limbs. He denied dysphagia, other symptoms or previous comorbidities. Physical examination showed altered gait, with laryngoscopy identifying paralysis of the two vocal folds in abduction, reduced laryngeal sensitivity and salivary aspiration during the examination. He underwent several complementary exams with a diagnosis of amyotrophic lateral sclerosis. **Conclusion:** The vocal fold paralysis is usually found in the late evolution of amyotrophic lateral sclerosis, when the diagnosis of the disease is already known. However, in the present case, dysphonia was the symptom that led the patient to seek the otorhinolaryngology service. Thus, central vocal fold paralysis in the daily routine of the otorhinolaryngologist and the importance of this signal to the suspicion of amyotrophic lateral sclerosis or other neurological diseases are highlighted.

Keywords: amyotrophic lateral sclerosis, bilateral vocal cord paralysis, dysphonia.

8249. Late Diagnosis in Head and Neck Neoplasms- Statistics from Ulbra service in 2017.

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Introduction: Head and neck neoplasms account for 5% of tumors today. Early diagnosis is hampered by the fact that initial lesions, usually asymptomatic, are not valued by the patient and health professionals. Most cases are di-

agnosed late, delaying therapeutic planning and worsening prognosis. **Objectives:** To retrospectively analyze the surgical procedures performed by the head and neck surgery department of Ulbra in 2017. **Methods:** The medical records of patients attended and operated during the months of January to December of 2017 were reviewed. The sample consisted of 63 patients. We analyzed the data regarding the type of surgery performed, anatomopathological result and subsequent conduct adopted in each case. **Results:** 63 head and neck surgeries were performed at our service during the study period, with laryngeal biopsies in first place (12) = 19.04%, secondarily thyroidectomies (10) = 15.87%; third, biopsies of mouth (8) = 12.69% and others (33) = 52.38%. **Conclusion:** The major part of the surgical procedures performed in our service are biopsies, and the vast majority of patients, after confirmation and staging of the neoplasia, were referred to the clinical oncology assistant for surgical nonresectability. Fear of illness, disinformation and unfavorable social conditions were a disincentive to seeking treatment. The search for an early diagnosis that leads to less aggressive and invasive treatments may favor the maintenance of the quality of life of these patients.

Keywords: head and neck cancer, diagnosis, oncology.

8250. Sjögren Syndrome: Case Report

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Introduction: Sjögren's syndrome is an autoimmune disease of the exocrine glands, which particularly involves the salivary and lacrimal glands^{1,2}. No clinical signal or immuno-marker described so far is accepted in isolation as an ideal for complete the diagnosis^{3,4}. However the diagnosis is strongly supported by abnormal findings of a biopsy of salivary-gland tissue^{3,4}. **Objectives:** Report a case of Sjögren's Syndrome, emphasizing diagnosis by salivary gland biopsy.

Resumed Report: Female, 55 years old, complaining of a significant increase in parotid volume 18 years ago with sporadic episodes of pain in right parotid topography that sometimes radiated to the throat. Refers to nocturnal sialosis associated with heartburn, xerophthalmia and xerostomia, in addition to major arthralgia in the upper and lower limbs. Refers loss of 4 pounds in 5 months without food change. Physical exam: parotid volume increase, fibroelastic consistency, painless. Ostium of the parotid duct visible, slightly bulging, without alteration of texture in both glands. Absence of palpable nodules or lymph nodes. The patient underwent minor salivary gland biopsy on the lower lip under local anesthesia. Anatomopathological analysis of 5 fragments of minor salivary glands evidenced inflammatory lymphocytic infiltrate compatible with Sjögren's Syndrome. **Conclusion:** Sjögren's syndrome is characterized by progressive focal lymphocytic infiltration of several exocrine and non-exocrine organs, which makes early diagnosis difficult. So the biopsy should be considered early because it represents a important diagnostic criteria.

Keywords: Sjögren's syndrome; xerostomia; salivary glands.

8251. Hybrid Cochlear Implant in a Child with Subtotal Hearing Loss Caused by Kawasaki Disease
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Cochlear implants (CIs) are a therapeutic option for sensorineural hearing loss (SNHL) by converting sound into an electrical stimulus that directly stimulates the cochlear nerve what permits to improve functional hearing for candidates with severe to profound SNHL. Several studies focused on the impact of CIs to adolescents and found benefits for development of language, academic, social skills and emotional factors. Several studies have been shown associations between Kawasaki disease and SNHL. The mechanism by which KD causes SNHL is not completely clear. A 13-year-old female who presented KD followed by hearing loss at age 5. Tonal audiometry presented bilateral and severe sensorineural hearing loss, with remaining bilateral hearing in low frequencies and bad speech recognition index. Personal hearing amplification device was indicated, however, the patient kept complaints about discomfort in noisy environments and a persistent difficulty to adaptation. Currently with 13-year-old the patient performs orofacial reading and has altered speech and hearing remains the same. Patients with low frequency residual hearing can undergo less traumatic procedures allowing to preserve their hearing at lower frequencies and even use conventional hearing aids and cochlear implants in a combined fashion on one ear, using a hybrid implant. The hybrid implant combines an Electroacoustic hearing stimulation aims to the amplification of a patient's residual hearing by means of conventional hearing aids. Several studies have been shown associations between Kawasaki and SNHL and the benefits with cochlear implant and hybrid implant should be considered in some of these cases with residual hearing.

8252. Anacusis in a Down Syndrome Patient with Cochlear Nerve Aplasia
 Carlos Eduardo Borges Rezende, Jéssica Miwa Takasu, Fernanda Ferreira Banhos, Marina Sabin de Souza Lima, Giovana Scachetti, Ana Paula Assunção Cecilio, Guilherme Bonadia Bueno de Moraes
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Hearing loss has been reported in Down syndrome population. It can be conductive (CHL), sensorineural (SNHL), or mixed hearing loss (MHL). CHL is the most common type and it is usually due to otitis media with effusion. One of the causes of SNHL and congenital deafness is the aplasia or hypoplasia of the cochlear nerve. This condition is rare but the diagnosis is important before surgery for candidates to cochlear implants EDR, male, 2 years old, bearer of Down Syndrome was submitted to bone-conducted BERA (Brainstem Evoked Response Audiometry), suggesting profound sensorineural hearing loss on left ear, and moderate mixed hearing loss on right ear. The magnetic resonance image (MRI) showed signs of aplasia of the left cochlear nerve. Hearing loss occurs more often in infants with Down Syndrome (DS) than in healthy infants. Sensorineural deafness is caused by a fault in the inner ear or the auditory nerve and is permanent. Patient with DS and hearing loss has a major challenge to the successful use of hearing aids and cochlear implants. DS patients with hearing loss should be encourage to have consistent audiological followed up and having hearing aid intervention. Children with DS, may have a worsering on

language development and oral expression because the hearing loss. Hearing loss occurs more often in infants with Down Syndrome (DS) than in healthy infants. Children with absent cochlear nerve are clearly not candidate for amplification or cochlear implantation. In these children, the introduction of alternative forms of communication is strongly encouraged.

8253. Fibrous Dysplasia in Frontal Sinus Approached by Modified Lothrop Procedure
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Introduction: Fibrous dysplasia (FD) is a developmental non-neoplastic tumor-like lesion of unknown etiology, characterized by the replacement of normal bone by fibrous tissue and lamellar trabecular bone. It corresponds to 2.5% of all bone tumors, has a slow growth and tends to stabilize after puberty, although the recurrence rate may reach 37% in adulthood according to some authors. **Objective:** Report a case of intranasal tumor with intracranial invasion, and nasal endoscopic removal. **Case report:** B.P.S., male, 28 years old, presenting with frontal headache and nasal obstruction with worse symptoms on the left side for 3 months. A CT of paranasal sinuses was requested, revealing an intranasal expansive lesion extending into the anterior cranial fossa. Surgical excision was performed accessing the frontal sinus by endoscopic modified Lothrop procedure, followed by removal of the frontal tumor fragment and crista galli, access to the anterior fossa, identification of the fronto-orbitary artery and tumor, and intracranial tumor resection. Bone grafting was chosen for closure, with subsequent hemostatic and Foley catheter for 48 hours. Patient presented good postoperative evolution, besides the formation of senechya (as sole complication) in the right nasal fossa, surgically reopened 4 months after the initial intervention. Patient progressed well in postoperative clinical and tomographic controls. **Conclusion:** FD is an uncommon benign pathology. The predilection for facial and cranial bones draws attention to it as an important differential diagnosis to be considered by the otorhinolaryngologist. Nasal endoscopic surgical techniques enable the removal of the entire lesion, even if it affects the anterior cranial fossa.

8260. Myiasis Secondary to Diffuse Osteorradiationecrosis of the Temporal Bone After Radiotherapy Adjuvant to Parotidectomy
 Carlos Eduardo Borges Rezende, Priscila Bogar, Elaine Shizue Novalo Goto, Alana Asciutti Victorino, Ana Paula Assunção Cecilio, Alaide Mader Braga Vidal
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The larvae of *Cochliomyia hominivorax* and *Dermobia hominis* are the most common agents in America and the most important parasites of domestic animals and wild animals. In general, the affected patients present predisposing factors such as poor personal hygiene, bad nutrition, mental retardation, alcoholism, senility, hemiplegia and trauma. This species deposits about 20 to 400 eggs at a time. The symptomatology and severity, besides the sequelae, vary according to the location, number of larvae and general condition of the patients. AMVS, female, 58 years old, with a history of right parotidectomy due to mucoepidermoid carcinoma, followed by radiotherapy, with exposure and zygomatic arch osteorradiationecrosis and chronic cholesteatomatous otitis me-

dia ipsilateral, submitted to mastoidectomy, with persistence of retroauricular fistula. She presented with myiasis in the right ear. After the removal the larvae were analyzed and identified as belonging to the species *Cochliomyia hominivorax*. The patient underwent parotidectomy with adjuvant radiotherapy to assist in the control local and improved survival. For cases with radionecrosis diffuse or not responsive to clinical treatment surgical procedure limited by difficult access to viable bone tissue, making it possible to relapse necrotic, on which myiasis can settle. The treatment of myiasis takes place through the mechanical removal of the larvae and sometimes surgical removal of the larvae and even of the affected tissue. The professional's knowledge, the correct clinical follow-up, and the strict patients with chronic osteocutaneous lesions are important, due to the great susceptibility of infestation by larvae, which makes the disease morbidity.

8261. Conductive Hearing Loss Caused by Malleus Head

Fixation on Duramater in a Dehiscent Tegmen Tympani
 Carlos Eduardo Borges Rezende, Bárbara Carolina Miguel Jorge, Guilherme Bonadia Bueno de Moraes, Beatriz Villano Krentz, Priscila Bogar

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The diagnosis of conductive hearing loss is often carried out through the audiometry with typically an air-bone gap. Identification of the cause is achieved through audiomeric testing. Computed tomography is used for recurrent or complicated middle ear pathology and surgical planning. A white female patient, aged 24 years, with left slowly progressive hearing loss for 10 years didn't have personal and family history. The exam revealed normal otoscopy. Pure tone audiometry showed mild left ear conductive hearing loss since 250 to 1.000Hz. Impedanciometry revealed type As curve and absence of the stapedian reflex in the left side. Computed tomography revealed dehiscence of tegmen tympani bone next and a connection between temporal fossa's meninge and left malleus head. High resolution CT scan may demonstrate some of the middle ear pathologies. However, a definite diagnosis can only be achieved during exploratory tympanotomy. It should be pointed out that rehabilitation with a hearing aid is a good solution in most cases of conductive hearing loss. Fixation of the malleus head is one of the possible causes of conductive hearing loss. Malleus head fixation alone is best managed by removing the incus and malleus head and using a PORP or an incus prosthesis prepared from the patient's ossicle. A more physiological method consists of drilling the synostosis and releasing the malleus without disrupting the ossicular chain. Exploration tympanotomy is a relatively minimal procedure and reconstruction, when feasible, has good success rate. However, clinicians should bear in mind that hearing aids are an option

8263. Unilateral Anacusis in a Old Woman with Previous Hearing Loss and Normal Pressure Hydrocephalus After Shunt Ventriculoperitoneal

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Hydrocephalus is an increase of the amount of cerebrospinal fluid (CSF) within the cranial cavity, specially in the ventricular cavities. Idiopathic normal pressure hydrocephalus (NPH) is a condition that mainly affects the elderly. This may also be associated with hypoacusis related to disturbances of CSF pressure. In this cases the shunt placement

can be done as a treatment of NPH, which can bring a not rare event of hearing loss. A 74 year-old woman with a four-year history of idiopathic NPH presented slowly progressive bilateral hearing loss. Her audiogram showed moderate to severe sensorineural hearing loss, SRT 45db ,WRS 32% at 70db for monosyllabic, 48% at 70db for dissyllables and 56% for trisyllabas at 70db in the left ear. The otoscopic examination was normal. Ventriculoperitoneal shunt was placed to treat the hydrocephalus and after that, she presented a rapidly progressive hearing loss on the left followed by anacusis within a year. Chronic hearing loss has been described in patients with hydrocephalus. An independent relationship between CSF dynamics and hearing has been ascribed to communication of fluid pressures between CSF, perilymph, and endolymph. The hydrodynamic theory states that abnormally high or low CSF pressure is transmitted to the inner ear fluids via the cochlear aqueduct and/or endolymphatic sac, and that these inner ear pressure alterations can produce some degree of hearing loss. Hearing loss is a symptom related to hydrocephalus and its rapid progression after a procedure of ventriculoperitoneal shunt may occur because the hypotension of CSF.

8268. New Low Redundancy Speech Test to Evaluate

Auditory Closure Hearing Skill
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Introduction: Filtered speech uses the reduction of extrinsic speech to evaluate the ability to recompose the original acoustic message, i.e., to perform auditory closure. This is important for understanding speech in the presence of noise, common in daily life. **Objectives:** To compose tests of filtered speech with significant material, submitted to effective filtering, normalized by age group, effective to separate normal individuals from those with alteration in auditory closure. **Methods:** Words from Brazilian Portuguese were recorded and filtered with five frequency cuts with Finite Impulse Response digital filters, high pass and low pass, and submitted to 50 normal-hearing adults to obtain intelligibility by cutoff frequency. Cut-off frequencies were chosen for the high-pass and low-pass tests to evaluate 164 normal-hearing people in 5 age groups. Thirty-eight patients aged 10 to 12 years underwent the tests before and after acoustically controlled auditory training to verify diagnostic efficacy. **Results:** There was an increase in hits per word and cuts according to the amplification of the frequency range provided and a improvement in performance with increasing age. There was a significant difference in the performance of the tests before and after acoustically controlled training. **Conclusion:** Speech material, filter efficiency, and cutoff frequency accuracy can interfere with the intelligibility of the filtered speech. The correct applications of these tools can more accurately ensure the differentiation between individuals with normal comprehension and those with difficulty in performing auditory closure, allowing a more accurate diagnosis in speech comprehension disorders.

Keywords: acoustic stimulation, speech perception, auditory processing disorders.

8272. Conductive Hearing Loss Secondary to a Dehiscent Facial Nerve over the Oval Window: Case Report

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Introduction: Purely conductive hearing loss with intact tympanic membrane in a young, adult patient is highly suggestive of otosclerosis or other ossicular disease. A differential diagnosis must always be considered before ultimate surgical treatment. **Objective:** To describe a case of unilateral, conductive hearing loss secondary to tympanic facial nerve dehiscence, mimicking otosclerosis of the round window. **Resumed Report:** a 28-year-old male patient presented to our Department complaining of long long-term, unilateral hearing loss and mild tinnitus in the right ear. Otoscopy was absolutely normal. Sound perception was better heard in the right side during Weber test. Audiological assessment revealed mild to moderate conductive hearing loss in the affected ear. Contralateral thresholds were normal. High-resolution CT scan revealed a dehiscent tympanic facial nerve completely over the oval window. No otosclerotic foci were identified. **Conclusion:** In this case CT scanning was crucial for a proper diagnosis. Even if ossicular disturbances predominate in cases of conductive hearing loss without inflammatory middle ear disease, differential diagnosis as third window syndrome and tympanic facial nerve dehiscence must be always taken into consideration.

8287. Jugulotympanic Paraganglioma : A Case Report

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Jugulotympanic paraganglioma is the most common primary benign tumor of the middle ear that is derived from the embryonic neural crest. The most paraganglioma are diagnosed in the fifth decade and much more common in women. The purpose of this article is to present a case of this condition, with its main features and differential diagnosis. **Case Report:** F.P.S. 64 year-old female with chronic hearing loss and otorrhea with otalgia in the right ear for about 1 month. Otoscopy revealed serous secretion and rubbery reddish mass of the external auditory canal (EAC). It was not possible to visualize the tympanic membrane .Computed tomography of the mastoid showed homogeneous mass in middle ear with displacement of jugular vein. Audiometry showed mixed hearing loss and absence of staped reflex in right ear without changes in the left ear. The treatment was surgical with exploratory tympanomastoidectomy and meatoplasty. The histopathology was compatible with jugulotympanic paraganglioma. **Comments :**The differential diagnosis of a mass in the jugular foramen includes schwannoma, meningioma, neurinomas, and endolymphatic sac tumors of the middle ear. Jugulotympanic paragangliomas are slow-growing lesions that usually present with pulsatile tinnitus with or without conductive hearing loss . In patients with a jugular paraganglioma, there may be lower cranial nerve deficits as well facial nerve paralysis, vertigo, hoarseness, and paralysis of lower cranial nerves .For such reason the early diagnosis is important to decrease mortality and morbidity pre and post-operative.

8288. Post-Intubation Tracheal Stenosis: Report Of Two Cases

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Introduction: Tracheal stenosis following orotracheal intubation is a relatively uncommon clinical entity. Respiration through an orotracheal tube is unphysiological, but essential in many situations. Accidents when positioning the tube or its prolonged presence in the airway are relevant causes of laryngotracheal injuries. There are several different types of possible lesions, with tracheal stenosis representing a potentially life-threatening complication of orotracheal intubation. **Objectives:** To present two cases of tracheal stenosis in patients submitted to orotracheal intubation during management of polytrauma, as well as report the therapeutic approaches elected in these cases. **Resumed Report:** We report two cases with similar clinical presentation. They had a history of orotracheal intubation following polytrauma, developing symptomatic tracheal stenosis after hospital discharge. Both had gone through unsuccessful dilation attempts and had needed tracheotomy to maintain functioning airway. The chosen treatment for these patients was tracheoplasty, with positive surgical outcome. **Conclusion:** Tracheal stenosis must be suspected in every patient with respiratory complaints and a history of orotracheal intubation or tracheotomy. Adequate treatment may demand months or years, with necessity of definite tracheotomy in some cases, greatly impacting the patient's quality of life. There are many surgical techniques described, with tracheoplasty being the most often applied in the treatment of these patients. However, the choice of approach must be individualized for each patient.

Keywords: tracheal stenosis, orotracheal intubation, tracheoplasty, case report.

8292. Intraoral Surgical Approach in Eagle Syndrome: Case Report

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Introduction: Eagle syndrome is characterized by the presence of symptoms such as neck pain, dysphagia, odynophagia and otalgia, associated with a styloid process greater than 30 mm. Resection of the elongated styloid process can be performed via intraoral or cervicotomy. The intraoral access presents some advantages as less procedure time, absence of cutaneous scar, technical simplicity and shorter recovery period. **Objectives:** To report the case of a patient with Eagle syndrome treated with an intraoral surgical approach. **Resumed Report:** P.A.S., male, 51 years old, presented with ear pain, right upper cervical pain and odynophagia for 1 year. There was no history of tonsillectomy or cervical trauma. Oroscopy and otoscopy were normal. Cervical examination showed a bone projection in the right jugulocarotid region, painful on palpation. Computed tomography of the skull base showed calcification of the stylohyoid ligament bilaterally. On the right side, the styloid process was elongated and thick, measuring approximately 40 mm; On the left, had normal length (25 mm). He was submitted to surgical treatment by intraoral access, with bilateral tonsillectomy and resection of 20 mm of the right styloid process. The patient showed complete regression of symptoms with-

in the first month post-surgery. **Conclusion:** Eagle syndrome is a cause of cervical pain that should not be neglected. The otorhinolaryngologist has an important role in the diagnosis and treatment of this disease, being able to offer surgical treatment, which is effective and will improve the patient's quality of life.

Keywords: Eagle syndrome, ossification, stylohyoid ligament, styloid process.

8295. The Importance of Early Diagnosis of Ramsay Hunt Syndrome: A Case Report

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Introduction: Ramsay Hunt syndrome (SRH) is the second most frequent cause of atraumatic Peripheral Facial Paralysis (PFP) caused by the Varicella Zoster Virus. It is of utmost importance the differential diagnosis for early and correct treatment. **Objective:** To demonstrate how the early diagnosis of SRD improves the patient's prognosis. **Resumed Report:** I.J.A., 21 years old, male, referred by an otolaryngologist with a diagnosis of malignant external otitis, left PFP (House Brackman VI) and vertigo for 3 days, medicated with ciprofloxacin, hydrocortisone and vestibular inhibitors. Initial report of intense otalgia in the left ear treated as acute otitis media 10 days ago. After 5 days, he had vesicular and crustal lesions in the left auditory pavilion and onset of vertigo. Two days after, he had PFP suddenly in ipsilateral hemiface. Evaluated by otolaryngologist, he was diagnosed with external malignant otitis, initiating treatment and referred. In the HU/UJF, he had vesicles and crusts in the left pavilion, PFP on the left ear, tinnitus and incapacitating vertigo. He was medicated with acyclovir, prednisone, cefepime and dimenhydrinate, with regressive dose of corticosteroid. He got better of vertigo but PFP did not regress. **Conclusion:** The SRH may be difficult to diagnose due to the poor initial symptomatology and the lack of knowledge from the medical team that did the first evaluation. This may delay the treatment and impair its prognosis, since the premature use of corticosteroids in adequate doses and acyclovir, increases the chances of PFP recovery.

8298. Nasopharyngeal Carcinoma: A Case Report

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Introduction: The skull base tumor is very aggressive and fast since the beginning. The diagnoses of this disease is difficult due to the quietness of its symptoms. The nasopharyngeal carcinoma is a rare example of neoplasia that can extend to this area. It starts normally at the lateral pharyngeal recess and its manifestation varies from asymptomatic lesion till skull base invasion. Its etiology relates to infectious, genetic and lifestyle factors. Its diagnosis is often done in late stage development, when generally the skull base is already affected. The treatment evolves radiotherapy and can associate with chemotherapy in advanced stages. **Objective:** To show the astonishing progression of nasopharyngeal tumor with the commitment of the skull base. **Resumed Report:** J.M.G, 59 years, female. In March 2017 started complaining about a tinnitus, associated with recurrent acute otitis media with evolution to facial paralysis (House Brackam VI) and paralysis of ipsilateral vocal cord. In the following months,

she developed cervical tumoration, convergent strabismus and excruciating pain at the right side of the temporal area. She was forward to hospitalization due to nasopharynx, mastoid, middle ear and skull base injury seen by imaging examination. The biopsy of cervical nodule showed a poorly differentiated carcinoma. After the cranial magnetic resonance image, the final diagnoses was an unresectable nasopharynx carcinoma extending to the skull base. After the evaluation of the oncology, she was transferred to the proper cancer treatment. **Conclusion:** the lack of premature diagnosis and adequate propaedeutic can impair the prognosis of patient with nasopharynx neoplasia.

8300. Case Report: Ramsay-Hunt Syndrome

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Hospital Universitário Cajuru

Introduction: Ramsay Hunt syndrome presents with vesicular eruptions in the external ear, earache and peripheral facial paralysis due to the reactivation of the varicella-zoster virus (VZV), present in a latent state in the sensory ganglion of the facial nerve. This syndrome usually occurs in the elderly, diabetic and immunodepressed. **Objective:** A case report of Ramsay Hunt's Syndrome of a patient accompanied in the Otorhinolaryngology and Head and Neck Surgery Department of the Cajuru University Hospital of Curitiba, PR in April 2018. **Resume Report:** B.D.F, female, 63 years old, presented at the Emergency Department of the Cajuru University Hospital in Curitiba, with a history of pain in the left auditory pavilion, edema and local temperature increase started three days ago. Vesicular lesions appeared in the left auditory and external auditory canal, and 24 hours after evolution there was facial paralysis to the left. After the possibility of Ramsay Hunt syndrome, and subsequently laboratory confirmed, aciclovir, analgesics and corticoid therapy were started. The patient returned after 7 days with almost complete clinical improvement of facial paralysis. **Conclusion:** Ramsay Hunt syndrome has a variable clinical presentation according to the number and extent of impairment of cranial nerve pairs. Clinical suspicion, early treatment initiation and laboratory confirmation of infection allow a favorable evolution of the condition, avoiding the presence of mutilating motor nerve sequels.

Keywords: herpes zoster oticus; otitis externa; earache.

8301. Mucosal Leishmaniasis

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Introduction: The Leishmaniasis is a chronic infectious disease evolution and endemic in South America, caused by a protozoan and transmitted by insect bite. It considered one of the five most prevalent endemic infectious-parasitic diseases and a worldwide public health problem. The mucosal presentation in Leishmaniasis is most often secondary to cutaneous lesions and most frequently affects in order the nasal, oral (lip and palate), pharynx and larynx cavities. Its treatment can be done with Pentavalent Antimonials, Amphotericin B or Pentamidine. The cure control of this pathology is done with clinical and laboratory criteria. **Objective:** Report a Leishmaniosis Nasal case. **Resumed Report:** P.F., 48 years old, entered in the service with rhinorrhea associated with intermittent epistaxis on the right na-

sal cavity one year ago. In the otorhinolaryngological examination showed, anterior rhinoscopy, presence of saddle nose with right nasal wing deformity, and ipsilateral ulcerocrosthosis. We did an incisional biopsy of three fragments in the lesion, which resulted in a chronic inflammatory process in an acute ulcerated outbreak in the nasal region compatible with Leishmaniasis. Showing this result of pathology and positive serology for Leishmaniasis, the patient make the treatment and follow-up with Infectious Disease doctor. **Conclusion:** It is a zoonosis, whose the human being is an accidental host, affected after insect bites infected by the parasite. The early diagnosis is crucial, and the treatment must be done as soon as possible for preventing deformities or functional impairments.

Keywords: nasal Leishmaniasis; Leishmaniasis treatment; Leishmaniasis diagnosis.

8302. Case Report: Acute Pulmonary Edema in Adeno-Amygdalectomy Immediate Postoperative

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Introduction: Negative pressure pulmonary edema is a rare condition, caused by acute airway obstruction and can be potentially fatal when undiagnosed. It occurs most commonly postextubation when associated with laryngospasm. Laryngospasm and bronchospasm are a defensive response from the lungs and the superior airways. The attempt to inhale, when under a situation of airway obstruction, causes a negative intrapleural pressure. This negative pressure increases venous return, reduces cardiac output and increases the capillary pulmonary hydrostatic pressure causing fluids to accumulate in the alveolar space. **Objective:** Negative pressure pulmonary edema in adeno-amygdalectomy immediate postoperative case presentation. **Case Presentation:** A 5-year-old female presented with oral respiration, night hoarseness, type 3-4 amygdalas and 80% adenoids, and mild asthma in control with treatment. The patient received pneumology preoperative evaluation and was cleared for surgery with orientations. The patient received orotracheal intubation and the surgery presented with no complications. After extubation the patient developed a severe laryngospasm with desaturation (50%) and bradycardia. Acute pulmonary edema was diagnosed. The patient had to be reintubated and was admitted to the intensive care unit hemodynamically stable. Received hospital discharge with no further complications. **Conclusion:** Negative pressure pulmonary edema is a rare condition that occurs especially in young and healthy patients undergoing general anesthesia during the post extubation period. It demands an early diagnosis and treatment due to its high morbidity.

Keywords: Acute pulmonary edema, laryngospasm, adeno-amygdalectomy.

8303. Case Report: Silent Sinus Syndrome

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Introduction: Silent sinus syndrome is characterized by chronic maxillary atelectasis with enophthalmia and deformity of maxillary sinus wall, not associated with trauma

or nasal and sinuses symptoms. Hypoventilation of maxillary sinus due to long-standing obstruction is presumed to be responsible for creating a negative pressure in the obstructed sinus, resulting in atelectasis of the sinus walls. Therefore, bone remodeling and inferior displacement of the orbital floor can be seen. Diagnosis is clinical and CT plays an important role in differential diagnosis. Treatment is focused on sinus disease. **Objective:** To report a case of Silent Sinus Syndrome, discussing probable pathophysiological mechanisms, diagnosis and treatment. **Resumed Report:** 58 years old male patient, examined at an Ophthalmology service at São Paulo due to excessive tearing and an enophthalmia at the right eye. Orbit's CT showed maxillary sinusopathy on the right, with signs of chronicity. He was then referred to the Otolaryngology department at the same hospital. He denied pain, headache, obstruction or rhinorrhea. Face's CT was requested, showing radiopaque material, due to a possible osteoma, interspersed with total concealment at right maxillary sinus and left nasal septum deviation. Therefore surgery would be necessary. **Conclusion:** Despite being described as a rare syndrome, silent sinus syndrome is frequently diagnosed in Ophthalmology and Otolaryngology services. Once correctly diagnosed, treatment usually allows complete regression of enophthalmia, good sinus aeration and regression of the displacement of the walls.

Keywords: silent sinus syndrome, enophthalmia maxillary sinus.

8304. Nasolacrimal Duct Obstruction Associated to Radioactive Iodine Therapy for Thyroid Carcinoma: Report Case

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Introduction: Radioactive iodine ablation (RAIA) has been used for the postsurgical treatment of differentiated thyroid carcinoma for over 50 years. Ocular complications have been reported to occur in 16-23% of those patients. Of those complications, the incidence of nasolacrimal duct obstruction (NLDO) was reported to be 3.4%. **Objectives:** To report a case of nasolacrimal drainage system obstruction associated with radioiodine therapy. **Resumed Report:** A 34 years old female with history of total thyroidectomy and complementary treatment with RAIA in 2013, started in 2015 with tearing in the right eye that late affected the left eye. She was on oral antibiotic at least three times a year and continuous use of tobramycin eye drops, in the right eye, for the last two years to treat yellowish discharge from lacrimal system. Her eye exam showed lacrimal meniscus augmentation in both eyes and pressure on right lacrimal sac caused reflux of mucoid material through the canalicular system. No alterations have been seen at clinical examination rhinoscopy. Dacryocystography showed dilated lacrimal sac on the left eye and total obstruction of lacrimal drainage on the right eye. It was performed bilateral endoscopic dacryocystorhinostomy with silicone stent insertion. **Conclusion:** Radioactive iodine uptake by nasolacrimal duct mucosa with subsequent inflammation, edema and fibrosis seems to have a relationship to lacrimal duct obstruction. The knowledge of this complication is important for the study and proper management of these patients.

Keywords: nasolacrimal duct; iodine radioisotopes; thyroid neoplasms.

8305. Oral Mucosa Pemphigus Vulgaris: Case Report

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Introduction: Pemphigus vulgaris is a chronic, autoimmune and blistering disease characterized by the presence of intercellular antibodies in the epithelium of the skin, mucous and circulating in the blood. **Objective:** To report the case of a patient diagnosed with pemphigus vulgaris in the oral mucosa at the Otorhinolaryngology service on a public hospital in São Paulo. **Resumed Report:** A 39-year-old-female patient, complaining of odynophagia for 14 days associated with fever. Intra-oral examination revealed ulcerative lesion on tonsillar pillars and whitish spots. Antibiotic and steroid therapy were initiated. After 10 days of treatment, she returned with the same symptoms and was prescribed broad-spectrum antibiotic. The following month, fever, odynophagia, whitish plaques in the tonsils and leukoplasic lesion on the jugal mucosa were again present. Treated again with antibiotic and scheduled tonsillectomy. Performed surgery without complications after improvement of the infectious process. Material sent for analysis revealed bilateral chronic tonsillitis and non - specific chronic inflammatory process in the mucosa. One month after surgery, she presented leukoplasic lesions on anterior tonsillar pillars, uvula, jugal mucosa and gums. A new lesion biopsy was performed, and pemphigus confirmed. Now, patient is in use of corticoid with good control of the disease. **Conclusion:** Pemphigus vulgaris is a rare autoimmune disease and, despite its low occurrence, may have a serious prognosis. High mortality rates have been reduced since the introduction of corticosteroids. The anatomopathological study is fundamental due to the great variety of differential diagnoses with this pathology.

Keywords: pemphigus vulgaris; oral; mucosa.

8306. Spinocellular Carcinoma Nasal: Case Report

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Introduction: Spinocellular Carcinoma is one of the major malignant tumors that can affect the nose and paranasal sinuses, being more common in men in the sixth decade of life. Symptoms are usually nonspecific, such as epistaxis, unilateral nasal obstruction and occasionally tumor can be externalized through the nasal orifice. **Objective:** To report a Spinocellular Carcinoma's case with fast and aggressive evolution and nonspecific symptoms. **Resumed Report:** A 73-year-old male patient was examined at an Otolaryngology's service at São Paulo, mentioning symptoms as rhinorrhea and nasal obstruction at left for 3 months, dual to an ipsilateral expansive lesion for 1 month. Physical examination showed purulent and fetid rhinorrhea in both nasal orifices, and the left nasal orifice evidenced a friable and infiltrated lesion. Requested Computer Tomography of neck and paranasal sinuses showed an expansive lesion in the left nasal orifice, and erosion of anterior portion at nasal septum; invasion of the alveolar process of maxilla on the left and anterior and medial wall of the maxillary sinus ipsilateral, lesion with heterogeneous enhancement delimiting areas of necrosis; metastatic lymphadenopathy with necrotic degeneration at level IB bilaterally. Biopsy of the lesion showed spinocellular carcinoma (T4b N2c Mo), unresectable and inoperable. Patient progresses with deterioration of the condition and

death. **Conclusion:** Although it usually presents in an insidiously evolution, Spinocellular Carcinoma may have a rapid and fatal result. Therefore, it is always important to investigate deeply when the patient mentions unilateral nasal obstruction.

Keywords: spinocellular carcinoma; nasal obstruction; rhinorrhea.

8308. A Different Case Involving Ramsay Hunt Syndrome: A Case Report

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Introduction: Peripheral facial paralysis is a disease that involves the paralysis of the facial nerve, causing prejudice to the facial mimic muscles. It represents a wide range of disorders with heterogeneous etiologies, from idiopathic to traumatic infectious with congenital, neurological, metabolic and neoplastic causes. A possible cause is the reactivation of latent herpes zoster virus in the geniculate ganglion, leading to a rare type of herpes zoster, called Ramsay Hunt Syndrome, which is associated with bubbles and vesicles at the external ear and external acoustic meatus. **Objectives:** We aimed to describe a curious case of herpes zoster affecting multiple sites in the contralateral side of the body. **Resumed Report:** Male, 95 years old, arrived in our service presenting right peripheral nerve paralysis in treatment for otitis externa in the right ear. Also, he had developed herpes zoster infection on left forehead and upper right back region four months before. Indeed, the physical exam showed hiperemia and scar lesions in the referred areas. Otoscopy revealed inflammation and small amount of secretion in the right ear canal, with no further abnormalities. We reached the diagnosis of ocular herpes zoster with secondary infection in the right ear, causing the Ramsay Hunt Syndrome. **Conclusion:** This unique case shows it is important not to discard the diagnosis of herpes zoster involving multiple dermatomes concomitantly, even though in different hemibodies.

8309. A Curious Case in the Larynx: A Case Report

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Introduction: Pemphigus involving the mucous membrane of the pharynx and mouth associated to its manifestation on the skin is frequently seen. Pemphigus involving the larynx solely for six weeks it's what makes the case reported here a curiosity. **Objectives:** to report a case of a patient diagnosed with pemphigus vulgaris and its isolated manifestation on the larynx. **Resumed Report:** A man, aged 68, was referred to our service on account of sore throat, dysphonia and weight loss of 3 months` duration. A laryngeal endoscopic exam was performed and at the left aryepiglottic fold an erythematous lesion was visualized and, then, biopsied, but the analysis wasn't conclusive. The sore throat of which he complained was aggravated by dysphagia and appearance of other lesion in the mouth. An empiric treatment for disseminated candidiasis, herpes simplex and cytomegalovirus infection was performed with fluconazole and acyclovir, without clinical improvement. Based on a hypothesis of multiform erythema, we initiated corticosteroids with a brief improvement of the sore throat. After 20 days of hospitalization, bullous and ulcerated lesions appeared on posterior surface

of the chest. One of these lesions was biopsied and we could make the diagnosis of pemphigus vulgaris. The patient initiated his treatment with immunosuppressive dose corticosteroids and Azathioprine. There was regression of the lesions and complete improve of the sore throat. **Conclusion:** Pemphigus presenting with solely laryngeal, including epiglottis' lesions can be a reason of diagnostic and therapeutic delay and could occasionally be complicated with edema and obstruction of the upper airway.

8310. A Post-traumatic Facial Palsy Case Consonant to Literature

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Introduction: Traumatic facial palsy is the second most frequent cause of Peripheral Facial Palsy, with higher incidence in males, post-traumatic brain injury, suddenly onset, and the tympanic segment most affected. The diagnosis is based on anamnesis and physical examination. The computed tomography assists in topodiagnosis. Surgical therapy may be of an early or late approach. **Objectives:** Report a case of Traumatic Facial Palsy after an automobile accident. **Resumed Report:** M.F.A, 33 years old, male, admitted to the emergency room in comatose state after an accident. He had skull tomography with temporal-parietal fracture, mixed and transverse temporal bone fracture on the left. After transfer to the Intensive Unit Therapy Care, the Otolaryngology service was requested for evaluating the presence of otorrhagia and temporal fracture. Although, it was not possible due to comatose state. After otoscopy, the presence of otoliquoric fistula was ruled out. One week later, with improvement of the neurological picture and recovery, we notice the presence of left paralysis with House-Brackmann V, in addition to ipsilateral hypoacusis and tinnitus. The patient was already undergoing corticotherapy, however without improvement of the facial palsy. We opted for the surgical decompression of the nerve, via mastoidectomy and after, the patient had residual facial paralysis grade III. **Conclusion:** The early approach of post-traumatic Peripheral Facial Palsy brings benefit to the patient, however, as greater as the intensity of the paralysis, more aggressive and more tendency for surgical intervention.

Keywords: facial palsy; post-traumatic facial palsy; facial nerve.

8311. Histological Alterations Study of the Inferior Turbinate in Patients with and without Allergic Rhinitis

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Introduction: Rhinitis is an inflammatory disease of the nasal mucosa which has significant impact on quality of life. The global prevalence in the population ranges from 10 to 20%. The inflammation observed in this pathology leads to structural changes in upper airway mucosa, but the mechanism still unclear. **Aim:** To describe and evaluate the epidemiological and histological findings of the inferior nasal turbinate mucosa of patients with and without allergic rhinitis, as well as to relate the results of the prick test with symptoms. **Material and Methods:** Prospective descriptive study in HUBFS 14 patients underwent surgical partial turbinectomy in the period March 2010 to June 2011. Clinical data were obtained through research protocol completed by the medi-

cal examiner. The inferior nasal turbinate samples were sent for histopathological examination performed by a single pathologist and evaluated by light microscopy. **Conclusion:** The study population was composed ten men and four women ranging in age from 17 to 56 years. Patients positive prick test showed symptoms of type secretory and with negative complained of nasal obstruction. All patients had infiltrate mainly lightweight type. Among patients with positive prick test result was striking eosinophilia, but it was not possible to relate this to the severity of symptoms.

Keywords: rhinitis, prick test, histological changes.

8318. BPPV Misdiagnosed as an Inferior Vestibular Nerve Neuritis as seen by vHIT

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Introduction: vHIT is being said to be a very reliable tool in evaluating patients in acute crisis of vertigo and/or dis-equilibrium. The main purpose of the test is to differentiate acute neuritis from stroke. **Objectives:** To report the case of one patient with acute and very intense complaints of vertigo and disequilibrium that was misdiagnosed as Acute Neuritis of the Inferior Vestibular nerve based on vHIT findings. **Resumed Report:** A 44 years old, otherwise healthy, female came to consultation walking only with her husband help. She was experiencing vertigo, nausea, vomiting and intense dis-equilibrium since two days ago. The vHIT showed 0,28 gain with saccades when testing the right posterior canal, all other canals were within normal limits. Posturography showed that she was unable to stand over unstable surface with visual distorted stimulus, all other conditions were normal. Two days after she returned without disequilibrium and complaining just of positional vertigo. A complete otoneurological evaluation, including vectonystagmography for oculomotor tests, rotary pendular chair test, caloric test, cVEMP, oVEMP, vHIT, static posturography with dynamic tests and positioning nystagmus with videonystagmoscopy was done and the final diagnosis was BPPV of the Right Posterior Canal. After Eppley Maneuver, a week later, the vHIT alteration subsided completely and the same happened with the symptoms. **Conclusions:** 1) Otoliths may block endolymph stream in the posterior canal generating abnormal responses in the vHIT 2) After treatment these abnormalities disappear quickly 3) BPPV symptoms may present as an Acute Neuritis Episode.

8323. Epidermoid Carcinoma as a Differential Diagnosis of Laryngeal Paracoccidioidomycosis: A Difficulty Macroscopic Differentiation

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Introduction: Paracoccidioidomycosis, a systemic affection that mainly affects lungs, is caused by fungi Paracoccidioides brasiliensis or Paracoccidioides lutzii. When there is laryngeal implication the vocal cords are the most affected, dysphonia being the main complaint. **Objectives:** The objective of this study was to report a case of laryngeal paracoccidioidomycosis, its clinical manifestations, therapeutics, and diagnosis difficulty, emphasizing macroscopic and epidemiological similarities with laryngeal squamous cell carcinoma. **Resumed Report:** Male, 44 years old, rural worker until 18 years old, smoker and alcoholic. Patient with a history of 2 months of

dysphonia, odynophagia, dysphagia, neck pain and weight loss of 12 kg. Treated as a tonsillitis, until an Otorhinolaryngologist sent him with hypothesis of laryngeal neoplasia. Patient was emaciated and dehydrated. The videolaryngoscopy evidenced an ulcerative-infiltrative-vegetative lesion involving epiglottis, vestibular folds, pyriform sinus and anterior commissure. Negative serologies. The neck tomography showed concentric thickening from the epiglottis until the glottis. An incisional biopsy was performed. Histopathology revealed a chronic inflammatory process, granulomatous, compatible with Paracoccidioidomycosis. The treatment was initiated with Sulfa-methoxazole + Trimethoprim 800+160mg. There was a good response to treatment, and at 6 months there was remission of condition. Dysphonia remained as a sequel. **Conclusion:** The patient presented many factors associated to Paracoccidioidomycosis, such as smoking, gender, age over 30 years old, endemicity and previous rural work. However, even with all these associations, the main initial diagnosis was laryngeal neoplasia, perhaps due to its higher incidence. Therefore, Paracoccidioidomycosis should always be a remembered diagnosis in laryngeal lesions, especially in endemic areas.

8324. Epidemiological Aspects of Total Thyroidectomy in Brazil

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Introduction: The total thyroidectomy has a surgical application in the treatment of thyroid cancer, multinodular goiter and Graves' disease. It is detailed as complications of this procedure permanent hypoparathyroidism and hypocalcemia. **Objective:** To analyze the morbimortality and incidence of total thyroidectomy disease in Brazilian hospitals in last five years. **Methods:** Descriptive epidemiological study of the transverse type about Total Thyroidectomy (TT) in the five Brazilian regions, from the Hospital Information System of SUS (SIH / DATASUS) from 2013 to 2017. The variables were: Authorization of Hospital Hospitalization (AHH), Average Hospital Stay (AHS), Total Value of Expenses (TVE) and number of deaths. **Results:** A total of 37,687 AHH were observed in total thyroidectomy, with 2015 having the highest occurrence with 21.12% (n=7,963) and the region with the highest AHH was the Southeast with 50.25% (n=18,940), in contrast to the lowest of 6.43% (n=2,426), which was in the Midwest. There were more elective surgeries with 87.93% (n = 33,140). The MPH in Brazil was 2.5 days, and, in the North, the highest number was obtained (3.7 days). The public TVE reached R\$ 21,992,085.94 in the Country and the Southeast obtained the highest percentage among the regions, with 52.57% (n=R\$ 11,561,518.57). Were 55 deaths during the past 5 years and was higher in the Southeast (n=28). **Conclusion:** In TT, highlighted the highest values of AHH, TVE and death in the Southeast, and the largest AHS in the North. It emphasizes the relevance of the data for surveillance in health and hospital management.

8326. Nasopharyngeal Carcinoma in a Patient with Unilateral Aural Fullness: A Case Report

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Introduction: Nasopharyngeal carcinoma is an uncommon type of cancer. The most common symptom is the appearance of a painless neck mass, followed by eustachian

tube dysfunction and nasal complaints. Most patients have locoregionally advanced disease at the time of diagnosis, which greatly impacts overall treatment success and survival rates. **Objectives:** To point out the importance of searching for nasopharyngeal masses in adult patients with unilateral conductive hearing loss and chronic serous otitis media. **Resumed Report:** A 52-year-old woman presented with history of aural fullness in the right ear for almost four years. She had been seen by countless general practitioners and specialists and prescribed many treatments without positive results. In April 2018 she was sent for audiometric testing which revealed conductive hearing loss in the right ear. Nasal endoscopy revealed a sizable mass occupying the nasopharynx with eustachian tube obstruction. Computed Tomography showed an infiltrating mass with epicenter at the fossa of Rosenmüller obliterating the right eustachian tube extending to sphenoid sinus and some ethmoid cells, skull base erosion, invasion of the middle cranial fossa and posterior extension to the paravertebral space. Biopsy diagnosed Poorly Differentiated Squamous Cell Carcinoma. She was assessed as Stage III and referred to Radiotherapy and Chemotherapy. **Conclusion:** Nasopharyngeal carcinoma is a rare malignancy with non-specific presenting symptoms which contributes to frequent misdiagnosis. It's important to consider Nasopharyngeal tumours in the differential diagnosis of unilateral ear symptoms, improving chances of early diagnosis and successful treatment.

Keywords: nasopharyngeal carcinoma; serous otitis media; nasopharyngeal masses.

8329. Peripheral Facial Paralysis in Consequence of Acute Otitis Media: Pathophysiology, Factors Associated and Treatment

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Introduction: Acute otitis media is a common pathology in clinical practice. Complications such as facial paralysis, previously common, have become rare with initiation of antibiotic therapy. In 1889, facial paralysis was estimated in about 0.5% of cases. Currently, it is estimated in 0.005% of cases. **Objectives:** This study reports a case of facial paralysis due to acute otitis media, discussing pathophysiology, associations, treatment and prognosis. **Resumed Report:** Patient 12 years old, history of 1 day of right facial paralysis. Two days before, patient presented otalgia, hemiface paresthesia, right auricular plenitude and objective vertigo. At physical examination, peripheral facial paralysis grade III of House-Brackmann scale. At otoscopy, the tympanic membrane was bulging and hyperemic, with retrotympanic content. Absence of signs of Herpes Zoster and parotid mass. Audiometry with air-bone gap of 15 dB. CT scan showing no dehiscence of the facial canal. Initiated antibiotic therapy, corticotherapy and right myringotomy. Electroneurography with 60% of nerve degeneration. On the 10th day, it showed grade II of the House-Brackmann scale and on the 20th day of evolution, grade I, with total improvement of the condition. **Conclusion:** The conservative treatment with antibiotic therapy associated with corticotherapy and myringotomy is the most recommended, obtaining excellent answers, as in our case reported. Surgical treatment would be reserved for only few cases, such as prolonged paralysis or occult mastoiditis. The sequel rates range from 0-30%. The cure does not appear to be relating to gender, age, degree of paralysis, early or late onset, and symptoms duration.

8332. Cervical Schwannoma: A Case Report

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Introduction: Schwannomas are benign neoplasms of Schwann cells origin, and may arise from peripheral, cranial or autonomic nerves of the body. They are uncommon, well-encapsulated, slow-growing and can appear in a wide variety of locations. Malignant transformation are rare. A small percentage of cases are related to type 2 neurofibromatosis. **Objectives:** Report a case of cervical Schwannoma diagnosis and approach **Resumed Report:** A 72-year-old female presented with gradual pain at left hand extending to arm and shoulder with 1-year progression. In the last 6-months the symptoms got worse, and physical examination of the neck revealed a mass at left supraclavicular region. The mass was firm, nonpainful and mobile. Magnetic resonance imaging (MRI) was performed and showed an expansive, well circumscribed lesion measuring 1,5 x 2,0 x 1,5 cm, with low signal intensity at T1 and high signal on T2-weighted images, at C5-C6 level. Microsurgery was performed by head and neck and neurosurgery service in association. Histopathological analysis of the resected specimen confirmed the diagnosis of Schwannoma. **Conclusion:** Schwannoma are usual solitary and slow-growing neoplasms appearing often between 20 and 50 years old. Frequency seems to be the same between both sexes, and malignant change is rare. They are properly evaluated by MRI studies, but a definite diagnosis always require histopathological study. The tumor may arise from neural structures including cranial nerves, specially vestibular, radial, median, cervical plexus and sympathetic chain. The main treatment is microsurgery with enucleation with nerve preservation, which is technically difficult in big lesions.

8334. Case Report:MALT Lymphoma of the Nasopharynx and Larynx in a 16-year-old

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Introduction: Mucosa associated lymphoid tissue lymphomas (MALT) are extra nodal marginal zone B-cell lymphomas¹. The most common anatomical location and best studied is the stomach². Though relatively rare, these MALT lymphomas may arise within several sites in the head and neck³. **Objectives:** Report a case of MALT lymphoma of the nasopharynx and larynx in a 16-year-old female, with a review of the main features of this subset of extra nodal lymphoma. **Summary Report:** A 16-year-old woman was referred to the HC-FMUSP presenting progressive nasal obstruction, hoarseness and hyposmia she denied the symptoms of headache or nasal bleeding. We ran a nasal exam (telescope 0 degree) and we detected a tumor lesion in the cavum location although we could not see any disease in the nasal mucosa. We also ran a larynx exam (telescope 45 degree), which revealed a vegetative lesion in the ventricular band in both sides close to the aspect of laryngeal papillomatosis. The otolaryngologist group from HC-FMUSP decided to run the excisional biopsy in the surgical center, which confirmed the diagnosis of Malt Lymphoma. The patient was sent for chemotherapy plus radiotherapy treatment for 6 months. In the last telescope examination non-lesions were seen in the rhino pharynx or in the glottic location. The patient showed an improvement in all her symptoms. **Conclusion:** Non-gastric MALT lympho-

mas are infrequent and reported for most organs, however with no defined epidemiological basis. Given it is rare, risk factors, prognosis, and optimal management are not well defined.

Keywords: lymphoma, MALT, larynx, nasopharynx, tumor.

8338. Phoniatic Evaluation: Phonological Awareness in Children with Cleft Lip and Palate

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Introduction: Phonological awareness is important for development of reading, considered reflection on the representation of language and dependent on the auditory perception for speech sounds. Children with cleft palate present a challenge to Phoniatrics due to great complexity and variability of the communication frequently related to failure of facial articulatory musculature, decrease of intraoral pressure, middle ear disorders and socio-emotional factors. **Objective:** To describe phonological awareness in children with cleft lip/palate obtained in phoniatic evaluation and relate to middle ear status and type of cleft. **Method:** The multiple case study evaluated skills involved in phonological awareness by oral production in 21 children with cleft lip and palate, aged 6 to 9 years. Sensorineural hearing loss, intellectual disability and/or associated syndromes were excluded. **Results:** Group 1: 10 Cleft lip and palate; Group 2: 10 Cleft palate; Group 3: 1 Cleft lip. Five of the 21 children presented alterations in phonological awareness skills, all belonging to group 1. Sixteen children had middle ear alterations. However, they were not related to performance in phonological awareness tasks. **Conclusion:** The worst performance in the phonological awareness abilities was observed in children with greater severity in the facial cleft. It accounts for, not only articulate alterations and middle ear, but also other aspects related to oral language development: multiple surgeries and interactions, social deprivation and emotional aspects.

8339. External Auditory Canal Paraganglioma – Case Report

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Introduction: Head and neck paragangliomas, or glomus, are benign, hypervasculized, uncommon, slow-growing, non-chromaffin cells belonging to the extra-adrenal neuroendocrine system whose embryological origin descends from the primitive neural crest. The classic clinic consists of pulsatile tinnitus and conductive hearing loss. Involvement of cranial pairs and otalgia are present in larger tumors. They are more common in women, mean age of diagnosis between 26-50 years. The location is varied, being more frequent the carotid, jugular, vagal and tympanic disorders. Primary paragangliomas of the external auditory canal (EAC) are rare otologic findings. Until the year 2000, only three cases have been reported in the world literature. **Objective:** A rare case of EAC glomus is reported. **Resumed Report:** Patient, female, 61 years old, with complaint of hypoacusis and left longstanding otalgia. At otoscopy, a lesion was described in left EAC. Audiometry confirmed mild left conductive hearing loss. Computed tomography highlighted an oval lesion on the left EAC. Surgical excision of the lesion that was restricted to EAC without bone or tympanic membrane invasion was per-

formed. Histopathological examination suggested low grade neuroendocrine tumor (carcinoid tumor) and immunohistochemistry confirmed tympanic glomus. The patient had remission of otological symptoms and evolved without complications. She is 1 year post-operative with no signs of relapse. **Conclusion:** A rare occurrence of EAC glomus is observed. In view of the mentioned symptoms, investigation with images and audiology is necessary. The treatment is surgical, with subsequent anatomopathological confirmation, and good prognosis to the patient.

8343. Simulator Model for Myringotomy and Placing Tympanostomy Tube

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Introduction: In view of the high number of patients with indication of myringotomy and ventilation tube placement in referrals in ear surgeries' clinics, the competence of these techniques is required since the beginning of the resident's training. The manipulation of anatomical structures and surgical materials are challenging to inexperienced surgeons due to the restricted and delicate anatomy of the outer ear. In this way, simulation methods are an important proposal of acquisition of greater anatomical knowledge and surgical skills to the professional in formation. **Objectives:** To demonstrate that a low cost simulator can contribute for training of myringotomy surgical techniques with subsequent ventilation tube placement. **Methods:** It was used: 3 ml syringe; stylet; adhesive tape; vegetal paper; styrofoam support; surgical microscope; myringotomy instruments; ear speculum and ventilation tube. The syringe was sectioned with stylet to simulate the auditory canal and the vegetal paper for the tympanic membrane, being coupled to each other and to the styrofoam support to give stability to the mold. The ear speculum was then placed in the syringe hole to give access for the simulated surgical field. **Results:** The model allowed the training of myringotomy in vegetal paper, through a narrow conduit of the syringe, and later placement of ventilation tube. **Conclusion:** The simulated adaptation of the surgical scenario, as a complementary didactic tool, seems to be the most promising method for training, in order to give physicians more motor skills, safety and shorter procedures' execution.

8348. Otolaryngological Symptoms In Patients with Gastroesophageal Reflux

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Introduction: Gastroesophageal reflux (GERD) is the displacement of gastric contents from the stomach into the esophagus. When this passage causes symptoms that affect the patient's well-being and / or promotes complications, gastroesophageal reflux disease (GERD) arises. The reflux that reaches regions above the esophagus is called extraesophageal reflux. **Objectives:** To identify otolaryngological signs and symptoms of pharyngolaryngeal reflux. Identify how this pathology affects patients' quality of life. Propose actions of health promotion and quality of life. **Data Synthesis:** Laryngopharyngeal reflux results from gastric contents entering the laryngopharyngeal area. His clinic presents with hoarseness, globus, snoring, throat clearing,

vocal cord alteration, chronic laryngitis, sinusitis and dental erosions. Patients with RLF generally experience long-term discomfort due to the chronic and intermittent nature of the symptoms. Patients with lower purchasing power have difficulty accessing therapy since it requires the continuous use of medications, as well as behavioral control measures. Thus adherence to treatment can be hampered by personal, marital and economic reasons. The technological and population evolution that occurred in the last years led to a greater diagnosis of GER and RLF. **Conclusion:** Pharyngolaryngeal reflux leads to a marked impairment of quality of life. In addition, there is a need for behaviors that increase the adherence of patients to treatment, such as lectures in the waiting rooms of Basic Health Units, promote health education for children and adults through entertainment such as music, play activities and movies.

8349. Giant Retrolabyrinth Cholesteatoma: Case Report

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Introduktion: Cholesteatoma is a benign lesion composed by a keratinized epithelial matrix. This tumors have lytic destruction capability. They can be classified as congenital or acquired. Due to its lytic potential, an early diagnosis is mandatory in order to prevent complications and recurrence. **Objective:** To report the diagnosis elucidation process and surgical treatment of a patient with giant cholesteatoma and to review its epidemiology and physiopathology. **Case report:** Male, 17 years old, black skin, with otorrhea on the right ear for 15 years and ipsilateral facial palsy for 12 months. Patient reported that thirty days before evaluation the otorrhea was intensified and pulsatile headache initiated, associated with dizziness, cervical pain and fever. Physical examination showed yellowish discharge and an inflammatory polyp at right external auditory canal and ipsilateral facial palsy (grade III in House-Brackmann Classification). Tympanic membrane could not be seen. Temporal bone CT scan showed right middle ear cavity filled with soft tissue density material, middle ear ossicles partially destroyed, tegmen tympani dehiscence, lateral semicircular canal and cochlea eroded. Audiometry with no response in the right ear. In the surgical exploration, disease was found in right tympanic antrum, epitympanic recess, tegmen tympani. Middle ear ossicles were eroded. Lateral and superior semicircular canals, cochlea and retrotympanic region were compromised as well. Patient was discharged 72h after the procedure with reduced facial palsy (grade II in House-Brackmann Classification). **Conclusion:** Despite its benign characteristics, cholesteatoma can produce severe consequences and it has a dangerous morbidity potential if not diagnosed soon.

8350. Use of Mobile Technology in Otorhinolaryngology: Apps Profile

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Introduction: The popularity of mobile devices, such as smartphones and tablets, is gaining more and more recognition by patients and health professionals, who adopt as a method of accessing privileged information in the execution

area, counting on diagnostics, therapeutic and miscellaneous approaches. In otolaryngology, this promising tool presents an expansion in its applicability. **Objectives:** To verify the use of the available apps' profile in tablets and smartphones in the field of otolaryngology. **Methods:** Researches were conducted on smartphones and tablets with Android and iOS operational system, adopting the following tags "otolaryngology; nose; ear; throat; hearing; voice and dizziness", in May 2018. **Results:** Totaling 156 applications, Android platform accounts for 78% of all apps, with the majority in English language (49%), for educational purposes (36%), for free download (69%). On iOS platform (15%), 11% of applications are free; 10% in Portuguese and the majority (6%) for public contact with the specialty services. Applications for both platforms include only 8% of the sample, all in Portuguese and 6% for public contact for specialty events. The predominant role is seen in the educational support and public contact of users, especially Android platform, interfering in several ways in daily practice of otolaryngology. The verified applicability presented varied characteristics. **Conclusion:** The mobile technology is attractive, interactive, accessible and present in almost full time in the routine of part of the population and represents an increasing importance in otolaryngology, with possibility of various tasks that favor medical practice.

8351. Non-Hodgkin Lymphoma of Nasal Cavity: Case Report

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Santa Casa de Limeira

Introduction: The non-Hodgkin lymphoma (NHL), of nose and paranasal sinuses, is a rare neoplasm, account for about 0,17-2% of all NHL cases. However, lymphomas are the most common head and neck non-epithelial malignant tumors. The non-Hodgkin lymphoma represents 60% of the cases, and the most common type is categorized into B-cell. **Objectives:** To describe a case of diffuse large B cell nasosinusinal non-Hodgkin lymphoma, attended in the Santa Casa de Limeira Hospital. **Resumed Report:** J.C.L, a male patient, aged 69 years old, assisted by the otorhinolaryngology service, presented with a chronic and progressive nasal obstruction. Patient also noticed a hyposmia in right side. Face sinuses tomography identified a total maxillary veiling to the right, all of sphenoid cells and some ethmoidal cell. With the diagnostic hypothesis of a tumor affection, opted for biopsy and the material was sent to the pathologist for analysis. The report came back categorizing it as diffuse B cell non-Hodgkin lymphoma CD 20-positive. The patient was referred to oncology care and offered six cycles of R-CHOP (rituximab, cyclophosphamide, doxorubicin, vincristine and prednisone). **Conclusion:** Non Hodgkin lymphoma of nose and paranasal sinus is a rare presentation and difficult to diagnose. Consequently, the otorhinolaryngologist must be alert in front of nonspecific and prolonged nasal symptoms. Early diagnosis are fundamental for the introduction of treatment and improves patient survival and prevents local destruction or metastases.

Keywords: B-cell lymphoma; Non-Hodgkin; paranasal sinuses.

8355. Surgical Excision of a Extensive Cervical Lymphangioma: A Case Report

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Introduction: Lymphangioma is a rare congenital malformation, result of sequestration of lymphatic tissue that fail to communicate with the normal lymphatic system during the embryogenesis. Neck and face are the most common sites. Imaging tests are useful for assess the extent of the lesion. Surgical excision is the most indicated modality of treatment. **Objective:** Report a case of a voluminous cervical lymphangioma in a infant, which treatment was complete surgical excision. **Resumed Report:** 16-months-old male, presenting a right sided cervical mass, noted 1 week post childbirth, growing constantly. The mass was located at the posterior triangle and extended all over the right cervical region. It was a expansive lesion, painless, tender, movable, with soft skin surface. Magnetic Resonance Imaging demonstrate voluminous expansive mass, predominantly cystic, septate, located at the right posterior cervical triangle, spreading inferiorly to infraclavicular fossa, dorsal region, and superiorly to the ear, causing compressive effect in perivertebral spaces and vascular spaces. Lesion measures 13x8x11cm. Surgical excision was performed, with total removal of the lesion. A closed system suction drain was installed. The patient presented satisfactory evolution after the procedure. Drain has been removed and patient was discharged 5 days after procedure. **Conclusion:** Lymphangioma is a benign behavior disease, however due to its great growth potential, it can lead to compression of important adjacent structures. In the case reported, there were compressive effect of perivertebral and vascular spaces, being performed complete surgical excision of the lesion, with satisfactory short-term results.

Keywords: lymphangioma; cervical mass; congenital malformation.

8357. Subglottic Stenosis in Granulomatosis with Polyangiitis: Case Report

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Introduction: Granulomatosis with polyangiitis (GPA) is an idiopathic small-vessel necrotizing granulomatous vasculitis. Tracheobronchial stenoses are potentially severe manifestation, occurring in 9 to 16% of cases, and other findings include nasal, paranasal sinuses, lungs and kidney involvement. GPA affects a wide age range, with usual onset of symptoms in the 6th or 7th decade. **Objectives:** Report a case of GPA presenting with subglottic stenosis. This case is part of a prospective study in progress about subglottic stenosis in granulomatous conditions. **Resumed Report:** A 41-years old female presenting with 3-years history of progressive dyspnea starting in the last year with purulent rhinorrhea and recurrent attacks of facial pain. She was admitted at otolaryngology service, where nasal endoscopy revealed nasal septum perforation with abundant crusts. Videolaryngoscopy showed a 50% subglottic stenosis. A computed tomography (CT) of paranasal sinuses was performed, revealing maxillary and frontal mucosal thickening with air-fluid level. During the investigation, antineutrophil cytoplasm antibody (c-ANCA) was positive (1/80) and kidney biopsy confirmed GPA. **Conclusion:** GPA requires multidisciplinary follow-up

and treatment includes systemic corticosteroids and immunosuppressive therapy. A variety of techniques can be used in subglottic stenosis, including dilation, endoscopic resection and reconstructions. Although surgical treatment does not affect the natural history of GPA, it reduces morbidity associated with clinical manifestations.

8358. Complicated Acute Otitis Media: Case Report

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Introduction: Acute otitis media is common in the pediatric age group, with a low rate of complications today. Acute mastoiditis is the most frequent complication, affecting mainly under 10 years. Among the other possible complications are extradural abscess and sigmoid sinus thrombosis. **Objective:** Report a case of complicated acute otitis media **Resumed Report:** A 3-year-old patient with fever for 45 days which persisted after treatment of acute otitis media with antibiotics presented retroauricular bulging and mastoiditis was hypothesized. Mastoid tomography showed bilateral mastoid veining, presence of mastoid bone dehiscence in the upper and lateral right walls, extradural collection adjacent to the posterior and superior wall of the mastoid suggestive of epidural abscess and sigmoid sinus thrombosis on the right. The child was afebrile, in good general condition, with preserved facial mimetics, otoscopy with bilaterally-cored stoppers, and retroauricular bulging to the right associated with phlogose. She underwent mastoidectomy with right myringotomy, had a good clinical evolution, and was kept hospitalized for clinical treatment of the intracranial complication, since the neurosurgery team did not indicate surgical approach of the abscess or anticoagulation, being discharged asymptomatic. **Conclusion:** In recent years there has been a decrease in the occurrence of intracranial complications of acute otitis media with the advent of antimicrobials, with extracranial complications being more common. The complications presented by the patient have in common the fact that they present with few clinical symptoms, but require adequate surgical treatment associated with antibiotic therapy.

Keywords: acute otitis media, extradural abscess, sigmoid sinus thrombosis.

8359. Nasal Foreign Body: Radiological Examination

Founding – Case Report

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Sos Otorrino

Introduction: Foreign bodies (FB) in the nasal passages is one of the most common causes of emergency consultations in Otorhinolaryngology, occurring mainly in children. Can cause symptoms like: runny nose, nasal obstruction, fetid and unilateral rhinorrhea, however it can be asymptomatic. **Objective:** to report a case of asymptomatic nasal FB with accidental radiological diagnosis in a patient with traumatic brain injury (TBI) performed in an emergency and trauma hospital. **Case report:** MCF, female, 2 years old, was admitted in a hospital with a history of mild TBI after fall from a certain height. It was prompted by the pediatrician a radiography and computed tomography that showed a face subgale-

al hematoma in the frontal region and presence of metallic artifact in the right nasal cavity, caused by screw. After examination the patient was transferred to Otorhinolaryngologic evaluation. Her mother couldn't inform how long the foreign body were inside the nose. The child did not present any nasal complaints. After a few attempts to remove FB in Office without success, it was necessary to carry out general anesthesia in the surgical ward for the removal, which was located in the right region of rhinopharynx. The FB has been removed successfully. **Conclusion:** Generally, the cases of nasal FB resolves easily, but when there is a technical difficulty or lack of patient cooperation, you should opt for removal in surgery under sedation or general anesthesia to prevent complications such as swallowing or aspiration.

Keywords: foreign body, nasal, child.

8361. External Hearing Conduit Spinocellular Carcinoma: An Atypical Presentation

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Introduction: Malignancies of the external auditory canal (EAC) represent less than 0.2% of head and neck tumors and squamous cell carcinoma (SCC) is the most frequent one. The disease is found mostly in women from 50 to 70 years. Symptoms include earache, bleeding, otorrhea. Metastasis are rare. Dissemination route is often by contiguity, mostly to middle ear, parotid gland and auricle. Diagnosis is based on histopathological examination. **Objective:** To report a SCC of External Auditory Canal and to emphasize the importance of including malignant disease at the differential diagnosis. **Case report:** Patient, 83 years old, male, with left auricle edema and pain for 3 months. Several antibiotics were tried with no results. Physical examination showed edema in the left auricle and otorrhea. No significant changes in the tympanic membrane. Initially, patient was treated for perichondritis with 2nd generation cephalosporin and steroids. Revaluation showed clinical deterioration. Patient was then hospitalized for parenteral antibiotic therapy (vancomycin and cefepime). Patient still had no significant improvement after some days. Blood culture was positive for multiresistant staphylococcus aureus. CT scan showed parotid gland and mastoid infiltration. Biopsy was performed at auricle. Histopathologic analysis revealed squamous cell carcinoma of EAC. Neither metastasis nor positive lymph nodes were found. Patient was referred to Oncology Department for radiotherapy and chemotherapy. **Conclusions:** Malignant diseases should always be considered as a differential diagnosis for those resilient lesions, mostly in the elderly population, because time is a relevant subject in these cases and it can deeply affect prognosis.

8362. Profile of Attendances at Emergency Room Trauma

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Sos Otorrino

Introduction: Urgency/emergency calls in Otorhinolaryngology are common and generally low mortality, however there are potentially lethal situations that need immediate assistance. **Objective:** to evaluate the epidemiological characteristics of attendances in Otorhinolaryngology ER in a

Trauma hospital in Paraíba in the period of 12 months. **Method:** Epidemiological study, cross-sectional, retrospective with data collection performed from record in a minute book of the visits made in the Otorhinolaryngology emergency room of a high complexity hospital in the city of João Pessoa for a period of 10 months. Were collected data on the clinical diagnosis of patients seen in the service. The sessions were divided in subspecialties: Otology, Rhinology and Pharyngolaringostomatology. **Results:** 2002 calls were made during this period. Among the calls in this service, 1115 (55.6%) were for Diagnostics in Otology, within that group the most diagnostic found was of foreign body, followed by ear infections. Secondly the Pharyngolaringostomatology with 537 (26.8%) attendance followed by subspecialty of Rhinology with 350 (17.4%) attendances. **Conclusion:** Among the attendances at Otorhinolaryngology emergency room evaluated in this service, 55.6% subspecialty Diagnostics Otology, with predominance of cases of foreign body in ear that constitute one of the most frequent ER in Otorhinolaryngology. Although rare, serious complications can occur, therefore the management of these patients should be performed by trained Otorhinolaryngologist and using suitable material.

Keywords: emergencies; Epidemiology; Otorhinolaryngology.

8363. Epidemiological Profile of Periamigdalianos Abscesses in a Reference Hospital of João Pessoa

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Sos Otorrino

Introduction: The periamygduian abscess is characterized by the presence of purulent collection between the fibrous capsule of the palatine tonsil and the superior pharyngeal constrictor muscle. The appropriate treatment is essential to prevent serious complications as an extension to the deep spaces of the neck and its rupture with aspiration of secretions to the lower Airways. **Objective:** to evaluate the epidemiological profile of patients with periamygduian abscesses in a hospital of João Pessoa - PB. **Methods:** epidemiological study, cross-sectional, retrospective with collection of data from medical records of a high complexity hospital in the city of João Pessoa, for a period of 10 months. **Results:** A total of 22 cases of periamygduian abscesses were identified, most of them men (59%). The mean age was 31.85 years, the youngest patient at 14 years and the oldest at 76 years. All of them underwent antibiotic therapy, and of these patients, 2 (4.5%) had spontaneous drainage of abscess and did not require puncture, the others were submitted to puncture. Of the patients submitted to puncture, 14 (63.6%) presented drainage of secretion and 6 (27.2%) had no drainage when punctured. All patients progressed well and without complications. No case of death was recorded. **Conclusion:** Treatment of periamygduian abscess consists of puncture with drainage, antibiotic therapy, analgesics and anti-inflammatory drugs. Depending on the previous history, tonsillectomy may be performed during the abscess, however bleeding during surgery is more frequent.

Keywords: abscess, epidemiology, drainage.

8365. Resume Report: Treatment of Cavitary Myiasis with Topic Ivermectin

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Sos Otorrino

Introduction: Cavitary myiasis is a disease caused by deposition of fly eggs in human body cavities and subsequent hatching of larvae that feeds with infected or dead tissue. The prevalence is highest at warm regions and poor people with low Level of class. The topic treatment of myiasis cavitary needs more studies to show the truly effectiveness of drug in these cases. Especially in children which not always could take this medication. **Objective:** To demonstrate the effectiveness of treatment on cavitary myiasis with topic Ivermectin. **Resumed Report:** T.O.S., male, 01 year old, was admitted at the emergency with edema and bloody and purulent secretion in the right ear two days ago. The exam shows worms at external auditory and anti-helix of the right auricular pavilion. It was macerated 6mg tablet Ivermectin with saline 0.9% and put into the auditory channel and anti-helix of right ear. Repeat it after 48 hours. At the end of 72 hours after procedure, were manually removed about six worms from right ear of patient and he had discharge from hospital. **Conclusion:** The treatment of cavitary myiasis with topic medication seems to be a good option for disease, especially in patients with contraindication to oral drug apply (eg under 15 kg). Moreover, studies that proves the effectiveness of this therapeutic method are still required.

Keywords: cavitary myiasis; drug treatment; myiasis.

8366. Giant Temporal Osteoma: Case Report

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Introduction: Temporal osteomas are rare benign tumors, accounting for 0.1% to 1%, higher incidence at 23 years, slow growth and generally asymptomatic. They compromise the squamous, petrous and most often mastoid portions. Considered giants when overcomes 3 cm or 110g. Unusual complications are sensorineural hearing loss and paralyzes of cranial pairs secondary to the mass effect. **Objectives:** To report a case of giant temporal osteoma with atypical clinic and multiple recurrences. **Resumed Report:** Patient, male, 19 years old, complaining of increased volume in the right retroauricular region, with slow, progressive and asymptomatic growth. History of two surgical procedures followed by relapses. Physical examination presents a lesion of stony consistency, displacing the right ear pinna and consequent partial stenosis of the posterior portion of the external auditory canal. Audiometry was normal. Tomography showed a hyperdense mass in the mastoid bone of the right temporal bone. Surgical approach was chosen with a partial temporalectomy with skeletonization of the dura mater of the middle and posterior fossa, sigmoid sinus and posterior portion of external auditory canal, preserving medial portion to support the intact tympanic membrane. Histopathological study revealed osteoma. Progressed without signs of tumor recurrence in the first postoperative year. **Conclusion:** The treatment of the craniofacial osteoma can be conservative if asymptomatic, however when it presents rapid growth, extensive or aesthetic defects is indicated complete surgical resection of the lesion, with excellent prognosis curative and aesthetic. The recurrence is rare and without reports of malignancy.

Keywords: osteoma, mastoid, temporal bone.

8367. Profile of Patients Undergoing Adenotonsillectomy in the Municipal Hospital Valentina in the Year from 2016 to 2018.

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Sos Otorrino

Introduction: In otorhinolaryngology clinics are the main disorders of adenotonsillar hypertrophy, which is the main surgical work in this specialty. The accepted indications are: adenotonsillar hypertrophy, recurrent tonsillitis, rheumatic fever, glomerulonephritis, halitosis, secretory otitis media, repeated rhinosinusitis and glomerulonephritis. **Material and Method:** A descriptive study was conducted, analyzing patients submitted to adenotonsillectomy and tonsillectomy in Otorhinolaryngology Service of the Valentina Municipal Hospital - João Pessoa-Paraíba, between 2016 and 2018. **Results:** 171 procedures involving adenotonsillectomy and tonsillectomy had been carried through, being the first of these the most common procedure, totaling 152 surgeries (89%). Of the total number of patients, 90 (53%) were male and female 81 (47%). Regarding the age group, it had predominance of procedures carried through in children between 3 and 11 years. **Conclusion:** Regarding the 171 procedures involving the adenotonsillectomy and tonsillectomy, the adenotonsillectomy most common procedure. There was no significant difference in sex between the ages of 3 and 11 years with the highest number of interventions.

Keywords: hypertrophy, profile, tonsillectomy.

8369. Case Report: Congenital anosmia

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Sos Otorrino

Introduction: Smell changes can be congenital or acquired. Congenital anosmia is rare and may be isolated or part of a syndrome, having a great impact on the quality of life of the individual. **Objective:** To report a case of isolated congenital anosmia. **Case report:** A 48-year-old male patient with congenital anosmia reports that he has never smelled, has diminished taste, but has an olfactory sensitivity to irritating odors. He has a family history of anosmia. Deny face trauma and TBI. Deny agenesia. He brought normal laboratory tests. Otorhinolaryngological examination and nasofibroscopy without alterations. No alterations were observed in computed tomography of the paranasal sinuses nor in nuclear magnetic resonance of the brain. Patient reported feeling sad because of the condition, as well as difficulty feeding due to the lack of appetite caused by the decrease of taste and that the same has already experienced situations of risk due to the condition. **Conclusion:** Abnormalities of smell and palate are complex, related and difficult to manage, so it is important to acquire knowledge for the correct and early diagnosis of these changes, associating with a multidisciplinary team, in order to clarify the patient's doubts, to delay the evolution of the disease and even to provide a better quality of life.

Keywords : smell disorders , sensory modalities , multidisciplinary.

8370. Pediatric Odontogenic Cyst: A Case Report

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Introduction: Odontogenic cysts result from proliferation of remnant epithelial cells associated with teeth formation. They can be classified as Developmental or Inflammatory Cysts. Clinical presentation is varied, but most patients are asymptomatic. Imaging studies are indispensable for assessing extension and planning treatment. Diagnosis is achieved through histopathological examination. In most cases the preferred treatment is complete surgical enucleation. Marsupialization or decompression may be performed to minimize injury to adjacent structures. **Objectives:** Report an uncommon case of large odontogenic cyst of the maxilla in a child. **Resumed Report:** A 10-year-old female, referred to otolaryngologist after diagnosis of facial abscess. Mother reported facial swelling over a period of 10 days and denied tooth or facial pain, fever or other symptoms. Upon physical examination patient presented with large swelling of the maxilla on the right side, bony swelling of the hard palate, displacement of maxillary central incisors. Rhinoscopy showed elevation of the floor of the right nasal cavity. Computed Tomography revealed cystic formation on the right maxilla, with teeth within the cyst and bone remodeling of the adjacent maxillary sinus. Biopsy diagnosed an odontogenic cyst, but didn't determine exact subtype. Patient was referred to the Maxillofacial surgeon who performed the marsupialization.

Conclusion: The odontogenic cyst is a benign clinical entity. Definitive treatment most often demands complete surgical enucleation. In cases where there is a large involvement of the upper teeth as well as the maxillary sinus and nasal cavity, multidisciplinary approach provides the best chance of successful treatment.

Keywords: odontogenic; cyst; maxilla.

8373. Case Report: Mycetoma of the Maxillary Sinus

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Sos Otorrino

The fungal ball or mycetoma is an infectious, noninvasive condition where fungal elements are found within the paranasal sinuses without mucosal invasion or granulomatous transformation. It affects immunocompetent individuals, usually affects only one sinus of the face, especially the maxillary sinus, followed by the sphenoid. The clinical picture involves repetitive rhinosinusitis, associated to the mass effects caused by the lesion. The treatment is performed with the total surgical removal of the lesion. In this study, we report a clinical case of a patient with a fungal ball in the right maxillary sinus, who presented with right pain and recurrent rhinosinusitis three years previously, and was previously treated with nasal corticosteroids. Should be considered the possibility of fungal infection in patients with atypical facial pain, recurrent rhinosinusitis, who do not benefit from the clinical treatment employed.

Keywords: fungal ball, mycetoma, chronic rhinosinusitis.

8374. Macroglossia due to Systemic Amyloidosis: A Case Report

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Introduction: Amyloidosis is characterized by the abnormal extracellular deposition of one of a family of unrelated proteins (amyloid), in different tissues or organs. It is usually associated with tissue or organ dysfunction. The cause is not yet known. **Objectives:** The present study was undertaken in order to report a case of primary systemic amyloidosis. **Resumed Report:** Man, 59 years old, black skin, attended at Otolaryngology Department of Hospital Santo Antonio, Salvador-BA, Brazil, with complaint of increased tongue size, dysphagia and 20kg weight loss for the last 2 years. Physical examination detected macroglossia and eyelid edema. The patient was submitted to laboratory tests like renal and thyroid function, HIV serology, FAN, C3, C4, FR, which were all normal. Urinary tract ultrasound had no significant changes. Echocardiogram detected alteration of ventricular relaxation. Interatrial and interventricular septum were intact. Protein Electrophoresis showed Gama globulin monoclonal peak. Tongue and per umbilical subcutaneous fatty tissue biopsy were made. Histopathological analysis showed birefringence to Congo red coloring, which confirmed the diagnosis of amyloidosis. The patient was referred to a Rheumatology center and will keep the follow-up at Santo Antonio's Otolaryngology Department. **Conclusion:** It's highly important to keep in mind less common diseases with ear, neck and throat manifestations, such as amyloidosis, in order to start therapy as soon as possible and assure the best prognosis.

8375. Catastrophic Antiphospholipid Syndrome(CAPS)**Induced by Tonsillitis: A Rare Case Report**

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Introduction: The catastrophic antiphospholipid syndrome (CAPS) is a rare life-threatening form of antiphospholipid syndrome (APS) in which widespread intravascular thrombosis results in multiorgan ischemia and failure over a short period. The etiology of CAPS is uncertain; however studies appointed to infectious diseases as the main triggering factor. **Objectives:** To report a case of CAPS induced by tonsillitis. **Resumed Report:** A 21-year-old man was referred to the Hospital das Clinicas otolaryngology emergency care unit after five days of unsuccessful antibiotic therapy for tonsillitis treatment. His Oroscopy showed a necrotic tonsillitis; further clinical and imaging evaluation ruled out cervical collections. Admisional laboratory tests revealed thrombocytopenia and microcytic anemia. On the third day of hospitalization, while presenting persistent odynophagia, the patient complained of sudden onset of abdominal and testicular pain and hematuria. Videolaparoscopic evaluation of abdomen was performed and identified a retroperitoneal hematoma. The patient experienced progressive worsening of his clinical condition and was then admitted to the intensive care unit 10 days after hospitalization. Furthermore, he developed disseminated intravascular coagulation, multiple thrombosis events and abdominal compartment syndrome. Total abdominal colectomy and partial enterectomy were performed due to progressive intestinal ischemia. Serologic autoimmune tests were performed. Anti-beta2-glycoprotein I was posi-

tive. Before starting plasmapheresis treatment, the patient experienced refractory shock and died. **Conclusion:** The low incidence of CAPS might make it difficult to recognize in clinical practice. Further research is required to improve its diagnosis, leading to early treatment and better outcomes of this potentially lethal condition.

Keywords: catastrophic antiphospholipid syndrome, tonsillitis, thrombosis.

8378. Silent Sinus Syndrome: Case Report

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Sos Otorrino

Introduction: The silent sinus syndrome is the association of enophthalmos and atresia or atelectasis of the maxillary sinus in the absence of sinus symptoms. **Objectives:** Exposing a case of silent sinus syndrome, a rare pathology.

Resumed Report: J. B. C. S, 34 years old, male, initially sought eye care with complaint of ocular asymmetry, because his right eye was smaller and lower than the left, with progressive worsening in the last 6 months. At the examination, enophthalmos and right hypotropia were observed, with no other changes. Magnetic resonance imaging and computed tomography of the paranasal sinuses were performed, and a hypoplasia of the right maxillary sinus associated with ipsilateral orbital depression was evidenced, being referred to the otorhinolaryngologist. When questioned, the patient denied nasosinus symptoms, past facial trauma, previous nasal surgery or visual complaints. Nasal endoscopy showed a non-obstructive septal deviation to the right, hypertrophic inferior turbinates, eutrophic medium turbinates, and the meatus and cavum were unchanged. After the hypothesis of silent sinus syndrome, the patient underwent nasosinus endoscopic surgery. A uncinctomy and maxillary antrostomy were performed, with enlargement of the natural ostium of drainage, and the patient presented improvement of the condition. **Conclusion:** The Silent sinus syndrome is a low prevalence condition. The knowledge of this syndrome is essential for the correct diagnosis and early surgical treatment in order to stop the progression of enophthalmos.

Keywords: silente sinus; enophthalmos; maxillary sinus.

8381. Foreign Body in Nasal Sinuses with Orbital Fistula

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Paciente CMF, male, 31 years old, with history of penetrating trauma in the left eye with a pen 15 years ago. It evolved with mucoid secretion that refluxed into conjunctiva and inferior conjunctival fornice. Patient didn't present ophthalmological alterations. It was submitted to tomography that evidenced the presence of left orbital floor fracture with communication to the maxillary sinus. Opposed for surgical accomplishment for fistula correction. In the intraoperatively observed presence of foreign body (pen) in the orbital floor that penetrated the left maxillary sinus, which was removed. A septal cartilage graft was used for fistula correction. Patient evolved with improvement of complaints.

8386. Odontogenic Focus Rhinosinusitis Complicated by Brain Abscess

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Introduction: The complications of rhinosinusitis are potentially serious and often fatal, usually stemming from acute primary infections or exacerbations of chronic rhinosinusitis. These events are rare, with predominance in males (3:1) and in children (1:32,000 cases). Individual host factors should be considered but complications typically occur in previously healthy and young individuals. **Objectives:** Report the case of a previously healthy patient with acute rhinosinusitis that evolved to cerebral abscess. **Resumed Report:** J.P.L.M, male, 25 years old, white, native and from São Paulo. History of mental confusion for 4 days, plus cough and fever. The patient denied previous pathologies, comorbidities or use of illicit drugs. At physical examination, Glasgow comma scale of 9, signs of meningeal irritation, teeth in poor condition, bone erosion in 1st/2nd molars. Magnetic resonance with skull contrast showed, frontal extra-axial collection with 0,8cm, resection of adjacent cerebral parenchyma with reduction of local liquor spaces and pansinusopathy. He has surgically approached, with improvement of the neurological chart, without any sequels. **Conclusion:** Although rare events, it is essential that the doctor know the possibility of complications during the evolution of rhinosinusitis cases. Most of the time the history is not obvious and the patient seeks care due to symptoms of the complications. Cranial complications are more serious and life-threatening (6%). Patient may show nonspecific symptoms (headache, fever) or may be asymptomatic in up to 15% of cases. The treatment involves hospitalization, corticosteroid therapy and prolonged broad-spectrum intravenous antibiotic therapy in addition to surgery.

Keywords: rhinosinusitis, complication, brain abscess.

8393. Sudden Hearing Loss with Total Response to Medicinal Treatment: Case Report

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Introduction: Sudden sensorineural hearing loss (SSNHL) is defined as loss greater than 30 decibels (dB) in 3 consecutive frequencies within 3 days of the onset of the symptom¹. Prognosis for hearing recovery is based on several factors, including duration and degree of deafness, age, and vertigo². Although SSNHL will often spontaneously improve without treatment, directed therapy against discernable causes of SSNHL and corticosteroid therapy for idiopathic SSNHL are mainstays of the care of these patients³. **Objectives:** Report a case of sudden deafness with complete improvement after clinical treatment. **Resumed Report:** MScS, 67 years old, female, reported sudden deafness in the right ear started 20 hours ago, with no other symptoms. She reported symptoms after using the cell phone, noting the auditory asymmetry. She denied a history of trauma in ear topography, recent upper airway infections, and cardiovascular events. Otoscopy without alterations. Audiometry were performed, showing sensorineural hearing loss in the right ear with a threshold of 40 dB and asymmetry between thresh-

olds greater than 30 dB, with type A tympanometric curves. Initiated treatment with Aciclovir 2g/day and Prednisone 60 mg/day during 7 days. Returning to reevaluation with partial improvement on day 7 and total improvement on day 14. Audiometry with 15 days of onset of symptoms showed a full recovery, with a threshold of 5dB in both ears. **Conclusion:** Although idiopathic etiology is the main cause of sudden loss, early diagnosis and treatment is necessary because of the potential for resolution of the condition.

Keywords: sudden hearing loss; corticosteroid therapy; sensorineural hearing loss.

8397. Pyogenic Granuloma of the Middle Turbinate: Case Report

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Introduction: Pyogenic granuloma or lobular capillary hemangioma is a condition that can affect skin and mucosas. It rarely involve the nasal cavity and the anterior nasal septum is the most common site. Clinic is nasal obstruction and epistaxis, therefore, becomes an important differential diagnosis for malignancy. **Objective:** To present a case of a rare condition in the nasal cavity, in an unusual location, with no typical history, reminding the importance of accurate and rapid diagnosis, since this condition has similar clinic to several nasal diseases. A 53-year-old female patient with epistaxis, about three times a week, for two months. No other nasal symptoms. There was no history of comorbidities, regular medications, smoking, previous surgeries or trauma. On nasal endoscopy an irregular lesion and friable appearance on the head and body of the right middle turbinate. CT scan showed that the lesion was limited to the middle turbinate. Endoscopic excision of the lesion was performed and histopathological report confirmed the diagnosis of pyogenic granuloma. **Conclusion:** Although pyogenic granuloma is rare in the nasal cavity and at locations different of the nasal septum, it should always be remembered as differential diagnosis of patients with nasal obstruction and epistaxis, mainly with rapid evolution. It is also worth notice that the absence of a history of nasal trauma does not rule out this condition, as the case described.

8398. Differential Diagnosis of Recurrent Epistaxe: A Case of Rendu-Osler-Weber Syndrome

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Introduction: The Rendu-Osler-Weber syndrome is a rare systemic fibrovascular dysplasia, which presents with pulmonary, gastrointestinal, dermatological, genitourinary and mainly otorhinolaryngological manifestations^{1,2}. The incidence is about 1-2/1000000 and recurrent epistaxis is the most common symptom present in 90% of the cases⁴. Treatment is of palliative nature only; there is still no consensus on the best treatment option⁵. Options vary between anterior and posterior nasal packing and chemical or laser cauterization of the lesions^{6,7}. **Objectives:** Report a rare case showing an epistaxis as the main symptom of this syndrome. **Resumed Report:** JFL, 45 years old, female, with persistent large amount of epistaxis for 3 years. Daily bleeds have been re-

ported, about two to three times a day, sometimes requiring hospital intervention and anterior and posterior tamponade. Numerous cauterizations of bleeding area were performed with 70% trichloroacetic acid, with no satisfactory response, including electrocautery. A history of minor epistaxis has been reported in childhood and adolescence. Deny other sites of bleeding. She reported having a 13-year-old son with a similar condition. At the examination, there were areas of recent bleeding in Little's area, in addition to numerous petechiae in nasal and jugal mucosa. History of coagulopathies has been ruled out. At the moment, it continues in control treatment during the crises. **Conclusion:** Rendu-Osler-Weber syndrome is a multisystemic disease, first manifested by repeated epistaxis, which reduces patients' life expectancy⁸. Thus, it is fundamentally important that the otorhinolaryngologist perform correct diagnosis as well as to prevent systemic complications of this disease.

Keywords: epistaxis; rendu-osler-weber syndrome; hereditary hemorrhagic telangiectasia.

8400. Clinical and Epidemiological Profile of National Voice Week at Hospital Santo Antônio – Obras Sociais Irmã Dulce (HSA-OSID)

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Introduction: The National Voice Campaign is promoted by Brazilian Otolaryngology, Voice and Head and Neck Surgery Societies. It consists in promotion of community education and care and easy access to exams such as videolaryngoscopy. The first campaign occurred in 1999 and approximately 1,550 precancerous lesions, 3,000 benign lesions and a hundred cancer cases have been detected since then. **Objectives:** To determine the profile of the patients who were attended at a Otorhinolaryngology Residency Service in a hospital in Salvador, Bahia, Brazil, during the 2018 National Voice Campaign. **Methodology:** The patients attending the Otorhinolaryngology service and other Departments were invited. Diagnostic videolaryngoscopy and interview related to clinical complaints and personal characteristics were performed. Data were analyzed descriptively by SPSS21. **Results:** 114 patients were attended: 77 women (67.5%) and 37 men (32.5%). 29 patients aged between 51-60 years. Five patients (4.4%) declared themselves smokers, 30 patients (26.3%) reported being ex-smokers. 79 (69.3%) reported vocal abuse. Hoarseness was the main symptom (66 patients -57.8%); followed by hawking (32.5%) and pharyngeal globus (26.4%). Signals of pharyngolaryngol reflux (RFL) were seen in 78 (68.4) patients; 5 (4.4%) vocal nodules were found, 4 (3.5%) had erythroplasia and 1 (0.9%) leukoplakia. These patients were referred to the larynx specialist. **Conclusions:** The high prevalence of RFL found in this sample is in agreement with the literature. The Voice Campaign is a well established way to guarantee secondary health care access for patients with voice complaints, resulting in early diagnosis and referral of these patients to appropriate care servisise.

8403. Sphenocoanal Polyp: A Case Report

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Introduction: Choanal polyps are benign, lonely tumors that are originated in a single sinus. They pass through the sinus' ostium and project themselves into nasopharynx. According to its origin, choanal polyps can be called antrochoanal, etmoidochoanal and sphenocoanal polyps. Sphenocoanal polyps are the rarest type. **Objective:** To report the diagnosis elucidation process and surgical treatment of a patient with nasal obstruction due to sphenocoanal polyp. **Case report:**

Male, 35 years old, with nasal obstruction, mainly at right nasal fossa, epistaxis and frontal headache. Patient reported history of previous endoscopic sinus surgery 6 years before due to nasal polyps with recurrence of symptoms 18 months after the procedure. Physical examination showed bilateral polypoid lesions with completely obstruction of the right nasal cavity. Oroscopy revealed polypoid lesion at oropharynx and bulged soft palate. CT scan demonstrated nasal cavities, oropharynx, nasopharynx and right sphenoid sinus occupied by soft tissue density content. The patient was submitted to endoscopy surgery. Polyp insertion was identified and completely removed from right sphenoid sinus. Patient was discharged 24h after the procedure and is being followed since then, with no recurrence so far, 6 months after the surgery. **Conclusion:** Although nasal polyps are a frequent presentation of chronic rhinosinusitis, polyps with sphenocoanal insertion are very rare. In order to minimize recurrence risks and to prevent iatrogenic lesions, pre-operative complete and exhaustive investigation is mandatory. In this case, imaging study helped to plan the surgical approach by assessing patient's unique anatomy and pointing out disease's origin and extension.

8404. Periorbital Complications of Acute Sinusitis: Case Reports

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Sos Otorrino

Introduction: sinusopaties are often evolving to periorbital complications. The meatal nasal are closed with orbits showing how an infection from sinuses can spread to orbit through the bone or blood. These are the importance about good relationship between several especialities, including otorhinolaringologists, ophthalmologists and clinicians or pediatrics. **Objectives:** Highlight the importance of precoce diagnoses in acute complications of sinusopaties. **Resumed Report:**

First case: teenager,sixteen years with left edema periorbital, chemosis and proptosis about three days get at the hospital for ophthalmologist consult. After no response medication and related of a clue fifteen days before, was asked otorhinolaringologist evaluation, which found muco-purulent rhinorrhea on right fosse nasal and planned venous antimicrobiotic for six weeks. Getting hospital discharge with no need surgical procedures. Second case: child, eight years, with proptosis, chemosis, no eyes movements and edema palpebral at right. Get at the hospital for joint assessment with ophthalmology, asked by pediatrics. He was did three antimicrobatics without clinical improvement. In occasion, the otorhinolaringologist saw the pacient at hospital ward and suggest an evaluation that shows an complication of sinu-

sopaties. He was submit to endoscopic nasal surgery, evolving with dramatic improvement after the procedure. **Conclusion:** The complications of acute sinusitis can be avoid with precosis diagnosis. A high degree of suspicion is extremely important in patients with sinusitis not responding to initial therapy. The level of suspicion of these speciallities must be high for decreasement of morbimortality.

Keywords: sinusopaties, periorbital, complications.

8405. Acquired Stenosis of External Auditory Meatus: Case Report

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Introduction: Acquired external auditory canal stenosis is rare and may be the result of a membranous, fibrous or bony thickening, and may completely or partially occlude the external meatus. There are several etiologies: traumatic, inflammatory, postoperative and osteodystrophies. Among the osteodystrophies, fibrous dysplasia in the temporal bone, manifests mainly with facial deformities and auditory symptoms. **Objective:** To present a case of fibrous dysplasia of the temporal bone, unusual in daily practice and whose diagnosis was delayed by multiple treatments for inflammatory causes. Patient 20 years old, with hearing loss and otalgia on the left ear for about three years, treated multiple times with antibiotics and oral anti-inflammatories, obtaining clinical improvement only at the onset of the condition. No trauma or otologic surgeries in previous history. Audiometry revealed conductive hearing loss in the left ear. CT scan showed dense formation with ground-glass aspect affecting the left temporal bone, causing complete occlusion of the ipsilateral external auditory meatus, compatible with fibrous dysplasia. We opted for clinical follow-up for now. **Discussion:** Acquired stenosis of the external auditory canal is often related to inflammatory causes, but other unusual diagnoses should be considered in the absence of response to clinical treatment. Fibrous dysplasia is a rare condition, usually manifested by deformities and auditory symptoms, but it may cause nerve compression and elevate the risk of a secondary cholesteatoma. Surgical approach is imperative in these cases. Clinical follow-up was chosen as the patient presented only mild symptoms.

8406. Basal-Cell Carcinoma In External Auditory Canal: Case Report

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Introduction: Basal-cell carcinoma (BCC) is a malignant epithelial tumor that originates in the epidermis. Its malignancy is local and can lead to disfigurement or loss of function of adjacent structures. Because of the complex anatomy and limited visualization, ear lesions are difficult to detect. BCCs are the most common malignant tumors of the ear and exposure to UV rays are the predominant cause. **Objectives:** To describe a case of BCC located in the external auditory canal and the importance of the biopsy of suspicious lesions for an early diagnosis and treatment. **Resumed Report:** A 58-year-old male, fisherman, from Itaguaí-RJ, reports the appearance of a tumor in the right ear canal of indolent growth six months ago. At physical examination presence of vegeta-

tive lesion, sessile, blackened, occupying the cavum conchae and entrance of the right external auditory canal. A biopsy was performed, which confirmed the diagnosis of BCC. **Conclusion:** Any suspicious lesion should be biopsied. Melanoma is the most feared differential diagnosis, due to its high malignancy and metastatic potential. Image exams may be used to evaluate the extent of the lesion. Treatment is always surgical and the choice of technique is mainly based on tumor size. In the majority of cases, local excision with surgical margin is preferred, as is the one programmed for the case in question. Early diagnosis can prevent major resections with aesthetic and functional impairment for the patient.

Keywords: basal-cell carcinoma; auditory canal; case report.

8407. Treatment of the Laryngeal Granulomas

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Introduction: Laryngeal granulomas are benign, recurrent lesions of various causes (reflux, vocal abuse, intubation and idiopathic), making treatment difficult. **Objective:** to describe our experience in the treatment of laryngeal granulomas in a series of cases. **Methods:** From the medical records of patients diagnosed with laryngeal granulomas treated in the last seven years at a university we analyzed: age, sex, vocal and gastroesophageal symptoms, vocal abuse, intubation, treatments, videolaryngoscopy before and after treatment. **Results:** We selected 16 patients (F-10, M-6), with a predominance of 20-60 years (68%), whose etiologies of the granulomas were: post-intubation (9), reflux (4), and idiopathic (3). The initial treatment adopted in all was inhaled beclomethasone dipropionate 100 mcg 12 / 12hours (1 month) and proton pump inhibitor, omeprazole 40 mg / day (2 months), alimentary and vocal orientations. After that period, surgery was indicated in 10 patients (7 post-intubation, 3 idiopathic) because they did not show improvement of symptoms or of the lesion. Of these, two presented recurrences, requiring surgery, associated with Bolutilinica toxin A in one case because of six recurrences. All patients with laryngopharyngeal reflux granulomas showed improvement of symptoms or injury after two months and maintained dietary guidelines and proton pump inhibitor, without surgery. In these cases, the longest treatment time for complete remission of symptoms and of the lesion was nine months. **Conclusions:** in laryngeal granulomas due to reflux, treatment with inhaled corticosteroids and proton pump inhibitors proved effective but prolonged. In the post-intubation and idiopathic granulomas the surgical treatment was the best.

8410. Aggressive Capillary Haemangioma in External Ear Canal: A Case Report

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Introduction: Capillary haemangioma is a reactional, proliferative, inflammatory, non-neoplastic process that can be found in epithelial tissues. The disease usually appears in mouth mucosa. It is more frequent in women aged between 0-40 years. Capillary haemangioma is rarely diagnosed in the external ear canal. **Case report:** Male, 69 years old with left hearing loss for over 20 years. Patient reported otorrhea and

tinnitus previously. History of facial palsy for 5 years. Physical examination showed left facial palsy (grade IV in House-Brackmann Classification), edema in infra auricle region and a retro tympanic reddish lesion. Temporal bone CT scan showed lytic lesion involving mastoid, middle and external ears. Transcanal surgical exploration was made. A friable, granulomatous, bloody lesion was found occupying the middle ear. Patient had a significant bleeding after the biopsy. A few hours later, patient had seizures and went to ICU. Histopathological analysis questioned capillary haemangioma or epidermoid cyst. Patient was discharged after clinical compensation. Due to the life threatening potential complication, a new surgical approach was not recommended. Patient is currently being followed by Otolaryngology and Head and Neck surgery teams. **Conclusion:** External ear capillary haemangioma is a very rare disease. Such lytic and severe presentation makes it less common. Surgical approach, whenever possible, is usually the best way to avoid complications and morbidity.

8412. Severe Epistaxis: The Importance of Looking for the S-point.

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Introduction: Epistaxis is one of the most common otorhinolaryngological emergencies. Severe epistaxis, which is life-threatening and requires urgent treatment, is less common, occurring in about 4% of cases. **Objective:** Report a case of difficult-to-control epistaxis **Resumed Report:** A 45-year-old man, hypertensive, arrived at the emergency of our service with an important epistaxis, difficult to control, and anterior and posterior tamponade was performed, without bleeding improvement, and the cauterization of the sphenopalatine artery was performed with control of the bleeding. Four days later the patient presented epistaxis, requiring the cauterization of the left anterior ethmoidal artery. The patient evolved well and was discharged nine days later with epistaxis. He underwent a new cauterization of the sphenopalatine artery and distal branches, and the bleeding ceased. During the hospitalization, he bled again, requiring a blood transfusion and a new approach, in which the bleeding was found in the area called S-point and cauterized. The patient progresses well, being discharged home and referred for outpatient follow-up. **Conclusion:** Severe epistaxis usually comes from the posterior circulation, although in almost half of the cases the site responsible for bleeding is not identified. The upper portion of the nasal septum, more specifically the projection of the axilla of the middle concha, has been considered an important source of bleeding in severe epistaxis. The S-point is not a site that is routinely checked for bleeding, and its revision was important for a correct diagnosis and treatment of the cause of epistaxis.

Keywords: epistaxis, S-point, emergency.

8413. Nasoangiofibroma Juvenile: Case Report

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Introduction: Juvenile angiofibroma is a benign tumor, but very aggressive because of its tendency to local invasion and corresponds to about 0.5% of head and neck neoplasms.

Objective: Report a case of a patient with Nasoangiofibroma. **Resumed Report:** Patient hospitalized for presenting nasal congestion with a two-month evolution, worse on the left, with purulent discharge from the left nasal cavity and self-limited but recurrent epistaxis, presence of whitish mass in the same nasal cavity and bulging of the palate. It evolved with worsening of the nasal obstruction, palpebral ptosis and deviation of the lip rhyme, convergent strabismus and speech impairment. Computed tomography of sinuses of the face showed signs of sinusopathy and enlargement of the pterygopalatine fossa, in addition to heterogeneous contrast enhancement, suggestive of juvenile nasoangiofibroma. The nasal obstruction worsened, in addition to conduction dysphagia, he started progressive respiratory discomfort and emergency tracheostomy was indicated, besides nasogastric sounding. He was submitted to left maxillary artery embolization for later surgical approach. In the intraoperative period it was necessary to ligate the external carotid artery to contain the bleeding at the lesion site. The patient evolved well postoperatively, with early decannulation and clinical reestablishment. **Conclusion:** The case of the patient presented with the classic triad of the nasoangiofibroma, composed of nasal obstruction, nasopharyngeal mass and epistaxis, being that the predominant gender is the male, as our patient. The preferred access route is transmaxillary, with pre-surgical embolization increasing success rates and reducing the possibility of intraoperative bleeding.

Keywords: nasal obstruction, angiofibroma, neoplasm.

8417. Paraganglioma of the Ear Simulating Necrotizing Otitis Externa: A Case Report

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Introduction: Paragangliomas are benign lesions of the head and the neck that may arise from venous and arterial vessels in the ear. Necrotizing otitis externa (NOM) is an aggressive form of otitis externa that usually happens in diabetics and other immune depressed patients. Paragangliomas usually begin as an intratympanic growing that may extend to the external auditory meatus (EAM), eventually simulating NOM. **Objective:** To report a case of paraganglioma simulating NOM and review literature on the subject. **Case report:** Woman, 75 years, diabetes mellitus, with an initial complaint of pulsatile tinnitus 2 years before. Two months ago, a small and persistent discharge arose in the same ear. Otitis externa was detected and treated with debris cleansing, systemic and topical antibiotics, with no improvement. To exclude the possibility of NOM, a CT scan was performed, which suggested a glomus tumour, that was confirmed by the MRI. The patient was referred to a neurosurgery service and, due to the extension of the tumor and clinical conditions, the patient is now under conservative treatment. **Conclusion:** Paragangliomas usually begins with a pulsatile tinnitus, that was not investigated by imaging in the beginning. They may extend to the EAM, due to bony erosion, and simulate NOM. Particularly in this case, the patient came to this service with a main complaint of ear discharge, which could be confounded with necrotizing otitis externa, as the patient is diabetic. Early diagnosis is the clue for successful surgical treatment.

Keywords: glomus jugulare, paragangliomas, necrotizing otitis externa.

8420. Evaluation of Self-Satisfaction of Patients Submitted To Rhinosseptoplasty

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Introduction: Great emphasis is given to surgical technique, however, assessment from the patient's point of view is poorly studied. In order to qualitatively and objectively estimate the results, the Rhinoplasty Outcomes Evaluation (ROE) was created, a questionnaire composed of six questions related to nasal appearance and function; degree of confidence and desire for change in appearance; social, professional and family acceptance. **Objective:** to evaluate the functional and aesthetic satisfaction of patients submitted to rhinosseptoplasty. **Method:** A retrospective cohort study of preoperative and postoperative satisfaction of 60 patients operated from January 2014 to June 2015 in a tertiary service in the Federal District. Patients were contacted and responded to ROE after pre and post-operative photos. After the application of the questionnaires, the data was stored in Excel® worksheet. Statistical analyzes were performed using software [R] for Windows, obtaining graphs and tables. This research was approved by the Ethics and Research Committee with protocol 69275517.0.0000.0029. **Results:** There was a significant increase in ROE score (16.7 to 37.5 in the minimum score and 58.3 to 87.5 in the maximum score), with an increase in satisfaction, both in women as in the male. **Conclusion:** The ROE questionnaire is an excellent way to evaluate the aesthetic and functional satisfaction of the patient. Surgical success is achieved by obtaining the value in the ROE questionnaire greater than or equal to 50. Based on the data obtained, we can conclude that significant improvement in quality of life and patient satisfaction was observed.

Keywords: rhinoplasty, evaluation, otolaryngology.

8423. Evaluation of Arachnoid Cyst Confined to the Internal Auditory Canal

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Introduction: Tumor other than vestibular schwannomas or meningiomas are rarely encountered in cerebellopontine angle (CPA). Arachnoid cysts (AC) are less than 1% and only 10% can be found in CPA. Lesions in CPA show audiovestibular symptoms (sensorineural hearing loss, tinnitus, dizziness) and facial nerve dysfunction. Etiology of arachnoid cyst is poorly understood. Congenital/primary and inflammatory origin/secondary could explain its birth and growth. Abnormalities of the subarachnoid space, embryonic tissue, trauma, hemorrhage or inflammation are discussed. Magnetic resonance imaging(MRI) reveals the characteristic appearance of these lesions and makes accurate diagnosis possible. AC have the features of cerebrospinal fluid. Surgical treatment of AC is needed in cases of symptoms related to compression of structures adjacent to the cyst. **Objectives:** Present the diagnosis and evaluation of AC in the internal auditory canal(IAC). **Resumed Report:** ALN, Male, 37 years, showed with slow progressive(8 months) hearing loss on the right side, associated with non-pulsatile tinnitus for the same period, without dizziness or facial motricity alterations. The Audiometric examination showed hearing loss with high tone decrease down to 50dB. Neurological and vestibular examination revealed no other abnormalities. MRI showed a confined

Arachnoid cyst that dilated the IAC and remodeled anterior wall. The patient was referred to a neurosurgeon to evaluate the best surgical option. **Conclusion:** Slow progressive hearing loss with other audiovestibular symptoms need more investigation to clarify the etiology. The new methods of neuroradiology made differential diagnosis easier. AC are a rare etiology in the CPA but have good prognosis if precocious diagnosis is made.

8430. Evaluation of Kallmann Syndrome Associated with Cleft Palate

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Introduction: The Kallmann syndrome(KS) combines hypogonadotropic hypogonadism(HH) with anosmia. This is a clinically and genetically heterogeneous disease. A variety of non-reproductive non-olfactory additional anomalies are present in only a fraction of KS patients. These include involuntary upper limb mirror movements, abnormal eye movements, congenital ptosis, abnormal visual spatial attention, hearing impairment, agenesis of the corpus callosum, unilateral/bilateral renal agenesis and cleft lip or palate. Most are diagnosed at puberty because of the lack of sexual development, identified by absent virilisation or the lack of breast development and primary amenorrhea. Magnetic resonance imaging(MRI) of the forebrain can be carried out to show the hypoplasia or aplasia of the olfactory bulbs and tracts. The treatment of hypogonadism first aims virilisation/breast development, and than fertility. **Objectives:** Present a case of kallmann syndrome associated with cleft palate. **Resumed Report:** VGS, female, 25 years, with a repaired cleft palate, showed with long time anosmia (since childhood) without improvement with nasal treatment and no other nasal symptoms, showed no history of olfactory disease, trauma or infection. Nasofibroscopy showed a minor septum deviation. Was receiving oral contraceptive for an unclear amenorrhea since puberty, with normal sexual characters. MRI showed aplasia of the olfactory bulb and a non-functional pituitary microadenoma. After a normal hormonal screening she was referenced to gynecological monitoring. **Conclusion:** Clinically KS can vary and its association with cleft palate is rare. Precocious diagnosis, preferably before puberty, can ensure a better quality of life with hypogonadism treatment having good outcomes for sexual and reproductive functions.

8432. Hamartoma of the Nasal: Case Report

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Famerp

Introduction: Nasal adenomatoid hamartomas are benign mass processes from disorganized cell proliferation of mature and specialized lines, similar to the rest of the organ, most common in lungs, spleen and liver, rare in upper respiratory tract. It affects men of the sixth decade. They clinically manifest with nasal obstruction, rhinorrhea, anosmia or hyposmia, allergic symptoms and epistaxis. Computed Tomography (CT) shows a mass connected to the posterior nasal septum, with a greater expansion of the bony part than erosion. **Objectives:** To report a case of nasal hamartoma at the Otorhinolaryngology Service of the HB of São José do Rio Preto. **Resumed Report:** D.V., 61 years old, male, with polypoid lesion in nasal cavities 25 years ago, more pronounced to the left, whose biopsy revealed squamous epithelium with mild

dysplastic changes. Mobile fibroelastic nodulation was also investigated in right parotid topography, present for 20 years, with periods of spontaneous growth and reduction, whose FNA of 02/2017 resulted in primary salivary gland neoplasia suggestive of benign mixed tumor. Performed face CT on 05/2017, a solid lesion was visualized in the left nasal cavity with paranasal bone invasion. The anatomo-pathological result after endoscopic surgical resection was adenomatoid hamartoma. On 01/2018 a supermotile parotidectomy was performed with anatomopathological evidence of adenocarcinoma of basal cells with vascular invasion and compromised surgical margin. Treatment with adjuvant radiotherapy was followed. **Conclusion:** Although the adenomatoid hamartoma set up as benign cell proliferation, early diagnosis and surgical treatment can prevent deformities and destruction of the nasal and paranasal anatomy.

8444. Adenoid Cystic Carcinoma - Case Report

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Famerp

Introduction: Cystic adenoid carcinoma is a slow-growing malignant neoplasm with development in the major and minor salivary glands, lacrimal glands, and portions of the upper aerodigestive tract. It is more common in the elderly and affects both genders equally. The clinic varies from nasal obstruction, epistaxis, hyposmia / anosmia to unilateral proptosis, diplopia, facial edema and neuropathy when invasion of neighboring structures (orbit, trigeminal nerve). The treatment depends on the clinical stage at diagnosis, with surgical, radiotherapeutic or combined possible approach. **Objectives:** To demonstrate, through a case report, the evolution of adenoid cystic carcinoma and its aggressive characteristics. **Resumed Report:** D.T.C., female, 73 years, with left nasal obstruction for 8 months, serosanguinous rhinorrhea, anosmia, with leukoeritroplastic verrucous lesion obstructing in left nasal cavity. In face tomography: expansive lesion of the left nasal cavity of non aggressive characteristics. Performed exeresis of lesion, biopsy showed cystic adenoid carcinoma without lymphatic or sanguine vascular invasion. In postoperative follow-up, the patient complained of left visual disturbance and serosanguinous rhinorrhea after 6 months. Magnetic resonance imaging showed large expansive lesion involving the nasal cavity, maxillary sinus, hard palate on the left, with signs of orbital invasion. An excision of the recurrent tumor with biopsy revealed adenoid cystic carcinoma, with infiltration of fibrous and bony connective tissue, maintained after radiotherapy treatment. **Conclusion:** Despite the slow growth behavior of cystic adenoid carcinoma, it is essential to keep close monitoring of oncological consultations to investigate possible recurrences and early therapeutic procedures.

8445. Case Report: Pott Puffy Tumour

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Introduction: Pott's tumor refers to a complication of frontal and ethmoidal sinusitis. It is characterized by a mainly subgaleal collection, subperiosteal abscess, and osteomyelitis of the frontal bone. Among the most common etiologies are trauma and sinusitis. **Objectives:** A case report of Pott's tumor of a patient attended by the Otorhinolaryngology team of the Cajuru University Hospital of Curitiba in May 2018. **Resume Report:** E.S.B, male, 52 years old, previously healthy, smoker (17

packs/year), referred with complaints of painful bulging and fluctuation in the frontal region of the right onset one month ago. Patient with the previous history of trauma in the frontal region for one year and episodes of recurrent acute sinusitis in the last 3 years. Computed tomography demonstrated bilateral maxillary sinus opacification, a soft tissue density in the frontal sinus associated with a frontal bone defect, and a well demarcated subperiosteal collection in the right frontal region. The patient underwent external frontoethmoidectomy surgery (modified Lynch) with drainage from the local collection and Penrose drain that remained for 2 days. She underwent empirical intravenous antibiotic therapy with ceftriaxone and clindamycin. After 3 weeks, he underwent nasosinus endoscopic surgery, bilateral maxillary sinusotomy, anterior and posterior ethmoid and right frontal sinusotomy (DRAF IIb). The patient progressed favorably without signs of frontal ostium stenosis after a 4-week follow-up. **Conclusion:** Pott's tumor is a rare and serious entity that needs to be recognized, diagnosed and treated early to prevent intracranial complications.

Keywords: Pott's Puffy tumor, sinusitis, osteomyelitis.

8455. Case Report of Adenoid Cystic Carcinoma

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Famerp

Nasosinus malignancies account for 3-5% of malignant head and neck tumors, the most common histological subtype being squamous cell carcinoma, followed by adenocarcinoma and adenoid cystic carcinoma (CAC). It has a slow growth. In the face of nasal and paranasal involvement, chronic nasal obstruction, facialgia and hyposmia can occur, to complications of its growth and invasion of neighboring structures. The surgical approach with postoperative radiotherapy showed better benefit.

Objectives: report a case malignant invasive potential of nasal cystic adenoid carcinoma. **Resumed Report:** J.P.S.M., female, 39, complains of progressive nasal obstruction one year ago, ipsilateral hyaline rhinorrhea, with pale obliterating lesion in left nasal cavity and abundant hyaline secretion. In Computed Tomography (CT) face, expansive soft mass of tissue density in left lateral maxillary sinus, with extension to the nasal cavity, determining rarefaction in nasal bone and vomer septum, eroding the bone wall of the left inferior orbital, in contact with medial and inferior rectus muscles and left optic nerve. Biopsy resulted in chronic rhinitis with ductal dilations and fibrosis, with no signs of malignancy. Performed excision of lesion by degloving access results of anatomopathological examination of cystic adenoid carcinoma infiltrating bone connective tissue with tumor necrosis and perineural infiltration present, without vascular or lymphatic vascular invasion, but compromised surgical margin. Therefore, it was decided to maintain adjuvant radiotherapy and outpatient follow-up. **Conclusion:** Cystic adenoid carcinoma presents as a malignant neoplasm, but of peculiar importance in the destructive aspect of the adjunctive structures and the local anatomy.

8462. Report the Case of a Patient with Juvenile Nasoangiofibroma

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Famerp

Introduction: Nasoangiofibroma is a vascular tumor that, although histologically benign, is locally invasive and has a high incidence of persistence and recurrence. Corre-

sponds to 0.5% of tumors of head and neck. Its classic treatment is surgical, but radiotherapy or hormone therapy are also options. **Objectives:** To report the case of a patient with juvenile nasoangiofibroma, rare tumor in head and neck. **Resumed Report:** Male, 16 years old, with complaint of right nasal obstruction, recurrent episodes of epistaxis and hyposmia 1 year ago. Physical examination revealed mass obstructing the right nasal cavity. Tomography showed a hypodense mass with marked and heterogeneous contrast medium uptake, measuring 5.3 x 5.3 x 5.4 cm, located inside the right sphenoid sinuses, insinuating to the right masticatory space and posterior nasal cavity right, determining bone destruction of the wall between the sphenoid sinuses, the posterior wall of the right maxillary sinus, the cryptic lamina and the small wing of the sphenoid on the right. Embolization was performed and 2 days later, endonasal resection. Anatomopathological indicated juvenile nasoangiofibroma. On follow-up tomography, we observed a highly vascularized expansive lesion with epicenter in the right pterygopalatine fossa. **Conclusion:** The nasoangiofibroma is a rare and benign tumor that affects young male individuals preferentially as the case of the reported case and presents high recurrence rates, requiring rigorous postoperative follow-up. There is no consensus in the literature as to the best approach, being recommended by most authors radical surgery as the most effective treatment.

Keywords: nasal neoplasms; angiofibroma; nasal cavity.

8463. Case Report: Nasal Dermoid Cyst in a 10-Year-Old Patient

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Introduction: Nasal dermoid cyst is a rare congenital condition. It corresponds to 1-3% of all cases of dermoid cysts, and 10% of dermoid cysts in the head and neck. It consists of fat and keratin, involved by an epidermal capsule. It may be single or multiple, and may present fistula and intracranial extension. Image exams for differential diagnosis are important, but they must be confirmed by histology. **Objectives:** Present a rare case of nasal congenital dermoid cyst, successfully removed by surgery, without return of the injury. **Resumed Report:** P.H.V.M, 10-year-old, male, from Ribeirão Preto, claims bulging on the nasal bridge area since birth. He denies any other otorhinolaryngological claim. Physical examination: soft bulging on the nasal dorsum, moving and painless, measuring about 20 mm. Tomography showed a hypodense cystic image, oval, with defined borders, located in the midline of the subcutaneous nasal pyramid. Close approach procedure was performed, by intercartilaginous incision, removing the entire lesion with its capsule. Microscopy and diagnosis: dermoid cyst. Outpatient follow-up for one year revealed aesthetic satisfaction. **Conclusion:** This case showed cystic lesion on the nasal bridge, which was completely removed through closed rhinoplasty incision, with good aesthetic results.

Keywords: nasal tip, dermoid cyst, tomography.

8466. Congenital Posterior Laryngeal Membrane Associated with Bronchogenic Cyst In Infants: Case Report

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Introduction: The association between congenital laryngeal membrane and bronchogenic cyst in infants is rare, since both emerge from the embryogenesis error in different periods. The clinic can range from asymptomatic to early symptoms according to the extent and involvement of the airways. In this way, the treatment can be expectant or surgical. **Objectives:** The objective of this study is to emphasize the differential diagnosis of congenital malformations of the airways that lead to respiratory distress in infants and the importance of early diagnosis due to the possibility of fatal outcome when performed late. **Resumed Report:** Infant, J.N.F., 09 months, with posterior laryngeal membrane diagnosed by videonasolaringoscopy and bronchogenic cyst associated with respiratory stridor and recurrent pneumonia. The diagnosis was suspected due to the evolution with exuberant and intermittent symptoms of the patient, which would not be justified by the involvement of the airway caused only by the presence of the laryngeal membrane. The diagnostic hypothesis was reinforced with tomography of the thorax and laryngoscopy by endoscopy, and confirmed with surgical intervention and histopathological examination of the lesion. **Conclusion:** This study reinforces the relevance of an in-depth investigation in patients with congenital posterior laryngeal membrane diagnosis, but who develop unfavorably with worsening of symptoms and recurrence of respiratory stridor, which forces us to think of differential diagnosis of associated airway malformation.

Keywords: bronchogenic cyst, laryngeal membrane, respiratory stridor.

8467. Pericondritis after Surgery for Coloboma Excision: Case Report

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Introduction: Pericondritis is an inflammation of the perichondrium with contribution of the anatomy and the poor irrigation of the auricle. The most frequent cause is trauma, but other conditions such as otologic surgery may be involved. The diagnostic is clinical and the identification and treatment of the condition delay may causes the "cauliflower" ear. The treatment involves the use of antibiotics with coverage for *Pseudomonas aeruginosa*. Fluoroquinolones are the only class with oral active formulation and their usage for children is authorized by the American Academy of Pediatrics. **Objective:** The objective of this study is to report a case of pericondritis after surgery for coloboma excision. **Resumed Report:** M.J.P.F.D., 12 years old, female, from Maceió, she presents coloboma on the right ear with a history of inflammation episodes in the region that had started to bother. She underwent surgery for excision of the coloboma that took place with no complications. Two days later, she developed astenia, fever with hyperaemia, swelling of the preauricular region, reporting pain on palpation and movement of the auricle. She was hospitalized with venous antibiotic therapy and daily surgical wound curative. She was discharged after 8 days with maintenance of oral antibiotics and daily surgical wound curatives for another 14 days

with resolution of the condition. **Conclusion:** Pericondritis is an inflammation of the perichondrium that may occur after otologic surgeries. The recognition of the disease with early initiation of treatment is crucial to avoid complications such as deformities of the auricle.

Keywords: pericondritis; surgery; auricle.

8469. Nasal Inverted Papilloma in Young Patient: A Case Report

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Introduction: The inverted papilloma is synonasmal benign epithelial neoplasm, is associated with chronic inflammation and human papilloma virus, and that prevails in men, whites, in the sixth decade of life. Are generally one-side, with complaints of nasal obstruction, rhinorrhea and anosmia. The treatment has been a lateral rhinotomy or middle-facial degloving approach to a medial maxillectomy or an endoscopic approach that removes it. The importance of its early diagnosis is emphasized, since malignant transformation occurs in up to 13% of the cases. **Objectives:** Report the case of nasal inverted papilloma in a young patient. **Resumed Report:** A 11 year old patient, male, white, from Santa Cruz do Sul, Brazil, with previous nasal atopy, complaints of left nostril discomfort, sneezing and nasal drip. Rhinoscopy revealed a painless and verrucous lesion of 2 mm. Nasopharyngoscopy showed pallor of the mucosa; free cavum with no signs of infection. Serology IgG and IgM negative. Excisional biopsy signaled inverted papilloma. Computed tomography of the sinuses revealed free nasal sinuses and swelling of the nasal turbinates. Endoscopic surgery was performed, with safe and injury-free margins. After the procedure, the patient performed the vaccine against the human papilloma virus and remains asymptomatic in regular monitoring. **Conclusion:** The case of this pathology in atypical age warns about the need for investigation in suspect cases, even if they do not belong to the prevalence range. Thus, an early diagnosis through biopsy allows a successful treatment, which avoids recurrence and malignant transformation of these lesions.

Keywords: Papilloma, Inverted, Papillomaviridae.

8472. Schwannoma Nasal - Case Report

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Introduction: Schwannomas are benign tumors that affect the neural sheath of the myelinated nerves. The most frequent site is NCC VIII (80%). They are rare in the nasal cavity (4%), with a low risk of malignancy (2%). Clinically they manifest with unilateral nasal obstruction, with or without epistaxis and hyposmia. Image exams such as tomography and nasofibroscopy assist in the evaluation of surgical extension and programming. **Objectives:** To report the case of a patient with Schwannoma in the nasal cavity, an uncommon site of manifestation of this tumor. **Resumed Report:** Female, 51 years old, submitted to cranial tomography showing bulging in the anterior region of the nasal cavity on the left without bone or anatomical alteration of the maxillary sinus. Attended by the otorrino team with complaint of medial bulging of left orbit and proptosis. Anterior rhinoscopy without visible lesions. Absence of visual complaints or nasal obstruction. Subjected to middle meatotomy, anterior ethmoidectomy and lesion exertion in the left nasal cavity. On

follow-up magnetic resonance imaging, residual lesion was observed, and lesion exertion was performed by degloving access. **Conclusion:** Schwannomas are slow-growing tumors, however, tend to produce symptoms such as nasal obstruction, early, not observed in this patient. Greyish mass observed in anterior rhinoscopy is also a common finding, not evidenced in this case. Because it is a rare tumor, the schwannoma hypothesis was not initially proposed, and the diagnosis was confirmed with the histopathological diagnosis.

Keywords: nasal tumor; nasal Schwannoma; nasal obstruction.

8474. Embryonal Rhabdomyosarcoma : Case Report

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Famerp

Introduction: Rabdomiossarcoma (rms) is a highly aggressive malignant tumor, composed of embryonic cells that differentiate in skeletal muscle. Represents near to 50% of the sarcomas of moles fabrics. Approximately 35% of all pediatric rms cases occur in the head and neck region. **Objectives:** Reporting the case of embryonic rabbidomiosarms, incorrect malignant tumor and associated with important late sequels. **Resumed Report:** Female, 2 years old. Nodulation in left parotide region there is 5 days, with progressive growth. Makes use of amoxicillin for 4 days, without regression of injury and maintenance of fever. Example presented nodulation of 3x3 cm, fixed, endured. Computerized tomography evidenced solid injury, hypodensa, defined contours, intramuscular on left masseter measuring 21 x 19 mm. Drained drainage of injury and collection of material for culture (staphilo hominis). Pathological anatomy showed maligna fusocellular neoplasia and imunohistokymic evidenciou ki-67 - positive mib1 80%, demine - d33 positive and miogenine - f5d positive concluding embryo radiograduation. Injured pediatric oncology, staying with favorable location, favorable histology, clinical group iii or iv and initiated chemotherapy. **Conclusion:** Embryonic radiography makes mainly in the age group less than 10 years in head and neck sites, genitourinary treatment and retroperitoneum. Patient meets within the age of largest incidence, because its unexpected clinic allowed the final diagnosis only with immunohistochemistry. Its treatment involves a surgical, chemotherapy and radiotherapy approach that must be carried out multidisciplinary, in order to control the late sequels.

8477. Surgical Treatment of Post-Traumatic Peripheral Facial Nerve Palsy: Cases Report

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Introduction: Post-traumatic peripheral facial nerve palsy (FNP) has different etiologies, comprised by traumatic brain injury (TBI). The treatment is clinical or surgical dependent on multifarious and controversial analysis. One aspect to be analyzed is the critical period in which surgical decompression might be accomplished. Nowadays, surgery is recommended in patients with less than 21 days of damage in more than 90% of the nerve fiber identified by electroneuromyography (ENMG). **Objectives:** To report two cases of late surgical treatment of post-traumatic FNP **Resumed Report:** Case 1: Male, 68 years, victim of TBI, evolving on the second day with left FNP, grade VI House-Brackmann (HB) classification. ENMG exhibited marked neuropathy without reinnervation. CT showed frac-

ture in the anterior mastoid portion on the left. He underwent open cavity tympanomastoidectomy and decompression of the facial nerve in the 47th day after facial palsy. In the 130th day post-operation, he presented with symmetrical face (grade II HB). Case 2: Female, 23 years, victim of TBI, evolving with right FNP, grade V HB on third day. Audiometry showed mild right conductive loss. ENMG revealed neuropathy affecting the facial nerve to the right with a marked degree of recent installation. CT showed a linear tract of fracture crossing longitudinally in the right mastoid. She was operated on 26th day after TBI, recovering facial nerve function three months after surgery. **Conclusion:** The surgical treatment of post-traumatic FNP with the correct approach and indication may result in great outcomes, even when performed after the critical period.

Keywords: FNP, decompression, electroneuromyography.

8479. Transmastoid Retrolabyrinthine Approach for Simultaneous and Minimally Invasive Treatment of Cerebellar Abscess and Mastoiditis

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Introduction: Cerebellar abscess represents 10-19% of intracranial abscesses, with chronic otitis media being the main associated risk factor. Classically, surgical drainage, by suboccipital craniotomy, presents greater morbidity compared to minimally invasive, exposed in this case report. **Objective:** To report on the minimally invasive technique chosen for simultaneous treatment of mastoiditis and cerebellar abscess. **Case presentation:** A 37-year-old female with diabetes mellitus and chronic otitis media had convulsive crisis, severe headache and vomiting, evolving with peripheral facial paralysis and left cerebellar ataxia. Magnetic resonance imaging revealed expansive lesion with ring enhancement and well-defined margins in the left cerebellar hemisphere, suggestive of abscess, associated with extensive vasogenic edema, determining obliteration of the fourth ventricle and ventricular dilatation. In addition, there was presence of coalescent otomastoiditis on the left, suggesting cerebellar abscess secondary to mastoiditis. Patient was undergone to surgical treatment of mastoiditis as well as simultaneous drainage of the cerebellar abscess (due to mass being greater than 3 cm, causing signs of intracranial hypertension), by transmastoid retrolabyrinthine approach. The postoperative period was favorable with auditory preservation. **Conclusion:** The minimally invasive technique provides better preservation of hearing and facial nerve, lower risk of gas embolism, hematoma, and cerebellar edema, and contemplates the concomitant treatment of mastoiditis and cerebellar abscess.

8480. Bezold's Abscess as a Complication of Chronic Otitis Media in Adolescents: Case Report

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Santa Casa de Misericórdia de Maceió

Introduction: Cholesteatomatous chronic otitis media is infrequent during childhood. It presents high power of bone erosion that may be associated with complications. Despite the decrease in the occurrence of complications after antibiotics, its global incidence seems to be stable the past 20 years, what may be related to the delay of diagnostics. Bezold's abscess is a rare complication. It is more frequent in

adult males and the presence of cholesteatoma is a risk factor. The diagnostic requires a high index of suspicion. The computed tomography with contrast of the temporal bone and neck provides important information for diagnostic and surgical planning. The treatment is performed through venous antibiotics, abscess drainage and mastoidectomy. **Objective:** This work aims to report a case of cholesteatomatous chronic otitis media complicated by Bezold's abscess in teenager. **Resumed Report:** G.A.V., 15 years old, female, from Viçosa - AL, with chronic otorrhea on the right ear for two years. It evolved with signs of mastoiditis with presence of polyp in external auditory canal to otoscopy. She was admitted to the HGE Hospital for venous antibiotic treatment, when she developed a Bezold's abscess. Then, she was transferred to Santa Casa de Misericórdia of Maceió, where she underwent mastoidectomy and cervical abscess exploration. Fifteen days after the procedure she was discharged and remains in outpatient medical monitoring. **Conclusion:** Otitis media is a very common condition in childhood and its complications are still present nowadays. Early diagnostic and treatment are essential to ensure a good functional outcome.

Keywords: otitis; cholesteatoma; complication.

8482. Sleep Apnea: an Alert About a Somnolence in Transit

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Introduction: Estimates suggest that up to 20% of traffic accidents are caused by excessive sleepiness. Daytime sleeping is an indicator symptom of obstructive sleep apnea syndrome, which is characterized by cessation of breathing during sleep because of repetitive dynamic obstruction of the pharynx, resulting in a restless sleep and interfering in driving attention. **Objectives:** Verify the association between apnea and sleepiness in traffic. **Methods:** This is cross-sectional observational study. Data were collected from a questionnaire applied in the Sleep Campaign in Santa Cruz do Sul, Brazil, in 2017. 38 passers-by who had a driver's license were approached. The questionnaire contained objective questions with "yes" or "not" answers and the Epworth Sleepiness Scale. The questions were, "Do you snore?", "Did anyone notice that you stop breathing or choke while you sleep?"; "Have you ever been drowsy or dozed off briefly while you driving?" The data obtained was tabulated using Microsoft Excel, and the average and proportions were calculated. Results e **Conclusion:** Among the people approached, 65.7% snored and 50% said they had already felt somnolent while driving, 18.4% said they had sleep apnea and of these, 57% felt sleepiness in traffic. In the Epworth Sleepiness Scale, 50% of the interviewee scored higher than 10. Given the obtained data, individuals with sleep apnea show more drowsiness while driving. Therefore, it's pointed out the need to include public policies that aim to include this pathology among the medical conditions that attracts attention in the Traffic Medicine examinations.

Keywords: apnea, sleep, traffic.

8484. Increase in Nasal Flux after Adenotonsilectomy Influence Pulmonary Blood Pressure?

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Introduction: Upper airway obstruction (UAO) due to adenotonsillar hyperplasia (ATH) may increase pulmonary artery systolic pressure (PASP). Performing early diagnosis

and correcting oral breathing (OB) is useful for normalizing PASP. The total inspiratory nasal flow (TINF) obtained by active anterior rhinomanometry (AAR) is a way of quantifying nasal patency. This study aimed to correlate TINF with PASP. **Methods:** Prospective study with 30 children between 2 and 12 years old with OB and indication of adenotonsillectomy due to ATH, evaluated before and six months after surgery, and 29 nasal breathing (NB) in the same age. PASP calculated by tricuspid regurgitation was obtained by transthoracic Doppler echocardiography. The nasal patency was calculated by the TINF obtained by AAR. **Results:** Average of PASP in the OB of 25.99 mmHg, standard deviation ($S=$)=3.27 in the preoperative period and 21.79 mmHg ($S=$ 2.48) in the postoperative period. In the NB, average of 21.64 mmHg ($S=$ 3.87). Average of preoperative TINF of 266.76 cm³/s ($S=$ 112.21), postoperative 498.93 cm³/s ($S=$ 137.80). The average of NB was 609.37 cm³/s ($S=$ 109.16). Average of nasal patency in the preoperative period was 42.85% ($S=$ 17.83) and 79.33% ($S=$ 21.35) in the postoperative period. In the NB, average of 91.40% ($S=$ 14.5). There was a correlation between TINF and PASP ($r=$ -0.459; $p=0.01$) when we analyzed all groups. **Conclusion:** There is a moderate and negative correlation between PASP and TINF. This study suggests that, when improving the TINF, there is a decrease in PASP.

8487. Extramedullary Plasmacytoma of Nasal Fossa: Case Report

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Introduction: Extramedullary plasmacytoma is a rare disease characterized by mass of neoplastic monoclonal plasmocytes, producing immunoglobulins outside the bone marrow. It's most common among elderly men, representing 3% of all cases of plasmacytoma. Surgery is the first choice treatment, presenting better survival outcome when combined with chemotherapy. **Objective:** To demonstrate how rare is this tumor variety for the scientific community and the efficacy of endoscopic endonasal surgery treatment. **Case Report:** An 87-year-old male patient, with hypertension, senile dementia and stroke sequela suddenly started with unilateral epistaxis associated with right nasal obstruction. At the rhinoscopy, presence of tumoral lesion occupying the right nasal fossa, with pale appearance and regular and smooth surface. No oral or pharyngeal lesions. Neck without nodulations. Tomography of the paranasal sinuses demonstrates lesion occupying inferior and right middle meatus, with density of soft tissue and without invasions to pterygopalatine fossa or anterior skull base. Proposed nasal endoscopic surgery with complete removal of the tumor, which involved the entire inferior right turbinate. The postoperative period has been evaluated with complete improvement of the patient's symptoms. **Conclusion:** Plasma tumors are common to the bone marrow, receiving the designation of multiple myeloma. Extracellular variation is rare with 0.04 to 3 cases per 100,000 around the world. It's responsible for 1% of tumors of the head and neck. The endoscopic endonasal surgery is the treatment of choice.

8488. Acute Invasive Fungal Rhinosinusitis in a Patient with Acute Myeloid Leukemia: Case Report

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Introduction: Acute fungal rhinosinusitis is a rapidly progressive and potentially lethal disease, more common in immunocompromised patients. Symptoms are generally nonspecific (nasal obstruction/discharge, facial pain or swelling, fever and epistaxis). As it progresses, neurological symptoms and diminished visual acuity can occur. Pale or necrotic mucosa, ulcers, crusting, are the most common findings of nasal endoscopy. Imaging studies are useful for assessing extension and planning surgical approach. Diagnosis requires histopathological evaluation and culture of affected tissue. Treatment involves control of underlying disease, antifungal medication and careful surgical debridement. **Objectives:** To report a case of acute fungal rhinosinusitis and alert to the importance of early diagnosis for successful treatment. **Resumed Report:** Male, aged 79, diagnosed with Acute Myeloid Leukemia, brought to the emergency department after fall with head impact. Brain magnetic resonance imaging did not show intracranial abnormalities, but revealed extensive occupation of the left nasal cavity and sinuses. Patient then disclosed mild nasal symptoms on the left side. Nasal endoscopy showed black, necrotic crust, signs of mucosa ischemia and white plaques suggestive of fungal infection. Computed tomography corroborated findings of magnetic resonance. He received ample spectrum antibiotics plus voriconazole and was taken to emergency surgery for aggressive debridement. Samples were sent for culture and histopathological analysis. Voriconazole was switched to liposomal amphotericin b. The patient had good postoperative outcome without signs of mucosal ischemia or new fungal growth. Culture was positive for Fusarium. **Conclusion:** Acute fungal rhinosinusitis needs to be considered in immunocompromised patients with nonspecific sinonasal symptoms, however mild.

8489. Angiomatosus Nasal Polyp

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Famerp

Introduction: The antro-choanal polyp is a benign growth, with no preference for sex, most prevalent in children or adolescents, unusually associated with nasal allergy. It originates from the maxillary sinus as a hypertrophy of its mucosa, by the ostium to the nasal cavity. It presents clinically with nasal obstruction, often unilateral, whose proposed treatment is sinusectomy by the access of Caldwell-Luc, or even meatotomy with endoscopic control. **Objectives:** To report the case of a patient with angiomatosus nasal polyp, important differential diagnosis of malignant tumors. **Case report:** R.L.Z., male, 17 years old, without comorbidities, with a history of unilateral nasal obstruction, at left, yellowish rhinorrhea and hyposmia. He performed a flexible nasofibroscopy that revealed a hypervascularized lesion filling the fossa and nasal vestibule on the left. He performed tomography of the sinuses with a heterogeneous, hypodense lesion, filling the left maxillary sinus, the middle and inferior nasal meatus on the left, extending posteriorly and inferiorly, with total obstruction of the nasopharyngeal lumen, associated with bone erosions on the walls of the left maxillary sinus. The lesion was withdrawal associated with ip-

sililateral middle meatotomy, whose anatomopathological study demonstrated that it was an angiomatic polyp. The pacient evolved without further complaints of nasal obstruction. **Conclusion:** Attention should be paid to unilateral nasal obstructions and to the radiological filling of the maxillary sinus unilateral due to the greater possibility of developing of polyps, but the biopsy of the lesion is important for diagnostic exclusion of malignant tumors.

8490. Diagnostic Methods for Rhinosinusitis: A Challenge in Clinical Practice

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Introduction: Radiographic diagnosis of acute rhinosinusitis (RSA) is a widely used practice, however, it isn't recommended since it doesn't guarantee an improvement in diagnostic accuracy and exposes the patient to unnecessary radiation. **Objective:** Evaluate which diagnostic methods for RSA have been adopted by physicians in the accident and emergency department (PAM) and Basic Health Units (UBS) of Cáceres - MT. **Methods:** This is a descriptive study in which a questionnaire was applied to 20 general physicians working at PAM and UBS in Cáceres - MT. This research development was approved by the Ethics Committee of the State University of Mato Grosso, CAAE: 87029518.2.0000.5166. **Results:** In the sample, 90% physicians affirmed working as generalists and 10% were characterized as clinicians. Although 95% participants claimed that a classic RSA clinical condition could be diagnosed only on the basis of symptomatology, and 70% stated that they would rarely request x-rays in similar clinical situations and that they did not consider the technique to be effective in establishing the condition, 45% physicians asserted that a radiograph was needed to elucidate the clinical condition proposed by the study. **Conclusion:** Although the study presented results that might appear conflicting, the genesis of this contradiction lies in the dissociation from theory to practice in health centers. This research portrays the reality in a small city of MT, however, studies that bring forward the national scenario are necessary to verify how the diagnosis of RSA is being made and what methods have been used.

8492. Lingual Thyroid

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Famerp

Introduction: The lingual thyroid is defined by ectopic glandular thyroid tissue located in the midline of the base of the tongue, between the circumvallated papillae and the epiglottis, due to the incomplete migration of this tissue along the thyroglossal canal during embryogenesis. 90% of the ectopic thyroids are located in the tongue and present two higher age peaks: the first is around 12 years old and then at 50 years old. **Objective:** To report the case of a patient with lingual ectopic thyroid, a rare site of growth of this organ. Case report: Z.P., a 46-year-old female patient with a history of hypothyroidism, presented with a complaint of conduction dysphagia for solids, started 9 months ago and dyspnea. The flexible nasofibroscopy, visualized a midline submucosal bulging, touching the epiglottis on its lingual face. Realized a tomography of neck that described absence of thyroid gland in its usual topography, and nodular images: the first, hyperdense, with contrast enhancement on the base of the tongue, partial obturation of the epiglottic vallecula, probably corre-

sponding to the sublingual thyroid; the second with heterogeneous contrast enhancement, and consideration should be given to the possibility of sublingual thyroid associated with a solid / cystic nodule. **Discussion / Conclusion:** Lingual thyroid tissue has few published cases, with sublingual localization being one of the rarest and probably underdiagnosed. In this way, it should always be considered in cases of medium-sized tumors of the tongue base.

8493. Tongue Abscess

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Famerp

Introduction: Abscesses in the tongue are rare because it has keratinized squamous epithelium, highly vascularized musculature, rich lymphatic drainage and direct contact with saliva that has immunological protection. It is more frequent in males and has an association with smoking, the use of dental prostheses and poor oral hygiene. **Objectives:** To report the case of a patient with abscess in the tongue, an unusual site of manifestation of this pathology. **Resumed Report:** Female, 49, a former smoker, complained of odynophagia, edema and pain on tongue base, after extraction of lower central incisors and left lower lateral incisor 1 week ago. She had an enduration in the middle third of the tongue, with extension to lateral borders and base of tongue and presence of bulging in bilateral cervical areas I and II. Tomography showed collection in the posterior middle third of tongue on the left. Initiated intravenous antibiotic and drained abscess in tongue. Persistent pain in the submandibular region on the left. The cervical abscess was drained and the paciente evolved well. **Conclusion:** The etiology of the abscess in the tongue should be considered depending on the location of the clinical manifestation. Abscesses of the posterior third may be related to lingual tonsils, remnants of the thyroglossal duct and pathologies of the first and second molars. In this case, dental extraction was the triggering factor. It is a rare pathology that should be considered as diagnostic differences of tongue bulges such as thyroglossal cyst and abscess of lingual tonsils.

8514. Temporal Bone Myeloid Sarcoma

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Introduction: Myeloid Sarcoma (MS) is a solid extra-medullary tumor with rare incidence that usually occurs associated with other hematologic diseases. Its common locations includes soft tissues, periosteum, skin and lymphatic glands. Around 25% of the cases precede Acute Myeloid Leukemia (AML), 15-35% occur together with AML and over 50% occur after leukemia diagnosis. **Objectives:** To report a case of Myeloid Sarcoma, especially because of its rare occurrence. **Resumed Report:** a 13 year-old boy had a history of otalgia, hearing loss and mass left temporal fossa with a stony consistency that began over the last four months. The computerized tomography of the mastoid showed lesion, extending into the skull base, orbit, rinopharynx and masticator space, besides bone infiltration without osteolysis. The histopathology and immunohistochemistry analysis of left temporal muscle revealed fibromuscular tissue with hematopoietic cells, positive for CD45, myeloperoxidase and TDT (focal), in addition to high proliferation index (Ki-67 = 70%). These findings favored the diagnosis of

MS. Blood count showed lymphocytosis (82%). The oncology hematology department confirmed AML through bone marrow test, starting the chemotherapy. The patient is showing signs of recovery of the otalgia and reduction of the bulging of the left temporal region. **Conclusion:** Myeloid Sarcoma is a rare disease and its difficult diagnosis requires an immunohistochemical analysis since the markers that are usually expressed are not specific for this pathology, besides of researches of associated hematologic diseases. There is not enough data on the literature regarding the prognosis.

Keywords: myeloid sarcoma; acute myeloid leukemia; temporal bone.

8515. Ectopic Lingual Thyroid - Case Report

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Introduction: Ectopic thyroid tissue is a rare entity with a prevalence ranging from 7% to 10%, and in 90% of cases thyroid glandular tissue is located on the base of the tongue and is more common in women. Its etiology is not totally known and can occur from the base of the tongue to the mediastinum. **Objective:** Report a case of ectopic thyroid tissue on the base of the tongue. **Case Report:** A 35-year-old female patient, attended at the Head and Neck Surgery Department of the University Hospital of Brasilia presented lingual ardeny associated with the tongue base tumor. Physical examination revealed a reddish mass measuring approximately 20x15mm on the tongue base and absence of a topical thyroid gland, suspecting ectopic thyroid. The hypothesis was then confirmed with thyroid scintigraphy that revealed ectopic thyroid tissue and hyperfunctioning lingual projection, as well as scintigraphic absence of thyroid tissue in its usual projection. Hormone levels of TSH and free T4 were normal. **Conclusion:** Ectopic thyroid should be part of the differential diagnoses of oropharyngeal tumors. Treatment may be conservative in asymptomatic patients, as was proposed for the patient reported above, or surgical - thyroidectomy - in patients with obstructive symptoms, bleeding or suspected malignancy.

Keywords: lingual thyroid; thyroid gland; head and neck.

8517. Evolution of Patients with Differentiated Thyroid Carcinoma According to the Preoperative Cytological Diagnosis

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Introduction: Fine needle aspiration cytology (FNAC) is the standard method for the diagnosis of differentiated thyroid carcinoma (DTC). However, there are cases of neoplasms in which FNAC does not indicate the diagnosis and there is doubt whether this lack of assertiveness would influence the prognosis. **Objectives:** Compare patients with DTC, classified according to the preoperative cytologic diagnosis, regarding prognostic factors and evolution. **Methods:** Retrospective case-control study including 104 patients with DTC operated between 2009 and 2015, grouped according to their preoperative Bethesda cytological diagnoses: G1 (classes I/II), G2 (classes III/IV) and G3 (classes V/VI) - and compared for prognostic and evolutionary factors such as type of surgery, tumor size, TNM staging, recurrence risk, mean dose of radioiodine therapy, clinical status 1

year after treatment and in the last evaluation and time of disease free survival. $p < 0.05$ was considered as significant. **Results:** The groups differed for the time elapsed between FNAC and surgery [median (minimum; maximum): G3: 2.0 (0.0; 7.0) > G2: 7.0 (0.0 ; 28) = G1: 8.5 (0.029); $p < 0.0001$]. Thyroidectomy at 1 time was performed in 98.3% of G3, 65.5% of G2 and 66.7% of G1 ($p < 0.0001$) and lymphadenectomy in 74.5% in G3, 46.4% in G2 and 69.2 in G1 ($p = 0.03$). There was no difference between the groups regarding the other parameters evaluated. **Conclusion:** Although patients with non-malignant FNAC had undergone surgical treatment later and with different approaches, it did not interfere in their clinical evolution.

Keywords: cytology; differentiated thyroid cancer; follow-up.

8518. Surgical versus Clinical Management of Secondary and Tertiary Hyperparathyroidism

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Introduction: Hyperparathyroidism common condition in patients with chronic renal insufficiency, causing significant clinical consequences and with a high impact on the quality of life and mortality of these patients. Clinical treatment with calcimimetics emerged as an alternative to the surgical management, but its high cost and clinical effectiveness in the control of renal osteodystrophy (ROD) are still not well understood. **Objectives:** Compare patients with secondary and tertiary hyperparathyroidism submitted to treatment with cinacalcet to patients submitted to parathyroidectomy (PTX). **Methods:** Retrospective case-control study including 53 patients with ROD, in which 28 used regularly cinacalcet and 25 were submitted to PTX and compared by levels of calcemia, phosphataemia, alkaline phosphatase, parathyroid hormone (PTH) and hemoglobin at pre-treatment, 1, 3, 6 and 12 months post-treatment. The presence of pre and posttreatment symptoms and complications were also evaluated. $P < 0.05$ was considered significant. **Results:** Although 42.11% ($n = 64$) of the patients with ROD started using cinacalcet, only 43.75% ($n = 28$) of them had regularly used for at least 12 months. The PTH curve was better controlled in patients submitted to PTX at all points, but there was no difference in comparison to the symptoms of ROD neither in side effects. **Conclusion:** The two modalities achieved the control of the symptoms, but PTX was superior in the control of PTH values. The use of cinacalcet is still limited by its high cost. Although it can delay the surgical indication, it's not able to replace it.

Keywords: hyperparathyroidism, parathyroidectomy, chronic renal insufficiency.

8519. The Importance of Recognizing the Urbach-Wiethe's Disease: A Case Report.

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Introduction: Lipoidoproteinosis is a rare inherited autosomal recessive disease resulting from the deposition of hyaline material on the skin and mucosa of organs and it leads to multisystem involvement. This disease is also known as Urbach-Wiethe disease or cutaneous mucosal hyalinosis and there are about 400 cases described in the literature until now, including alive patients and cadaveric findings. The vocal folds involvement causing dysphonia is often the first manifestation and it is present in two thirds of the cases. **Objectives:** Report an Urbach Wiethe's case in a patient assisted at the otorhinolaryngology's clinic of an university hospital in

Taubaté (Taubaté, SP). **Resumed Report:** A 36-years-old male patient, previously diagnosed with Urbach-Wiethe disease, was admitted to the otorhinolaryngology's clinic of the Hospital Universitário de Taubaté (Taubaté, SP) with a complaint of dysphonia since birth and had the intention of improving the voice. There was no indication of surgical treatment after evaluation. **Conclusion:** This case has been reported to draw attention for the fact that weak and hoarse crying in early childhood is almost pathognomonic of Urbach-Wiethe disease, so, although rare, it should be a differential diagnosis among the causes of dysphonia in this age group.

Keywords: lipoidoproteinosis, urbach-wiethe, larynx, dysphonia.

8522. Influence of an Acupuncture Program In Vitamin D Levels and Tinnitus: Case Study

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Introduction: Acupuncture has been used to treat tinnitus, however, the scientific literature still lacks studies that support its therapeutic efficacy. There are reports of tinnitus associated with vitamin D deficiency, with the most likely pathogenesis being localized demineralization of the cochlea, resulting in secondary morphological changes. There are also reports of improvement in vitamin D levels after treatment with acupuncture. **Objectives:** Check improvement of levels of vitamin D and tinnitus with acupuncture, through an experimental and longitudinal case study. **Resumed Report:** Patient A.M 73 year old patient, male, performed an initial evaluation responding to the THI questionnaire, and blood sampling was performed to analyze the vitamin D level. After collection, the patient underwent bilateral craniopuncture treatment with a frequency of 10 Hz and a 20-minute application time, in the Vestibulocochlear line. The intervention occurred for 5 weeks, often twice a week. After treatment the patient repeated the initial evaluation and the blood collection. **Conclusion:** Patient had initial vitamin D levels of 31.4 IU and THI equal to 48 points, after treatment vitamin D levels were 54.7 IU and THI was equal to 32 points. Due to improved levels of vitamin D and tinnitus, it is suggested that further experimental studies should be performed so that vitamin D deficiency can be considered in the differential diagnosis of tinnitus, since this association between vitamin D and tinnitus may be important for both diagnostic and treatment purposes of tinnitus and prognosis of other disorders involving vitamin D deficiency. Support: FUNADESP

8525. Orbital Abscess as a Complication of Acute Rhinosinusitis

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Introduction: The complications of rhinosinusitis (RS) are serious and can affect noble structures, such as the eye. Knowing its consequences is important for the correct suspicion, investigation and treatment, to cure avoiding sequelae. **Objective:** To report a case of orbital complication of acute rhinosinusitis. **Resumed Report:** E.E.S, 12 years old, brought by the ophthalmology service to the otorhinolaryngology emergency with a 3-day history of soared eye, orbital edema and diplopia. Physical exam showed right palpebral

edema, difficult eye movements and diplopia. Rhinoscopy: few crusts and mucus on left nasal cavity, right nasal cavity with pale mucosa, without active rhinorrhea. He was admitted with intravenous Clindamycin and made a nasal video-endoscopy which showed diffuse mucosa edema, with purulent secretion in both middle meatus and obliteration of right middle meatus, and great quantity of purulent secretion in the cavum. Paranasal sinuses CT revealed right orbital abscess and veiling of maxillary, ethmoid, sphenoid and right frontal sinus. In the surgical treatment, a large amount of pus was drained in all paranasal sinuses and on the right eyelid. Patient progressed well, with gradual regression of eyelid edema. **Conclusion:** The orbital complication in the case was caused by rhinosinusitis, although nasal symptoms were few. The suspicion and evaluation with videoendoscopy and CT were important for the conduction of the case. Although they are not a common cause, RS can cause ocular symptoms and treatment should be instituted quickly to avoid sequelae.

Keywords: acute rhinosinusitis; orbital abscess; complications.

8528. Evolutive Profile of 168 Patients with Differentiated Thyroid Carcinoma

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Introduction: Differentiated thyroid carcinomas (DTC) are neoplasms with good prognosis when properly treated. The prognosis is influenced by local extension or by metastasis. There are controversial points regarding the conduction of DTC cases, as whether or not to perform more conservative surgeries, which type of neck lymph node resection (NLNR) and when to use the complementary treatment. **Objectives:** To evaluate patients treated with DTC regarding: treatment received, risk of recurrence, complications of surgical treatment and evolution. **Methods:** This is an observational and retrospective study of patients with DTC analyzed by: surgical approach, risk of recurrence of the American Thyroid Association (2015) one year after the initial therapy and in the last evaluation and complications of the surgical treatment. $p < 0.05$ was considered as significant. **Result:** 168 cases of DTC were evaluated, being 87% female, with age (mean \pm SD) of 49.6 ± 13.6 years. 25.4% of the patients developed hypoparathyroidism as a permanent surgical complication, being correlated with NLNR ($P < 0.0001$). There was also a correlation between NLNR and disease persistence at 1 year ($P = 0.02$) and at the last evaluation ($P = 0.01$), classification of high risk of recurrence of disease and persistence of disease in 1 year ($P = 0.01$) and in the last evaluation ($P = 0.002$), total thyroidectomy at 1 time and disease persistence at 1 year ($P = 0.007$). **Conclusion:** The clinical and surgical data evaluated have an important prognostic value for the adequate management of DTC.

Keywords: Thyroidectomy, differentiated thyroid carcinoma, follow-up.

8529. S-point: A Cause of Severe Epistaxis

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Introduction: Epistaxis are frequent; when severe, the bleeding origin identification has a great importance for good treatment. The S-point was reported as a new re-

gion of spontaneous severe epistaxis origin. **Objective:** Report a case of S-point epistaxis. **Resumed Report:** T.A.S, 64 years old, hypertensive and smoker, referred to the otorhinolaryngology (ORL) emergency room with 2-day history of persistent epistaxis, refractory to previous tampon, which was made hours before. On physical examination at the first evaluation, good general state, blood pressure (BP): 160x90 mmHg, hematic nasal crusts, no bleeding. The patient remained hypertensive (BP: 150x90mmHg), without active bleeding. After 8 hours, presented new epistaxis after sneezing. Nasal irrigation was performed with saline solution and clotting removal with visualization of active bleeding from right middle meatus, no origin seen, succeeded by pre-syncope and a new right anterior tampon. Maintained tampon for 2 days, with one recurrence of epistaxis. Nasal video endoscopy presented right sphenopalatine recess with discrete clots, and active bleeding, indicating surgery. She presented recurrence of bleeding while waiting surgery, followed by surgical treatment with visualization of active bleeding in the right S-point area and performed cauterization. Patient progressed well, no reports of epistaxis after surgery. **Discussion and final considerations:** Determine the exact bleeding point is a challenge in epistaxis treatment. Knowing the probable origins accelerates diagnosis and treatment avoiding complications. The S-point evaluation in the endoscopic approach allowed this case diagnosis, strengthening the importance of researching this anatomical landmark in the ORL evaluations.

Keywords: endoscopy; epistaxis; S-point.

8531. Intracranial Complication of Acute Rhinosinusitis: A Severe Case with a Favorable Outcome

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Introduction: Intracranial complications of rhinosinusitis are as severe as uncommon, and should be treated promptly because of their high morbidity and mortality. **Objective:** To report a case of intracranial complication of acute rhinosinusitis. **Resumed Report:** M.E.M.C, 26 years old, referred to the Otorhinolaryngology from Neurosurgery because of a 2-day exacerbation of frontal headache with 2 weeks of evolution, associated with fever, vomiting without nausea and neck stiffness. The pain was worsening progressively, refracting stepwise analgesia to tramadol. Presented history of multiples sinusitis and otitis. Cranial computed tomography (CT) showed right subdural hypodense collection and apparently left extradural images in frontal, with contrasted hyperdense halo, suggestive of cerebral empyema, and left maxillary sinusitis. Physical examination: neck stiffness, painful palpation of left frontal and maxillary sinuses, no neurological deficits. Oroscopy: mucopurulent posterior discharge. Rhinoscopy: pale mucosa, turbinates edema on the left nasal cavity, mucopurulent discharge from middle meatus. Management: immediate onset of antibiotic (Cefepime, Clindamycin and Metronidazole), surgical drainage of cerebral empyema and pansinusectomy. On surgery there was abundant purulent discharge from the sinus. Patient evolved progressive improvement after surgery, maintaining Cefepime and Metronidazole by infectology orientation for 6 weeks. **Conclusion:** Intracranial complications of rhinosinusitis occur due to the extension of the infection by contiguity or hematogenic pathway, and may progress to meningitis, meningoencephalitis, sub or extradural meningeal empyema to cerebral abscesses. The presentation can

be from headache to hemiparesis, convulsions and lowering of consciousness. Diagnosis comes from suspicion associated with CT, requiring immediate treatment.

Keywords: complicated rhinosinusitis; cerebral empyema; pansinusectomy.

8533. Odontogenic Maxillary Sinusitis

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Introduction: Maxillary sinus disease is characterized by the inflammatory and/or infectious reaction of the paranasal sinus mucosa. Odontogenic origin is found in about 5% to 10% of cases, being more common in adults. Some of it most possible causes include: periodontal disease, cysts and odontogenic abscesses and iatrogenic. Diagnosis is made through anamnesis, physical examination and specific radiology and the treatment of odontogenic sinusopathy involves the elimination of causative dental factors. The management of infection with antibiotics, as well as the opening of its drainage ostium for ventilation of the affected sinus. **Objectives:**

To report a case of odontogenic sinusitis after tooth extraction. **Case report:** AGGB, female, 31 years old, was admitted at Polyclínica de Botafogo complaining of pain in the right maxillary sinus region and cacosmia refractory to oral antibiotic therapy. The symptoms started 3 months after extraction of wisdom tooth upper right. Nasal endoscopy without significant changes. Computed Tomography of the Paranasal Sinuses reveals hypoattenuating material occupying almost all of the right maxillary sinus, extending to the respective ethmoidal infundibulum, obliterating it. There is a solution of continuity of the bony boundaries at the sinus floor with the oral cavity in the topography of the third right upper third that is absent. **Conclusion:** Patient was submitted to nasosinus endoscopic surgery, with right maxillary sinusectomy with opening of the maxillary ostium and drainage of muco-purulent secretion and cystic content of its interior. Subsequently, material was collected for biopsy and culture and lavage of the cavity with saline solution.

8534. Chronic Otitis Media with Severe Complication: Cerebral Abscess.

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Introduction: Chronic otitis media is an inflammatory process of the medium ear mucosa that affects the tympanic membrane and adjacent cavities of the auditory tube, lasting more than three months. **Objective:** To report a case of chronic otitis media complicated by cerebral abscess. **Resumed Report:**

12-year-old female patient, history of chronic otitis media, was admitted in the pediatric ICU with headache, right otalgia and high fever with three days of evolution, in addition to vomiting and drowsiness, Glasgow 13. On admission examination, effusion in the right ear, neck stiffness and nystagmus were identified. Computed tomography of skull and mastoid showed expansive lesion in the posterior fossa, with mass effect in the fourth ventricle and hydrocephalus supratentorial, besides signs of bilateral cholesteatoma, discontinuity of posterior portion of the wall of the right mastoid and signs of ipsilateral sigmoid sinus thrombosis and also an abscess in the cerebellum. Ventricular shunt was

then installed and three decompression craniotomies were performed for cerebral edema, and right tympanomastoidectomy, finding a massive cholesteatoma. The child remained in serious condition with partial improvement of neurological symptoms. **Conclusion:** Chronic otitis media is associated with persistent, insidious and destructive conditions, with anatomical and functional sequels, especially in the cholesteatomatous form, due to its invasive potential. The patient presented a drastic evolution, even after drainage of the abscess and tympanomastoidectomy, which leads us to an early approach to chronic cholesteatomatous otitis media as a preventive measure of its serious complications.

Keywords: chronic otitis media, cholesteatoma, mastoiditis, abscess.

8536. Anxiety and Stress Associated with Voice Symptoms in Teacher Activity and its Therapeutic Alternatives: A Systematic Review

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Introduction: Voice professionals, such as the teacher, face daily stress and anxiety situations that negatively affect the quality of life and, especially, their working tool: the voice. The association between the occurrence of disturbances in the teaching voice and the school / academic environment is proven. In this way, it is important to determine the factors that decrease and alleviate the overload on the voice of these professionals. **Objectives:** To determine the association of vocal and therapeutic complaints that improve the teacher's quality of life. **Data Synthesis:** Professional performance, characterized by abusive use of voice, too much stress, exposure to noise, inadequate environment and predisposition to atopies make the trainer an individual predisposed to the development of vocal complaints. According to the literature, the symptoms that most affect the study population were: hoarseness, voice failure, fatigue in speech, weak voice and shortness of breath. In the face of alternatives to improve this panorama, there are alternative stress relief activities ranging from medicines such as Passiflorine-based herbal remedies, physical activities such as walking, Pilates, dance, Yoga and meditation, Acupuncture, diet - avoiding stimulant foods like acai coffee -, adequate sleep - from 6 to 8 a night - and psychotherapy. **Conclusion:** It is essential to disseminate the knowledge of vocal complaints and their improvement factors as a way to reduce social costs (physical, cognitive and psychic), as well as relieve the stress of the profession so essential to society.

Keywords: voice, teacher, quality of life.

8540. A Craniofacial Monostotic Fibrous Dysplasia Case Report

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Introduction: Fibrous dysplasia is a benign, congenital skeletal disease characterized by the replacement of bone marrow by fibrous tissue. It may present in monostotic (affects single bone) and polyostotic (affects many bones) forms. The monostotic form occurs more often in maxilla and it is the most affected skull base bone, usually in patients aged 10 to 30 years, and less severe than the polyostotic form.

Objectives: To describe the clinical and radiologic features of a monostotic craniofacial fibrous dysplasia in a 36-year-old woman. **Resumed Report:** A 36-year-old woman with complaint of nasal obstruction, mainly to the right, oral breathing, coryza and pain in frontal region. Computed tomography (May/2017) of the paranasal sinuses demonstrated hypoplastic frontal and maxillary sinuses, notably the right maxillary sinus; expansive lesion in the right maxillary bone, heterogeneous, promoting discrete bulging and facial asymmetry, with ground glass opacification and hypodense areas of permeation; impression of partial resorption of posterior dental roots. Radiography of the upper limbs revealed a distal phalangeal fracture of the right third finger and, of the lower limbs, bilateral hallux valgus. **Conclusion:** Fibrous dysplasia is a benign bone disease, usually with good prognosis, and potential for malignant transformation. Treatment is limited and conservative in asymptomatic cases. However, advances in surgical techniques and imaging technologies allow symptomatic patients to be treated with complete resection, restoring function and facial aesthetics.

8542. Congenital Nasal Dorsum Absence: A Case Report

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Introduction: Absence of the nasal dorsum is a rare congenital condition of uncertain etiology. The diagnosis is suspected during second trimester ultrasound and confirmed after delivery labor. It can be associated with other abnormalities such as defects in the eyes, ears, palate and midline defects. The newborn may have feeding and respiratory difficulty leading to failure to thrive, close follow up is mandatory.

Objectives: Report of nasal dorsum absence in newborn. **Resumed Report:** Newborn, gestacional age 37 weeks, cesarian delivery without intercurrences and uncomplicated prenatal course. At birth, the baby showed absence of the nasal dorsum, hypertelorism and increased fontanelle with no other anomalies. After further evaluation with computed tomography, abdominal ultrasound and echocardiography the baby was discharged. Parents instructed to follow-up with otolaryngologist, neuropediatrician and general pediatrician. Posterior karyotype analysis showed no abnormal results. **Conclusion:** Congenital anomalies of the nose range from partial deformities to the complete absence of the nose and may be associated with other abnormalities. Patient presenting with nasal bone absence must be routinely assessed by specialized medical care providers to exclude other congenital malformations. Assess feeding and breathing is crucial to patient's quality of life hence the aesthetic issue can be delayed. The surgical plan of treatment is complex and requires a multidisciplinary team, usually the reconstruction is performed in preschool years.

Keywords: congenital, malformation, nasal.

8543. Laryngeal Tuberculosis: Case Report

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Introduction: Tuberculosis still one of the most prevalent infectious-contagious diseases in our country which can affect several organs of our organism. Laryngeal tuberculosis is one of the most frequent forms of granulomatous lesion. During laryngoscopic examination, the lesions can be found

in any part of the larynx, being very common the involvement mainly of the vocal folds, uni or bilaterally. Dysphagia is the main symptom reported by patients, accompanied by odynophagia, cough and systemic complaints such as fever and weight loss. **Objective:** To report the case of a patient with laryngeal tuberculosis. **Case report:** L.M.A. 70 years old, was admitted at Polyclínica de Botafogo service with dysphonia and dysphagia. Videolaryngoscopy was performed and visualized irregularity and thickening in the epiglottis, suggestive of an infiltrative lesion on the laryngeal face. The head and neck surgeon requested the preoperative laboratory tests and imaging exams. Computed tomography of the larynx revealed no tumor and chest radiography showed lesions suggestive of pulmonary disease. The histopathological analysis report reveals hyperplasia with areas of granuloma and necrosis, with culture positive for *Mycobacterium tuberculosis*. **Conclusion:** It is essential to the otorhinolaryngologist to be aware of the increasing incidence of tuberculosis cases as well as the importance of differential diagnoses such as squamous cell carcinoma of the larynx that may similarly present with hoarseness, odynophagia, cough, stridor, hemoptysis and cervical lymphadenopathy. A careful analysis should be performed in preoperative exams for laryngeal microsurgery, especially the chest radiography. Direct laryngoscopy along with biopsy are mandatory to establish a definitive diagnosis.

8544. The Occurrence of Symptoms Associated with the Voice of the Teacher in a Public School Of Primary Education of the Municipality of Maceió

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Introduction: Otorhinolaryngological complaints in the teaching profession represent a challenge because of their high frequency. The incidence of dysphonia has increased over the years. Excessive workload, inadequate work environment, and bodily and psychological stress are factors that contribute to the sickness of teachers. **Objectives:** To describe the occurrence of symptoms associated with the voice of the teacher in a Public School of Elementary Education. **Methods:** This was a cross-sectional observational study with 20 teachers who answered a questionnaire analyzing personal data, voice complaints, other associated symptoms and life habits. Analyses occurred through descriptive analytics (proportional distribution). **Results:** the most commonly reported symptoms were tiredness in speech (75%), burning in the throat (70%), hoarseness (65%), throat clearing and coughing (60%), and loss of voice (30%) and throat sensation (25%). 70% of them had an anxiety complaint and 45% had insomnia. Of these, half already went to the Otorhinolaryngologist, six people (30%) went to the speech pathologist and only five (25%) had vocal therapy. Six (30%) practiced physical activity, three (15%) used alcohol and none were smokers. **Conclusion:** The data point to the similarity in the pattern of complaints with the national literature. The high incidence of anxious symptoms and difficulties in sleep that need to be treated with a change in the labor panorama of the class is noticed. It is essential to follow up with an appropriate professional, to institute therapy using vocal techniques, to encourage physical activities and to reduce the consumption of alcoholic beverages.

Keywords: teacher, complaints, voice.

8546. Ozenosa Rhinitis and Nasal Myiasis: Case Report and Literature Review

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Introduction: Atrophic rhinitis or Ozena is a chronic disease characterized by yellowish secretion with fetid crusts and atrophy of the mucous lining. It has a higher incidence in countries with low socioeconomic development and hygiene, especially in rural areas. Chronic inflammation favors nasal myiasis because of the great attractiveness to flies that lay their eggs while the host sleeps. **Objective:** to describe a case of chronic rhinitis, which after two episodes of nasal myiasis intensely aggravated Ozenosa rhinitis. **Resumed Report:** Female patient, 78 years old. Resident in rural area. She reports that since she was young she has chronic rhinitis and that about 8 years ago, when she was still working in the field, she suffered from nasal and treated myiasis and continued to have rhinitis with symptoms of yellowish secretion, crusts and foul odor. Three years ago she had another episode and was treated. He currently experiences anosmia, cacosmia, tinnitus and echoes in the left ear and the presence of yellow discharge with crusts in the nasal passages. The examination of anterior rhinoscopy, nasal endoscopy and CT of the sinuses of the face show worsening of the chronic condition and because it is an elderly woman with advanced age, the treatment proposed initially is being clinical. **Conclusion:** In the face of the case, which shows an association of the disease with living conditions and hygiene in rural areas, it is necessary to pay more attention to the health of these people.

Keywords: atrophic rhinitis, ozenosa, myiasis.

8547. Nasal Metastasis of Clear Cell Neoplasia 20 Years After Primary Tumor Nephrectomy

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Metastases to the nasal cavity are rare, and may occur from clear cell renal carcinoma. We present a case of a man with nasal metastasis, 73 years-old, non-white, submitted to radical nephrectomy nineteen years ago. This surgery was due to a clear cell adenocarcinoma - stage 1 (T1M0N0). In the follow-up, he did not present recurrence in serial abdominal computed tomographies. No adjuvant therapy was required. In the last year, patient started complaining of nasal obstruction and intermittent mild epistaxis. It was performed a nasal endoscopy and visualized a reddish lesion in the left nasal cavity. A head computed tomography (CT) with contrast showed an expansive tumor with soft tissue density in the left middle meatus eroding the left lamina papyracea. A complete removal of the tumor was performed in a piece-meal fashion. The anatomopathological exam indicated clear cell adenocarcinoma with free margins. After one year, patient has no complaints and shows no sign of recurrence in the follow-up CT.

8549. Reaction to Alloplastic Graft in Late Postoperative Rhinoplasty

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Introduction: Silicone was widely used in augmentation rhinoplasties, but late complications are related. Literature shows that the silicone favors the formation of capped lesions with the presence of fibrosis that can retract over the years. The lymphocytic inflammatory response is predominantly found. **Objectives:** to evaluate the reaction to alloplastic graft in late postoperative rhinoplasty. **Case report:** LTP, 32 years old, white, female, no comorbidities. She was in the late post-operative period of rhinoplasty, complaining of bulging nasal dorsum, progressive in the last months. She also reported nasal obstruction. On examination, the patient had an oval bulging of approximately 1.5 cm in the nasal dorsum, and an obstructive septal deviation. Revisional rhinosseptoplasty was proposed. In the surgery, it had about 1 cm in its greater axis, fibroelastic consistency, occupying nasal dorsum. Below The subcutaneous. Pathology showed to be an irregular fragment of whitish and firm tissue, measuring 1.5 x 0.8 x 0.4 cm, with granulomas of the foreign body type encompassing empty cavities (content probably eliminated in the processing), fibrosis and associated lymphocytic inflammation, suggesting foreign body granuloma associated with injection of exogenous silicon-like material. In postoperative follow-up, the patient reported aesthetic satisfaction and improved nasal breathing, without recurrence of the lesion. **Conclusion:** The deformity presented was probably a frequent late reaction to the use of ALLOPLASTIC grafts, such as silicone. Other techniques using autologous grafts, such as cartilage for example, are widely used to avoid complications.

8554. Results of Treatment on Peripheral Facial Paralysis with and Without Electrostimulation: A Systematic Review

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Introduction: Idiopathic facial palsy (Bell's palsy) is the most common peripheral lesion of cranial nerves. Treatment requires prescription of oral corticosteroids. Electrostimulation of facial nerve remains controversial. **Objectives:** To evaluate, through a systematic review, the efficiency of electrostimulation on recovery of Bell's palsy patients. **Data synthesis:** It was made a research on data basis – Scopus and PubMed. Articles published between 2000 e 2017 included an amount of 280 patients aged from 15 to 79 years. Besides Bell's palsy (98,9%), were included volunteers with facial paralysis by other causes (n=8): diabetes, neurinoma, surgical amputation of facial nerve. The time of onset of symptoms range from 48 hours to 24 years. Of these patients, 55 (19,6%) received oral corticosteroids as initial therapy and 78 (27,8%) received antivirals. Of the volunteers, 176 (63%) were submitted to electrical stimulation. **Results:** Shows that electrostimulation, in addition to drug therapy, was associated to a less time to recover from facial paralysis. In patients with sequelae of paralysis (>1 year), it was observed improvement in facial mimetic after electrostimulation. The main adverse effects of electrostimulation were dermatitis, synkinesia, and mild pain, that occurred in 7 (3,9%) of the patients submitted to therapy. **Conclusion:** Selected studies did not show significant differences between electrostimulation in comparison

to conventional therapy. But the low quality of the studies must be considered.

Keywords: facial paralysis, idiopathic, electrostimulation.

8555. Recurrent Spontaneous Hematoma as a Complication of Cochlear Implant Surgery

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Introduction: Cochlear implants (CI) are devices used to rehabilitate individuals diagnosed with severe to profound neurosensorial deafness (1). CI surgery is a complex procedure, Cohen et al. Were the first to describe and classify their complications (2), the hematoma of the internal component region of the CI is one of them. **Objective:** To describe a case of recurrent spontaneous hematoma in a patient submitted to CI surgery at the Universitário Hospital of Brasília-DF. **Case report:** IFRC, female, 8 years old. Congenital deep sensorineural deafness, performed IC surgery at 2 years and 11 months. No immediate intraoperative / postoperative complications. After 2 years and 5 months of the procedure, the patient presented edema in the posterior region of the internal component of the CI, without fever or associated phlogistic signs, required drainage under sedation in a surgical center and treatment with corticoid therapy and oral antibiotic therapy. Patient progressed asymptomatic, but five similar episodes, conducted with the same treatment, occurred after primary surgery (intervals: 3 years and 2 months, 4 years and 4 months, 4 years and 8 months, 4 years and 10 months, and 5 years). Patient with no history of blood dyscrasias, trauma or other conditions that could justify the presented hematomas. **Conclusion:** Without definite cause or diagnosis explaining the presented picture, the patient maintains follow up with the Otorhinolaryngology service of the University Hospital of Brasília - DF. Oriented to immediately report symptoms suggestive of relapse.

8556. Single Sided Deafness and Bonebridge: Case Report

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Introduction: Bonebridge is a transcutaneous bone conduction prosthesis, being implanted for the first time in 2011 as part of a clinical trial, having increased its indications as of this date. Initially for conductive or mixed hearing loss and later for Single Sided Deafness. It has the advantage of being transcutaneous, decreasing the risk of skin complications and leading to direct stimulation of the bone. Single Sided Deafness causes socioeconomic problems due to the difficulty of sound localization, understanding speech in noisy environments and hearing difficulties in specific situations. **Objectives:** Report the case of Single Sided Deafness to the right with treatment by bone conduction prosthesis, Bonebridge. **Resumed Report:** CGR patient, male, lawyer, 74 years old, evolved with Single Sided Deafness to the right, 10 years ago. Resonance and tomography of temporal bones were normal. Due to the social difficulty, it was decided to perform Bonebridge. Patient currently satisfied with the result of the bone conduction prosthesis, with gains even in the labor market. **Conclusion:** A case of Single Sided Deafness with treatment chosen by Bonebridge was presented to reinforce the advantages of this method. There are several options for bone

conduction prostheses available, but with greater surgical complications. Bonebridge becomes a great choice for these patients while minimizing the risks. It reinforces the gain in patients with unilateral deafness who are economically active. This loss could lead to socio-economic losses in the case in question, for example, in court meetings.

Keywords: bonebridge, single sided deafness, bone conduction prosthesis.

8560. Cholesterol Granuloma of the Petrous Apex - Case Report

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Introduction: The petrous apex lesions are clinically silent for a long period of time (1). Cholesterol granulomas of the petrous apex are expansile, cystic lesions containing cholesterol crystals surrounded by foreign body giant cells, fibrous tissue reaction and chronic inflammation. (2). Occur in about 1 per 2–3 million population each year. (4). It is most commonly found in the middle ear and mastoid, associated with its pathologies. They are less frequent in a petrous apex region. (3). The clinical will depend on its extent (2). CT determines the exact location of the lesion and the most favorable drainage pathway. (1). By Magnetic Resonance the lesion is hyperintense in both T1 and T2-weight images. (4). Generally, patients with symptoms are managed surgically, while non-surgical management is advocated for asymptomatic patients. (2) **Objective:** The following report aims to shows a case of a young woman with a temporal mass with cholesterol granuloma. Case: J.S.M. 50 years old Referred to otorhinolaryngology department with complaint of major headache in ocular region, heavy headache. No nausea, vomiting, vertigo, hearing loss or tinnitus. MRI in T1 and T2 hyperintense at the petrous apex. Audiometry without alterations, impedanciometry with type A curve bilaterally. CT showed collection without expansion or destruction of osseous trabeculae. Expectant conduct. **Conclusion:** The lesions of the petrous apex are relatively rare. Cholesterol granuloma is the most common lesion. The imaging tests are fundamental for their diagnosis. The treatment depends on the symptomatology and dimensions, being most of the time surgical.

8564. Case Report: Cholesteatoma with Involvement of Posterior Cranial Fossa

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Introduction: Cholesteatomas are benign cystic lesions covered by stratified squamous epithelium filled with keratin, classified as congenital (2-5%), with early manifestation, and acquired. The chronicity of this lesion can cause erosion and remodeling in the adjacent bone, with early clinical signs. It rarely extends to other regions of the skull and, when it occurs, it affects the middle fossa. **Objective:** To report a case of aggressive presentation of cholesteatoma emphasizing the importance of follow-up and early therapeutic approach. **Case-report:** Female, 72 years old, with chronic suppurative left otitis media since childhood, never treated previously, attended due to sudden onset dysphonia 2 months ago and presence of a retroauricular cutaneous fistula with drainage of purulent secretion appeared 6 months before. At the examination, fetid diarrhea, tongue hypotrophy, uvula deviation, House-Brackmann grade II peripheral facial palsy, decreased strength when elevating the upper limb degree

4. Videolaryngoscopy shows paralyzed left hemilarynx. Computed tomography was performed, which showed extensive erosion of temporal bone on the left, including cochlea and semicircular canals, extending to the occipital and comprising paths from VII to XII cranial pairs. She underwent surgery for biopsy, which resulted in cholesteatoma. The complete resection was not possible due to age, prohibitive surgical risk and extension of the lesion, then clinical follow-up was chosen. **Conclusion:** Cholesteatoma, although benign, can present aggressive behavior when not treated. Among the therapeutic options, surgery is possible to remove the disease, in addition to clinical follow-up with serial cleaning and antibiotics administration.

8568. Malignant Branchiogenic Cyst or Cystic Metastasis? Case Report

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Introduction: Branchiogenic cyst are cervical congenital anomalies and represent a remnant of the branchial apparatus. The current literature presents a great controversy regarding the process of malignancy of branchiogenic cysts, and the majority of authors believe it is metastases of unknown primary tumors, considering the branchiogenic cyst carcinoma a rare or even non-existent entity. **Objectives:** The objective of this work is to present a case of cervical cystic lesion type branchiogenic cyst compromised by epidermoid carcinoma **Resumed Report:** Patient, 69 years old, female, sought service in March 2017, complaining of bulging in the cervical region on the right of beginning 2 years ago, with progressive increase. Otorhinolaryngological examination without alterations. At cervical palpation, the presence of a cervical nodule, in the jugular chain on the right, with approximately 6 cm in diameter, mobile, fibroelastic consistency. Tomography of the neck with a 5.0 cm cystic mass in the right cervical region, compressing and displacing lateral sternocleidomastoid muscle, suggesting a branchial cyst. Indicated extraction and sent material for anatomopathological that suggested cervical cystic lesion type branchial cyst compromised by epidermoid carcinoma. Performed exams for primary tumor investigation. Patient was referred to the oncologist. It is a year of follow-up, with no primary tumor. **Conclusion:** The existence of a malignant branchiogenic cyst is controversial due the difficulties of histological distinction between branchiogenic cyst and a metastatic lymph node, the coincident structures location, the time of patients' follow-up and diagnostic criteria's overlapping.

Keywords: branchiogenic cyst, cystic metastasis, bronchiogenic carcinoma.

8571. A Case Report of REM Sleep Behavior Disorder (RBD) Associated with Obstructive Sleep Apnea Syndrome (OSA)

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Introduction: RBD is a parasomnia characterized by dream-enacting behaviors related to the loss of the normal generalized skeletal muscle atonia during REM sleep. It mainly affects men over 50 years old. The clinical history and findings of videopolysomnography confirm the diagnosis. May be associated with others neurological conditions. Treatment consists of safety measures of the bedroom and use of Melatonin and/or Clonazepam. Some articles suggest negative impact of obstructive respiratory events in RBD. **Objective:** To evaluate the impact of the treatment of OSA with positive continuous pressure in

RBD. Resumed Report: JCBP, 66 years, male, no comorbidities. He presents abnormal behaviors and movements occurring in the second half of sleep that began five years ago. Reports snoring, apnea witnessed, nocturia, constipation, nasal obstruction and hyposmia. In use of Clonazepam 1mg/day with partial improvement of the symptoms. Neurologic exam without alterations and otorhinolaryngological evaluation with obstructive septal deviation. Submitted to septoplasty. Videopolysomnography with IAH 16,3/h; sleep efficiency 75%; microawakenings of 30,87/h; increased NREM sleep stage and REM sleep reduction, 96% average saturation; presence of motor activity during REM stage. It was prescribed CPAP and the patient progressed with significant improvement of abnormal motor activity. **Conclusion:** RBD may be the main manifestation of neurological disorders such as Parkinson's disease. Early diagnosis and treatment are essential for the patient's safety and quality of life. As well as the treatment of other concomitant disorders such as OSA can have a positive impact on the clinical control of this pathology.

8577. Palatal Melanoma: Case Report

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Introduction: Mucosal malignant melanoma is an extremely rare, aggressive neoplasm, accounting for 0.5% of all oral malignancies. When diagnosed it is often invasive and has a very high propensity to relapse, associated with a poor prognosis. Its exact etiology is unfamiliar, but it is known that mechanical trauma, tobacco use, exposure to alcohol are possible predisposing factors. **Objectives:** To describe a case of advanced palatal melanoma in a female patient as well as the therapy applied. **Resumed Report:** a 67-year-old female patient presented to our department of head and neck surgery complaining of painful bleeding pigmented lesion on upper alveolar ridge with 2 months of evolution. Incisional biopsy revealed palatal malignant melanoma and the patient was submitted to wide local resection followed by I-III right cervical lymphadenectomy. Unfortunately, the anatomopathological analysis revealed palatal bone involvement as well as linfo-nodal metastasis and the patient was referred to clinical oncology treatment. **Conclusion:** Oral mucosal melanomas carries dismal prognosis. Early detection of the lesion, proper evaluation, and appropriate treatment are very important to cure it.

Keywords: melanoma, palate, head and neck neoplasms.

8579. Pulfigo Vulgar

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Introduction: Pemphigus vulgaris is a vesichobolic, autoimmune disease that affects oral mucosa, skin and conjunctiva, nose, pharynx, esophagus, larynx and genitalia. Most patients present lesions of the oral mucosa in the form of painful erosions and cutaneous lesions. It prevails in the 5th and 6th decades of life and women, less frequent after 70 years and children. Diagnosis is histopathological with intra-epidermal acantholytic bubbles, over the basement membrane zone. Immunofluorescence demonstrates G immunoglobulins in the intercellular spaces of the epidermis. Treatment is systemic corticosteroid therapy which improves the prognosis of

this disease. Goal: Report a case of pemphigus vulgaris in oral mucosa and larynx. **Summary report:** A 50-year-old male patient, healthy. It evolved with canker sores in oral mucosa and larynx, lingual fissures, pain and bleeding after treatment for H. pylori. Oroscopy had diffuse ulcerated lesions in oral cavity. Crispy mucus with easy detachment to touch. Videolaryngoscopy had multiple ulcers in laryngeal mucosa with diffuse hyperemia and vesicobolous areas. He used Oncilom, without improvement. He was treated with Itraconazole and Nystatin, with no response. Biopsy of jugal mucosa was performed and Prednisolone was prescribed, evolving with improvement of ardence and aftoid lesions. Histopathology confirmed the diagnosis of Pemphigus vulgaris. **Conclusion:** PV is a rare chronic mucocutaneous autoimmune disease that exhibits oral lesions. Early diagnosis is essential because it can be fatal in 5% to 10% of cases. The patient with pemphigus vulgaris may present remission peaks and disease progression.

Keywords: Pemphigus, autoimmune disease, lesions of oral mucosa.

8581. Superior Canal Dehiscence Syndrome: Series of Case Reports

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Introduction: The Superior Canal Dehiscence Syndrome (SCDS), is the result of a bone dehiscence in the upper semicircular canal. Its presence is associated with a constellation of auditory and vestibular symptoms and include conductive hearing loss, hyperacusis through the bone pathway, and vertigo or nystagmus induced by both sound and increased pressure in the external auditory canal. **Objectives:** To describe 3 cases of SCDS to show how this syndrome is able to mimic a range of auditory diseases. **Resume report:** Description of 3 cases of male patients, between 45 and 60 years old, with presumed diagnoses of different diseases of the middle and inner ears and who, at the diagnostic evaluation stage, showed to be SCDS. The first case is an individual with unilateral conductive hearing loss, at low frequencies, without vestibular symptoms and with an initial diagnostic hypothesis of otosclerosis. The second, an individual with mild unilateral conductive loss had been referred for ventilation tube placement through the hypothesis of persistent tubal dysfunction. The third case, a patient with recurrent vestibular seizures and unilateral hearing loss in severe, sensorineural, had his initial diagnostic hypothesis of endolymphatic hydrops confronted with the concomitant finding of SCDS. **Conclusion:** SCDS should be on the list of differential of diseases of the middle and inner ears, since their presentation, when incomplete, may mimic other diseases of the peripheral auditory apparatus.

Keywords: superior canal dehiscence; vertigo; hearing loss.

8589. Rare and Recurrent Vascular Tumor In Nasosinusal Region

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Introduction: Glomangiopericytoma is a rare vascular tumor of the nasosinusal region representing less than 0.5% of primary nasosinusal tumors. Usually affects people

over 70 years. The most common symptoms are nasal obstruction and epistaxis. Benign behavior and frequent recurrence are its main characteristics. **Objective:** Report a case of glomangiopericytoma, a rare and recurrent tumor. **Case report:** A 64-year-old female patient, with personal history of hypertension and smoking, presented fixed nasal obstruction, purulent rhinorrhea, massive epistaxis in the right side of the nasal cavity and ipsilateral facial pain. Nasofibroscopy showed a hyperemic, vascular and friable lesion, with seropurulent secretion occupying the entire right nasal cavity from the middle meatus. Computed tomography of the face revealed a solid and expansive lesion with epicenter in the right nasal fossa, causing obliteration of the ostiomeatal complex, and extension to the rhinopharynx. She underwent nasal endoscopic surgery in April/2017, performing excision of the lesion on the lateral surface of the sphenoid bone. Pathology and immunohistochemistry confirmed the diagnosis of glomangiopericytoma. In March/2018, manifested recurrence of the condition, and after a new surgical excision, the diagnosis was confirmed by immunohistochemistry. New relapse 04/2018 in the face of the sphenoid without bone involvement. In joint follow-up with clinical oncology and will make radiotherapy sessions. **Conclusion:** Glomangiopericytoma is a benign rare tumor. Usually requires only surgical treatment, but it is important the total resection of the lesion to prevent recurrence. In cases of numerous relapses, radiotherapy may be used as adjunctive therapy.

Keywords: nasal neoplasm, glomangiopericytoma, immunohistochemistry.

8597. Laryngeous Tuberculosis

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Introduction: Tuberculosis is a chronic infectious contagious disease whose etiologic agent is *Mycobacterium tuberculosis*. It especially affects the lungs, transmitted by air, and may involve other organs. Usually the first extrapulmonary manifestation occurs in the laryngeal region, being dysphonia, dysphagia and odynophagia the main symptoms, usually accompanied by systemic complaints. Classically, laryngeal tuberculosis is related to extensive lung lesions and is characterized by being highly contagious. **Objective:** Report case of laryngeal tuberculosis. **Resumed reported:** AMOV, female, 26-year-old, two years ago began odynophagia, dyspnea, dysphonia, fever and productive cough, evolving with important weight loss. Videolaryngoscopy evidenced an infiltrative lesion in epiglottis and glottis with edema, hyperemia and moriform appearance. No lesions on skin and oral cavity. Chest X - ray with diffuse nodule reticulum, larger at apices. Laryngeal mucosa biopsy shows hyperkeratosis, acanthosis with pseudoepitheliomatous hyperplasia. At the tip itself, granulomatous formations, consisting of epi-

thelial cells, lymphocytes, multinucleated giant cells. BAAR test in sputum with positive result, after third sample with suspension of corticotherapy. Treatment RIPE with important healing of the symptoms after 2 weeks. After 3 months of treatment, laryngoscopy presented improvement of tissue infiltration, however, it developed tissue membrane, covering arytenoids, hindering the total abduction of vocal folds. Therefore, surgical treatment was planned, but patient refused because dysphonia did not bother her. **Conclusion:** Laryngeal tuberculosis is considered one of the most common granulomatous diseases. With difficult diagnosis by clinical examination, the chest x-ray and biopsy of the lesion should be performed for diagnostic confirmation.

Keywords: pharynx, larynx, tuberculosis laryngeal.

8598. Patient with Disseminated Tuberculosis with Bilateral Acute Otitis Media as Initial Symptom: A Case Report

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Introduction: Tuberculosis is a disease caused by the *Mycobacterium tuberculosis*. It commonly affects the lungs, but it can also reach other organs and systems (referred to as extrapulmonary tuberculosis). Primary infection of other sites, such as the auditory, is rare. Nevertheless, tuberculous otitis media is usually approached by otorhinolaryngologists.

Objectives: Report the case of a patient with disseminated tuberculosis with otitis media as initial symptom. **Case Report:** Y.R.E.N, a 10-year-old female, malnourished, sought medical care presenting fever for two months, weight loss and otalgia. During physical examination it was observed bilateral cervical lymphadenomegaly, palpable and painful, and bulging of the tympanic membrane during otoscopy. The otorhinolaryngologist detected purulent otorrhea. Culture of ear secretion, tomography of mastoids and a cervical ultrasound were done. The tomography was suggestive of bilateral otomastoiditis with diffuse obliteration of the external ear canal due to soft tissues' contents. On another otoscopy, it was identified otorrhea and polyps coming from both middle ears, creating the possibility of diffuse tuberculosis. After two negative smears, the diagnosis was concluded by rapid molecular test, reactive tuberculin skin test (05mm) and abnormalities in videonasolaryngoscopy. During hospitalization, the patient was under a scheme of antibiotics including the ones for tuberculosis. After discharge, treatment was concluded at home. **Conclusion:** Tuberculous otitis media represents 0.04 – 0.09% of cases of extrapulmonary tuberculosis. The signs and symptoms presented by the patient commonly include otorrhea, bulging of tympanic membrane and enlargement of cervical lymph nodes. Delayed diagnosis can result in sequelae.

Keywords: otitis media, tuberculosis, otorhinolaryngologist.

8599. Study of Prevalence of Pertussis Cases in Children Under One Year Old from 2002 to 2017 in São Paulo
Gabriel Borges Veado de Assis, Thiago Yuzo Azuma, Vinícius Ruiz Nunes, Felipe Francisco Favaretto, Rodrigo Andreta
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Introduction: Pertussis is an acute respiratory disease caused by *Bordetella pertussis*, ranked among the top 10 causes of infant mortality. **Objective:** To evaluate the prevalence of pertussis in children under one year old in state of São Paulo from 2002 to 2017. **Methodology:** A total of 1925 cases of this disease in the group studied which occurred from 2002 and 2017 were analyzed. These records were obtained, according to the notification year, from the database of the Information System of disease Notification (SINAN) of the Ministry of Health (MS). This data was tabulated and analyzed in a Microsoft® Excel spreadsheet. **Results:** There was no significant number of reported cases between 2002 and 2010. From 2011 to 2014, there was a gradual increase of approximately 400% in notifications. In 2014, there was a peak of suspected cases, reaching 620 notifications. Between 2015 and 2017 there was a significant decline of approximately 540% in the reported numbers. **Conclusion:** The small number from 2002 to 2010 (101 cases) may represent a flaw in the notification system studied, perhaps due to lack of professional acceptance or difficulties in implementation. It is noteworthy that São Paulo has followed a global tendency to reduce pertussis cases lately. Hygiene habits, housing and forceful vaccination campaigns are related to this drop. It must be emphasized the importance of early diagnosis, exposed people prophylaxis and vaccination of those not yet vaccinated or in need of an extra dose since there is a high mortality rate among these patients.

8600. Study of Prevalence Of Cases Of Whooping Cough Under 1 Year from 1975 to 2017 in Brazil
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Introduction: Pertussis is an acute respiratory disease caused by *Bordetella pertussis*, ranked among the top 10 causes of infant mortality. **Objectives:** Evaluate the prevalence of whooping cough in children under 1 year in Brazil from 1997 to 2017. **Methodology:** A total of 20,120 cases of pertussis in children under 1 year old who occurred in Brazil between 1997 and 2017 were analyzed from SINAN(MS). This data was then tabulated and analyzed by Microsoft® Excel spreadsheet. **Results:** In the period of 1975 and 2005 we did not obtain a significant number of notifications. There is an increase in the number of notifications from 2006 to 2008(3,533%), subsequently between 2008 and 2010 there was a fall of 54%. Between 2010 and 2014, there was an increase of 1,193% in the number of cases. However, in the period from 2014 to 2017 there was a reduction of 82.25%, reaching a lower number in 11 years. **Conclusion:** The number of unimpressive cases from 1975 to 2005 may represent a failure in the notification system studied. In the period from 2006 to 2008 there was a significant increase in notifications, with a larger number in 2008 (872). Was observed a fall of 82% until the year 2017. Until 2017 Brazil continues with the reduction in the number of pertussis cases, habits of hygiene, housing and vaccination can be related to this fall.

8602. Prevalence of otorhinolaryngological complaints during the “Care for Your Voice” campaign for World Voice Day in the city of Maceió in 2018
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Introduction: The voice, a sound produced by the vibration of the vocal folds and modified by the resonance cavities, establishes a biopsychosocial communication. Any difficulty in vocal emission that impedes the natural production of voice goes unnoticed among individuals, thus the awareness and search of data is necessary for better conduct and prognosis. **Objective:** To determine the prevalence of otorhinolaryngological complaints during the “Take Care of Your Voice” campaign for World Voice Day in the city of Maceió in 2018. **Methods:** 100 physical questionnaires of self-authorship were used; contemplating personal data, dysphonic symptoms and habits of life; in subjects without participation restrictions. **Results:** In the sample, 66 women and 34 men were interviewed and the mean age was 34.28 years. 94.8% did not smoke, 77.3% did not use alcoholic beverages and 53% did not practice any type of physical activity. The prevalence was: clearing (50.7%), hoarseness (47.8%), cough (40.3%), burning or pain in the throat (38.8%), voice loss (35.8%), speech exhaustion (25.4%), choking (25.4%), throat sensation in the throat (22.4%) and speak (17.9%). 63.3% reported insomnia, 63.3% anxiety and 26.7% depression. 67.8% had symptoms of allergic rhinitis and 15.4% had asthma. 55% already visited the otorhinolaryngologist and only 19% went to the audiologist. 80% did not use controlled medication. **Conclusion:** Voice campaigns promote awareness of the perception of signs and symptoms for diagnosis and early treatment, as well as strategies for vocal health.

Keywords: otolaryngology, campaign, vocal health.

8603. Metastasis of Prostate Cancer in Temporal Bone
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Introduction: Metastasis to temporal bone originate from breast, lung, kidney, prostate and stomach. The most common temporal involvement is through metastasis from distant primary tumors by hematogenous dissemination. The portion of the temporal bone usually involved is the petrous apex, followed by mastoid and the internal auditory canal. The symptomatology is nonspecific. The presence of hearing loss sensorineural type may indicate involvement of the capsule. The diagnosis is made by biopsy and imaging is done to determine the extent of the disease. The treatment of these injuries is generally palliative, through radiotherapy and/or chemotherapy. **Objective:** To report a metastasis of prostate cancer in temporal bone **Case report:** A 58 years-old male patient complaining of tinnitus and hearing loss for 6 months in left ear and history of prostate adenocarcinoma treated surgically. Audiometry revealed moderate sensorineural hearing loss in the left ear with curve type A. Imaging scans revealed expansive solid lesion in the left jugular foramen with invasion and bone erosion affecting mastoid, occipital condyle and jug-

ular vein. Histopathological examination revealed epithelioid neoplasm infiltrating bone and immunohistochemistry study showed adenocarcinoma with probable origin in the prostate. Bone scans showed involvement of left temporal and occipital bone, ribs, spine and left ilium-ischium. Patient is on chemotherapy with pamidronate evolving with improvement of bone pain. **Conclusion:** Metastasis from distant primary tumor are infrequent diagnosis. In symptomatic patients, after exclusion of other more common diseases, it is necessary to carry out biopsy of the lesion and immunohistochemistry study.

Keywords: metastasis, immunohistochemistry, temporal bone.

8617. Silent Sinus Syndrome: A Case Report

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Introduction: Silent sinus syndrome, is a rare condition, consists of spontaneous enophthalmia secondary to chronic maxillary hypoplasia not related to trauma or previous sinus surgery. Occurs during the third to fifth decade of life, equal distribution between sexes, more commonly unilateral. Patients most commonly may present with vague symptoms, like change in facial appearance or sinking of the eye, but less symptoms may also happen like diplopia, blepharoptosis or oscillopsia. Computed tomography(CT) make this diagnosis. The treatment is surgical and consists in a maxillary sinus antrostomy and an orbital correction maybe necessary. **Objectives:** To report a case of silent sinus syndrome , discussing probable pathophysiological mechanism, diagnosis and treatment. **Resumed Report:** Male, 37, with recurrent pharyngitis performed CT Paranasal sinuses, image compatible with Silent Sinus Syndrome on the right side. Absence of nasosinusual complaints, denied diplopia or altered visual acuity. Only after CT performed, he noticed slight asymmetry between the eyes. Nasal endoscopy with patent nasal cavities, middle meatus and sphenoethmoidal recess without secretion or edema bilaterally. Patient undergoing nasosinusual endoscopic surgery under general anesthesia for right side maxillary antrostomy, without intercurrences. **Conclusion:** Silent sinus syndrome is rare, and should be recognized by otolaryngologists. The imaging findings with involvement of the orbit and the maxillary sinus confirm the diagnosis, and that functional endoscopic sinus surgery is efficient in this treatment.

Keywords: enophthalmos, chronic maxillary hypoplasia, silent sinus syndrome.

8619. Otorhinolaryngological Changes in Patients with Behcet's Disease

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Introduction: Behcet's disease is an immune-mediated systemic vasculitis characterized by the presence of oral and genital ulcers, ocular inflammation and cutaneous lesions. The etiology and pathogenesis are unknown, although

the presence of HLA-51 represents a predisposing genetic factor. **Objectives:** To describe the manifestations in a patient diagnosed with Behcet's disease, underwent to clinical work out in the otorhinolaryngological clinic at the University Hospital of Brasilia. **Case Summary:** NEFA, 15 years old, with a previous diagnosis of Behcet's disease, started follow- up in the otorhinolaryngological outpatient clinic at age of 3 years. During this follow-up period, in addition to recurrent oral and vaginal ulcers, she developed alterations in the ear, nose and larynx, possibly correlated to the underlying disease. She had recurrent episodes of otalgia and bilateral purulent otorrhea, and the mastoid CT cshowed a chronic bilateral otomas-toiditis and she developed moderate conductive hearing loss. During the follow up she presented dysphonia, and videolaryngoscopy had a mid-posterior triangular cleft, thickening at the left-hand edge, and nodular formation in vocal folds. Futhermore she presented nasal obstruction and rhinorrhea compatible with allergic rhinopathy. No reports of sinusopathy or epistaxis were foud. Personal history: mother and sister are also diagnosed with Behcet's disease. The exam presents bilateral central perforation on timpanic membrane, ulcerated lesions on the upper lip and anterior septal perforation, and ulcerated lesion on larinx . **Conclusions:** Behcet's Disease may affect the whole body, being ear, nose, and throat area is a possible target. Otorhinolaryngologist must pay more attention to additional clinical abnormalities.

8620. Kartagener Syndrome: A Case Report

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Introduction: Kartagener's syndrome is an autosomal recessive disorder occurring with frequency of 1:30,000 to 1:40,000. It is a form of primary ciliary dyskinesia that is characterized by the classic triad of dextrocardia, bronchiectasis and sinusites. **Objectives:** To report a case from a young patient with rhinosinusitis, who during the investigation was discovered situs inversus and nasossinusual polypoid, likely to be diagnosed Kartagener's Syndrome. **Resumed Report:** An 8-year-old male boy, with chronical nasal obstruction and rhinosinusitis. During the investigation, was found a nasossinusual polypoid and situs inversus. Although he did not had any history of pulmonary problems, a thoracic tomography revealed bronchial mucoid impaction, which may be due to primary ciliary dyskinesia. Because of his age, he did not had a sperm evaluation. Despite the fact that he does not presents the classic triad yet, the signs and symptoms corroborate for kartagener syndrome. He was submitted to Functional Endoscopy Sinus Surgery and is currently stable. The patient is being followed by +otorrinolaringoly and pneumology evaluations, with no nasal obstructive and improvement in quality of life. **Conclusion:** Although nasossinusual polypoid are a common condition in adults, they are rare in infants and more often associated with syndromes, therefore it must be investigated. In this case, the investigation led to Kartagener's syndrome, which is a form of primary cililiary dyskenesia, characterized by chronic sinusites, situs inversus and bronchiectasis.

Keywords: kartagener syndrome; nassosinusual polypoid; chronical nasal obstruction; infants.

8621. Mucosal Melanomas of the Nasal Cavity – Case Report at a Teaching Hospital
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Introduction: Mucosal melanomas of the nasal cavity are responsible for approximately 1% of all neck and head melanomas; it is a rare malignant disease that originates from the neural crest's melanocytes that migrate to the mucosa of the aero digest tract. **Objectives:** Report a case of a mucosal melanoma of the nasal cavity, showing the significant roles of its early diagnosis and of a meticulous otorhinolaryngologic examination. **Case Report:** A 68-year-old female with a six-month history of unspecific nasal symptoms – nasal obstruction and rhinorrhea, more evident on the left; followed by intermittent epistaxis, started 3 months later, also on the left side. A lesion was seen both in the nasal endoscopy, which evidenced a dark image in the posterior region of the left nasal fossa, and on CT, that showed a 23x21mm lobed lesion, with soft-tissue density, occupying the posterior region of the left nasal cavity, extending posterolaterally to the cavum. The patient underwent surgery for complete resection of the lesion, and histopathology examination confirmed mucosal melanoma of the nasal cavity. Post-operative follow-up continues with routine ambulatory appointments. Yet, there are no evidences of tumor recurrence or metastatic lesions. **Conclusion:** Mucosal melanomas of the nasal cavity are an extremely aggressive neoplasia, which is often late diagnosed due to lack of symptoms in the early stages. Preferential treatment is surgery complemented or not with radiotherapy. It is important to include this kind of tumor as a possible diagnosis of nasal tumors, specially in elderly patients with unilateral nasal obstruction.

8625. Laryngeal Amyloidosis
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Introduction: Amyloidosis comprises heterogeneous group of disorders characterized by the deposition of amyloid protein in various organs of the body. The larynx is one of the rarer sites where amyloidosis occurs. **Objectives:** To present and to discuss a case of laryngeal amyloidosis, your diagnosis and treatment. **Resumed Report:** A 51-year-old man with four-year history of exertional dyspnea, associated to progressive dysphonia. He has had a negative history of smoking, weight loss or orotracheal intubation. Started treatment for asthma and at the time he did a videolaryngoscopy, it was found a tumoral lesion in subglottic region. It was requested a CT of neck and biopsy of lesion. After the use of Congo-red stain, the diagnosis of amyloidosis was completed. It was investigated systemic diseases as multiple myeloma, rheumatic diseases and tuberculosis, however these tests were negatives, except the perumbilical fat biopsy that was positive to amyloidosis. Partial resection of the subglottic lesion was performed with an important improvement in dyspnea and dysphonia. **Conclusion:** The laryngeal amyloidosis is rare, contributing with less than 1% of all benign tumors of larynx. Amyloidosis commonly affects individuals between 50 and 70 years of age, with predominance in female gender (3:1). Early diagnosis and surgical intervention can optimize respiratory and phonatory functions. In this case, the disease

was associated with systemic form, however without manifestation in others organs or association with other comorbidities, being the laryngeal lesion the single manifestation.

Keywords: amyloidosis, larynx, laryngeal diseases.

8626. Acute Rhinosinusitis Evolving with Orbital Abscess – A Case Report

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Otorrinoseul

Introduction: Acute rhinosinusitis is an inflammation of the mucosa lining the nasal cavity and paranasal sinuses and often affects the upper respiratory tract. Despite the decrease in its complications due to its treatment with antibiotics, rhinosinusitis remains the main cause for orbital infections. **Objectives:** We present a patient submitted to drainage of left orbital abscess due to complicated maxiloetmoidal rhinosinusitis. **Resumed Report:** P.R.M., 14 years old, male, went to the emergency room with significant edema on left orbital region associated with hyperemia and diplopia, with sudden onset 5 days before, presenting progressive worsening. Patient had not presented sinusitis previously and had important septal deviation. At the admission, his state was fair and laboratory tests presented leukocytosis with left shift and elevated CRP. Face Tomography found extensive inflammatory process affecting left paranasal sinuses extending and forming intra-orbital collection. Patient underwent septoplasty and abscess drainage and was hospitalized with Ceftriaxone and Clindamycin, but presented orbital edema and diplopia on the 4th postoperative day, leading to a new surgical approach. He was also submitted to sessions in the hyperbaric chamber and was discharged after 14 days of hospitalization. **Conclusion:** The peculiarity of the case is the fact that the patient does not have a previous history of sinusitis. The deviation of the septum was pointed out as one of the risk factors for the condition. We emphasize here the need for an immediate surgical approach in cases of complications, associated with antibiotic therapy for better patient response.

Keywords: sinusitis, orbital cellulitis, orbit.

8631. The Benefits of Hypothermia Prevention on Head and Neck Surgeries

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Introduction: Hypothermia refers to the reduction of room's or client's temperature. It can be used as therapeutic method or it can be non intentional. **Objectives:** For the execution of the present study, information was collected on articles of scientific production in databases such as MEDLINE, SciELO and productions developed by the Rio de Janeiro's Society of Anesthesiology. to understand the theme as well as evaluating the importance of thermal control. **Data Synthesis:** The non intentional hypothermia may occur on clients subdued to anesthetic and surgical procedures or on trauma victims. It might come as isolated or associated factor, such as heat loss, physiological thermal regulation inhibition, or lack of proper care for its prevention. As a therapeutic method it can be applied as induced hypothermia, intracranial surgery, sepsis, cranial traumatism, burns or liver and heart surgeries. The temperature adopted on those cases is usually below 35° C. **Conclusion:** Hypothermia is frequently found on the clinical practice of the anesthesiologist, developing systemic effects, often del-

eterious for patients. The non intentional hypothermia when not identified or neglected, increases the morbidity of procedures. Tremors and intense cold sensations are frequently complaints of clients, many times described as the worst period of the hospitalization. For those reasons the non intentional hypothermia must be prevented, since it is the fastest, cheapest and most efficient way for its solution.

8645. Frontal Mucocele: Report Case of Lynch And Endoscopical Combined Approach

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Introduction: Mucoceles are defined in literature as slow-growing benign lesions, often filled with aseptic fluid, found in the paranasal sinuses. Frontal and ethmoidal sinuses are the most frequent sites. Their etiopathogeny is unknown, although it seems likely that ostium drainage obstruction and sinus inflammation, chronically, can be the cause. When in Frontal Sinus, Mucoceles can behave as destructive masses with bony resorption and external compressions, allowing symptoms from eye proptosis and diplopia to minor clinical signs such as headaches. Surgery intends to marsupialise the cavity of the mucocele, in order to ensure good ventilation and drainage of the affected sinus. The frontal sinus is the location which presents more surgical limitations. Lately the endoscopic approach has been used widely insuring less morbidity, while the external access has been less used. Although recent systematical reviews shows same percentage of recurrence and complication between the two accesses. Usually Lynch external approach is indicated in frontal mucoceles with anatomical obstacles such as narrow frontal recess or wide extent of the disease. **Objective:** To Present our experience of the surgical external approach in Frontal Mucoceles. **Resumed Report:** We present a 28 yo female, with chronic rhinitis symptoms since childhood. In the last 4 years she started an eye localized and left cranial hemisphere intense and constant headache, with no visual or other symptoms. The CT showed frontal sinus wide hypodensity, and Mucocele was confirmed on an external Lynch technic approach. **Conclusion:** At this case, with most external and posterosuperior region of the sinus committed, we choose an safe way of exposing better the Frontal Sinus, with a association of Lynch technic and endoscopic approach.

Keywords: mucole; frontal-sinus; lynch.

8646. Antrochoanal Polyp – Case Report

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Otorrinoseul

Introduction: Antrochoanal or Killian polyp is a solitary benign polypoid lesion that affects children and young adults. It represents 4 to 6% of nasal polyps in the general population. It originates from a hypertrophy of the maxillary sinus mucosa and protrudes posteriorly into the nasopharynx. It can also be originated as spheno-coanal and ethmoid-coanal polyp. **Objectives:** Our objective is to report the case of a patient with unilateral nasal obstruction, with complete resolution of the complaint after an endoscopic surgical approach. Case report: AAS, 24 years old, female, with complaint of unilateral nasal obstruction for one year without improvement with clinical treatment. Computed tomography of the sinuses revealed opacification and homogenous filling of the left maxillary sinus, ipsilateral nasal cavity and cavum. Nasofibrolaryn-

goscopy showed a single nasal polyp externalizing through the left middle meatus and projecting into the coana. Patient underwent nasal endoscopic surgery and the lesion - which partially filled the cavum - was removed in its entirety. A piece submitted to pathology confirming a diagnostic hypothesis.

Conclusion: The polyp grows rapidly due to the venous return of its peduncle, which is compressed by the ostium, becoming more edematous. It is manifested by nasal obstruction, usually unilateral, but may be bilateral when the polyp is extremely bulky, with important deviations of the nasal septum. The main differential diagnoses are tumors of maxillary antrum, mucocele, nasoangiofibroma, maxillary sinusitis and meningoencephalocele. Treatment is surgical and the most commonly used technique is endoscopic surgery.

Keywords: nasal polyps, nasopharynx, sinusitis.

8648. Atypical Topography of Inverted Papilloma: Duct Nasolacrimal

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Introduction: Invert Papilloma is a benign tumor of nasal and paranasal mucosa lining epithelium. Most known risk factor is HPV infection. It is rare to have a tear sac. Injury with high recurrence, local aggression and malignant transformation. Treatment indicated is surgical excision. **Objectives:**

To report a case of location and atypical incidence. **Case report:** Female patient, 26 years old, Manaus/AM. In 2014, started an isolated epiphora in the right eye evolving with hyperemia, edema and increased soft-mass in the topography of the ipsilateral tear duct, in addition to intermittent epistaxis. After three attempts of probing the nasolacrimal duct, without success, a dacryocystorhinostomy was performed. However, even after the procedure, symptoms of edema and increased mass in the nasolacrimal duct region worsened and patient progressed with local phlogistic signs, temporal displacement of the globe and recurrent epistaxis. Nasal endoscopic examination revealed vegetative lesion, softened, friable and irregular at the orifice of the dacryocystorhinostomy in the right nasal cavity, with drainage of white and viscous fluid with blood under external compression. At CT face sinuses, evidenced osteolysis of the nasolacrimal duct wall and dilation of all its extension. Biopsy and anatomopathological examination were performed, confirming the diagnosis of Inverted Papilloma. Submitted to modified medial maxillectomy with complete resection of the lesion, followed in outpatient follow-up. **Conclusion:** Due to recurrence and possibility of malignant transformation, complete tumor resection is mandatory as well as its long-term clinical follow-up.

Keywords: inverted papilloma; lacrimal duct; paranasal sinus.

8654. Langerhans Cell Histiocytosis Presented as Otitis Media and Mastoiditis – Case Report

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Otorrinoseul

Introduction: Langerhans cell histiocytosis is characterized by a disorder of the reticuloendothelial system with proliferation of a specific type of cells presenting immature

antigens – dendritic cells – associated or not with the inflammatory reaction of eosinophils, neutrophils and mononuclear cells, involving integument, bones and viscera. **Objectives:** Our goal is to emphasize this disorder as a possible diagnosis, since it mimics other more common diseases seen by the otolaryngologist, such as external otitis and acute mastoiditis. In this report, we present a patient with acute mastoiditis submitted to mastoidectomy with placement of ventilation tube evolving with bulging in the right frontotemporal region. **Resumed Report:** M.O.F., 1 year old, male, with recurrent acute otitis media, evolved with phlogose on the right mastoid area, underwent mastoidectomy with placement and ventilation tube with partial improvement of otitis episodes. However, he developed skin lesions in the right ear canal and importante bulging on frontotemporal area. Computed tomography detected superolateral osteolytic lesions in the right orbit extending to adjacent extracranial soft tissue. Patient underwent histopathological examination that found macrophages and giant histiocytes. Currently, the patient is in follow-up with oncological care and under radiotherapy treatment. **Conclusion:** Langerhans Cell Histiocytosis is a rare disease in the pediatric range and its early manifestations occur mainly in the head and neck. It should be taken into account as a differential diagnosis of difficult-to-treat otitis. Early diagnosis is of fundamental importance for treatment and best prognosis.

Keywords: otitis media, histiocytosis, langerhans-cell.

8658. Temporal Bone Osteomyelitis - Case Report

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Otorrinoseul

Introduction: In 1968, Chandler described a form of external otitis caused by *Pseudomonas aeruginosa*, initially insidious and with progressive debilitating character, high tendency to recurrence and mainly affecting elderly diabetic patients. Its manifestations are persistent otalgia and purulent secretion, which can affect soft tissues, cartilage, bones and cranial nerves, eventually progressing to osteomyelitis of the temporal bone. **Objectives:** To present case of patient with external otitis refractory to treatment with oral and topical medications, evolving to osteomyelitis of the temporal bone. **Resumed Report:** N.L., 74 years old, male, diabetic, went to the emergency room with left otalgia and was diagnosed with external otitis. Treated for an extended period with oral and otologic antibiotics, but without resolution of the condition. Investigation by magnetic resonance and scintigraphy with ^{99m}Tc confirmed the inflammatory process of the left temporal bone with important increase of the osteogenic activity in the mastoid region, compatible with osteomyelitis. Intravenous antibiotic therapy was instituted for fourteen days and the patient evolved with important clinical improvement. He followed oral therapy for another six weeks. Patient is still under follow-up. **Conclusion:** There are cardinal points in the diagnosis: persistent otalgia for more than a month, purulent otorrhea with granulation tissue for several weeks, diabetes mellitus, advanced age or some state of immunosuppression and involvement of cranial nerves. Treatment should be local and systemic with anti-pseudomonas antibiotics and control of diabetes, if present, is indispensable. Surgical debridement is only done in patients refractory to usual clinical treatment.

Keywords: osteomyelitis, temporal bone, earache.

8675. Laryngotracheobronchial Papillomatosis with Pulmonary Involvement In Adult: A Case Report

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Introduction: Papillomatosis is the main benign larynx neoplasm. Can spread to any region of the respiratory tract - laryngotracheobronchial papillomatosis – with rare pulmonary involvement. It's caused by human papillomavirus,mainly subtypes 6 and 11,with low malignant potential,related to previous smoking,irradiation and chemotherapy. Clinically it presents by dysphonia,stridor initially inspiratory,dyspnea and obstruction of the airway. Endoscopically manifests as sessile or pedunculated exophytic lesions,with verrucous surface. Laryngotracheobronchial papillomatosis is suggested by tomographic findings and diagnosed by bronchoscopy with biopsy. The virus infects preferably squamous cell junctions,especially true vocal folds.The manifestations are related to host's immune response.Pulmonary involvement is a bad prognostic factor. **Objectives:** Report a case of laryngotracheobronchial papillomatosis with pulmonary involvement in a non-smoker adult patient. **Resumed Report:** Female,29 years,second trimester of pregnancy,history of respiratory papillomatosis by human papillomavirus type 6 since 3 years old,requiring multiple resections because of laryngeal obstruction.One year ago has progressed with worsening dyspnea and,by flexible bronchoscopy,multiple lesions were observed throughout the tracheal extension besides obliteration of the left main bronchus. Chest tomography showed pulmonary mass in left lower lobe. Petscan presented compatible captation with malignancy but parenchyma approach was contraindicated because of pregnancy. **Conclusion:** Laryngotracheobronchial papillomatosis is a rare entity with few reports in adults.It presents dissemination to the pulmonary parenchyma in less than 1% of cases and there are few reports of malignancy.The related case is important for the alert regarding the follow-up of laryngeal papillomatosis beginning in childhood,demonstrating the importance of further studies regarding the occurrence of isolated pulmonary malignancy.

Keywords: laryngotracheobronchial papillomatosis, malignancy, pulmonary involvement.

8676. Benefits of Monitoring the Electro Neuro Activity of the Recurrent Laryngeal Nerve After Head And Neck Surgeries

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Introduction: Intraoperative monitoring of the recurrent laryngeal nerve helps the prevention of injuries in this structure, determining the immobility of these structures, being developed for the preservation of its neural function. **Objectives:** For the execution of the present study, information was collected on articles of scientific production in databases such as MEDLINE, SciELO, productions developed by the Brazilian Society of Head and Neck Surgery, primary articles (5) to understand the theme. As well as evaluating the importance of nerve monitoring in surgical practice. **Data Synthesis:** The recurrent laryngeal nerve is a pair of branches of the vagus nerve. It is an important nerve connected to the muscles of phonation as it is the motor nerve of the larynx. The use of intraoperative neural monitoring (NIO) in thyroid surgery aims to help prevent recurrent laryngeal nerve damage.

age during surgery or to confirm that the nerve was actually injured. **Conclusion:** MNIO has great indications in thyroid and parathyroid gland surgeries in order to prevent lesions on the laryngeal nerves, aiming at reducing vocal fold paralysis, facilitating reoperations, especially where there was previous dissection of the nerve, facilitating goiter and those in which the presence of neoplasias occurs. Accurate knowledge of the anatomy is the basis for performing a safe surgery and can not be replaced by intraoperative neural monitoring.

8681. Oropharyngeal Melanoma: Case Report

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Introduction: Mucosal melanoma of the head and neck is a rare condition which has an aggressive behavior¹. Primary oral malignant melanomas represent 0.5% of all oral neoplasia, taking place predominantly in the nose, rhinopharynx, oral cavity, and oropharynx². **Objectives:** Present a report of primary oropharyngeal melanoma in a patient submitted to a PET scan. **Resumed Report:** A 62 year-old, female patient, non-smoker, presented with complaints of globus sensation, dysphonia and bloody sputum for the last 4 months. The oroscopy showed part of a blackened lesion. A fiber optic examination of the aerodigestive tract revealed an injury involving rhinopharynx and oropharynx with a vegetative lesion in the center. A computed tomography scan of the head and neck demonstrated a vegetative lesion on the posterior wall of oropharynx with imprecise limits and no signs of invasion of deep planes. The lesion was biopsied and reported as malignant melanoma. The histopathology revealed proliferation of cells exhibiting eosinophilic cytoplasm, some filled with melanin pigment and increased nuclei and volume. Immunohistochemistry was done for human melanoma black (HMB-45), MART1 and S-100, which showed positivity. A PET scan showed an increased glycolytic metabolism in a discrete protuberance area located in the left posterior portion of the oropharynx. The patient was referred to oncology to start the therapy. **Conclusion:** The oropharyngeal melanoma is rare and hostile. The late diagnosis is not good to the outcome and should be done early. This affection presents different features from cutaneous type as wide excisions of mucosal melanomas causes significant morbidity³.

8682. Recurrence of Amygdala Cancer in a Smoker- Case Report

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Oral manifestations are very common and may be the first or only signs and symptoms of systemic or local diseases. There has been a significant increase in the rate of oral cancer in Brazil in recent years, being the seventh most common cancer in the country. Oral lesions of different shapes and sizes, especially when found in the smoker patient, may indicate the onset or evolution of this disease. In the case in question, a 58-year-old female patient, heavy smoker, presented, primarily, small ulcerated lesions in the right tonsil, indicating post-biopsy mildly differentiated squamous cell carcinoma, radiotherapy being indicated as a therapeutic treatment. After seven years, without interruption of smoking, new ulcer-

ated lesions were presented, with necrosis in the soft palate and uvula, showing well differentiated, infiltrating and ulcerated squamous cell carcinoma, evolving to infrastructure maxillaryectomy and palatectomy, with good postoperative evolution and without new lesions to date. The objective of this work is to emphasize the importance of detection and early treatment of oral lesions, since they improve the prognosis of the disease. The most common delay is usually access to the specialized service in otorhinolaryngology or head and neck, which is due to the patient's delay in seeking medical or dental care after the onset of symptoms, and delay in referral to the specialized service.

8683. The Great Value of Anatomical References For Submandibulectomy.

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Introduction: The submandibular gland is affected by various types of diseases, whether degenerative, inflammatory or neoplastic. The most common clinical presentation is the oedematous enlargement of the gland. Tumors of the submandibular gland account for about 3% of all tumors in the region. With a high rate of malignant tumors, although inflammatory diseases and sialolithiasis are also found. The most common benign tumor is pleomorphic adenoma. **Objectives:** We conducted a research in databases such as BIREME, LILACS, PUBMED and SciELO, books Gardner, Gray, Testut and Moore. We performed follow-up surgery to evaluate the importance of the anatomical points for the surgery in question. **Data Synthesis:** The submandibular gland is located along the body of the mandible, being partly superficial and partly deep to the miloioid muscle, maintaining relations with the vein, facial artery and the marginal nerve of the mandible. The main characteristics of this evaluation are the absence of hemorrhage at the expense of precise hemostasis, broad access, complete recognition of each organ and its pathology, as well as adherence to the principles of plastic surgery. **Conclusion:** The simple observation of the anatomical segment that establishes the connection between the head and the rest of the human body dispenses warnings about the vital value of many of its affections, the severity of the surgical interventions performed in it, and the importance of permanent neck exposure, or Neck, to compete with one's own face in the aesthetic consequences of regional surgery.

8684. Inverted Papilloma of the Nose And Paranasal Sinuses – Case Report

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Otorrinoseul

Introduction: Inverted papilloma is a true benign epithelial neoplasm presenting hyperplastic epithelium, which grows into the underlying stroma. It is usually implanted in the middle meatus or lateral nasal wall and rarely in the nasal septum and paranasal sinuses. Although histologically benign, the inverted papilloma is able to penetrate the bony walls of the paranasal sinuses, extending into surrounding soft tissues. **Objectives:** The objective of this case report is to present a patient with inverted papilloma, focusing on the epidemiology and the care with which the surgical procedure should be performed, in order to avoid recurrence. **Resumed**

Report: L.C.S., 62 years old, male, with complaint of unilateral nasal obstruction, associated with long-standing headache. Computed tomography of the paranasal sinuses revealed right nasal polyposis. Patient was submitted to endoscopic polyp resection and after the procedure, the specimen was sent to anatomopathological study, diagnosing inverted papilloma. Patient progresses uneventfully with significant improvement of symptoms. **Conclusion:** Inverted papilloma typically affects men in the fifth or sixth decades of life causing unilateral nasal obstruction. Its symptoms tend to appear in late stages, which delays the diagnosis. It accounts for almost 4% of all nasal tumors and presents malignancy rate varying from 5% to 15%. Surgical removal of the tumor with its peripheral bone borders is the correct treatment to avoid recurrence, whose rates might reach 78% of the cases.

Keywords: airway obstruction, inverted papilloma, nose neoplasms.

8685. Congenital Torticollis: Correction Technique

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Introduction: Congenital muscular torticollis is one of the most common congenital diseases of childhood, consisting of a contraction of the sternocleidomastoid muscle, causing deformity of the child's neck and, when not treated early, can cause deformities, such as facial asymmetry, among others Abnormalities, in addition to functional limitation. **Objectives:** The composition of this article resulted from searches in the MEDLINE, SciELO and PubMed databases. Articles from previous years are cited, or found in the bibliography, to the extent of their relevance to the subject in question. As well as evaluate the usual techniques in the correction of this congenital condition. **Data Synthesis:** There is a higher incidence in children of primiparous mothers and female patients. There is recurrence of deformities associated with incomplete release of the deep cervical fascia. In the postoperative immobilization, use of minerva-type gypsum for a few weeks, remembering that our children are older and of low socioeconomic level, which could increase the rate of recurrence of the disease. **Conclusion:** According to the studies carried out by professionals of the area, it was observed that the great majority of this series of patients with congenital torticollis submitted to the distal release of sternocleidomastoid muscle evolved with good or excellent end result, with low complication rates.

Keywords: congenital muscular torticollis, sternocleidomastoid muscle, deformities.

8687. Eview of the Applications and Advantages of Videoendoscopic Surgery in Pharyngeal Tonsillectomy

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Introduction: Many terms have been used in reference to the minimally invasive surgical approach. The words scopium and skopion mean to see, to observe. This procedure offers several advantages: a better field of vision, continuous suction of blood and extreme precision in the removal of adenoid tissue. Compared with current practices employing the adenotome or curette, it is possible with our approach to remove adenoid tissue in the most important centers: the coanal and tubal regions. **Objectives:** Search material data-

bases on the subject, to follow discussions about the subject and to discuss the use of video-endoscopy techniques. **Data Synthesis:** Practiced less frequently today than in the past, adenoidectomy is still the appropriate treatment in certain specific applications, especially in children. Given the greater diagnostic efficiency of the currently available instruments, there is a need to improve this surgical procedure that has remained unchanged, in many cases for 30-40 years. While valid, traditional methods have not always yielded optimum results. Both Cannon et al. **Conclusion:** Adenoidectomy with microdebrider and 70 ° endoscope, both introduced by the mouth, demonstrated that the technique is characterized by a high level of precision and a very low incidence of postoperative bleeding. The precision offered by the improved visual field of the endoscope combined with the extreme maneuverability of the microdebridor allows the surgeon to control the efficient removal of the adenoid tissue.

Keywords: vision, adenotome, endoscope.

8688. Multinodular Goiter

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Introduction: The multinodular thyroid goiter as any pathology with multiple aspects is probably multifactorial. This pathology may begin in adolescence where the patient would have small goiter that gradually undergoes structural modifications and growth and evolves to a larger volume multinodular goiter. **Objectives:** Accompany total thyroidectomy; evaluate the surgical times; accompany the sending of the material to the anatomo-pathological; compare the data with the usual literature. **Resumed Report:** Patient, female, I.O.R., 64 years old, female. Anesthesia was performed in DDH, asepsis and surgical fields. Performed anterior cervical incision semilunar, opening by planes. Made ligation of thyroid vessels, identification of recurrent bilateral laryngeal nerves. Total thyroidectomy was performed, the part being referred to the pathological anatomical sector. Hemostasis with Valsava maneuver, Penrose drain 1. Closure by planes, suture and dressings. **Conclusion:** According to MEDEIROS NETO (1998), the diagnosis is often made by simply inspecting the anterior cervical region (neck). The doctor asks the patient to swallow saliva 1 or 2 times. With this the structures of the neck move up and down and in case there are 1 or more lumps in the thyroid, the doctor visually can diagnose the disease. After surgery, the patient had her thyroid gland removed. The multinodular thyroid goiter as any pathology with multiple aspects is probably multifactorial. When the patient reaches age range over 65 years, the goiter can be extremely large and with great ease it occupies the upper part of the mediastinum.

8691. Deafness of Genetic Origin: The Significance of Predictive Diagnosis

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Introduction: Hearing impairment is a disorder that presents a high prevalence: it affects about 5% of school children and 10% of the adult population. If profound, hearing impairment affects the most diverse aspects of the lives of its carriers, including educational preferences, communication strategies, family and social relationships, and professional

opportunities. **Objectives:** To evaluate the presence of a family group with genetic deafness and to compare what has been described in the literature. The participants of this study belong to 11 families with an average of 4.7 people. **Data Synthesis:** From the medical point of view, deafness is a pathological condition. This statement, which seems so obvious in the context of medicine, is not so for many deaf people who consider themselves to be a separate cultural group, who have different values, beliefs and behavior patterns based on their own deafness and who do not consider themselves to be disabled. But only different; Deafness as a culture is a natural consequence of grouping deaf children into special schools and using a common manual language, the language of signs. **Conclusion:** The mapping and molecular characterization of the genes causing deafness, and the identification of their corresponding products and functions, will make an extraordinary contribution to understanding the pathogenesis of deafness.

8694. Background of the Pharmostomy of the Patient

Submitted to Pharyngolaryngectomy

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Introduction: Head and neck cancer is local and disseminated by means that involve the lymph nodes of the region. The major incidence is in the male sex and its forms of treatment include surgery and radiotherapy, with total laryngectomy consisting of removal of the entire larynx and structures belonging to it, such as hyoid bone and adjacent musculature, a procedure always associated with the removal of lymph nodes from the larynx. **Objectives:** Search materials databases on the subject, to follow discussions on the subject and to discuss the reconstruction of the pharyngostome. **Methods:** An article resulting from research in the MEDLINE, SciELO and PubMed databases. As well as to evaluate the importance of the reconstruction of the alimentary transit in the patients submitted to the described surgical procedures. **Data Synthesis:** New surgical reconstruction techniques have been gaining more space in modern surgery. Microsurgical reconstructions, even providing good results, require greater complexity, hospital structure and surgical time. For these and other reasons such as: the clinical conditions of the patients and the need for specialized technical staff, the local flaps are being used more. Other older surgical techniques, such as myocutaneous flaps, are heavy, thick, bulky patches and cause permanent defects in donor areas. **Conclusion:** The effectiveness of the implemented interventions, therefore, is directly related to the scientific knowledge, clinical competence and the interpersonal relationship of the health professional in the total laryngectomized approach, throughout the treatment period.

8697. Application of Botulinum Toxin in a Pediatric Patient with Paradoxical Movements Of Vocal Folds

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Introduction: The paradoxical focal fold movement of the vocal folds (PVFM) is characterized by inappropriate abduction of the vocal cords during inspiration. The causes may be organic or inorganic, such as laryngeal respiratory

dystonia, gastroesophageal reflux disease, asthma and Munchausen stridor. For an adult, the diagnosis can be made with laryngostroboscopy and electromyography, while for a child, laryngoscopy or electromyography is used. The treatment is performed with intramuscular application of botulinum toxin and can be done uni or bilaterally, guided by endoscopy. There are not reports in the literature of pediatric PVFM patients with a good response to botulinum toxin treatment.

Objective: Present a case of PVFM in a pediatric patient with a good response to botulinum toxin treatment. **Case Report:**

J.C.M.Z.R, 1 month, admitted to the service complaining of stridor to crying, cyanosis and gagging during breastfeeding. He obtained an initial diagnosis of moderate laryngomalacia undergoing supraglottoplasty. In the postoperative period it evolved with PVFM. It was decided to apply botulinum toxin 3U in the vocal folds bilaterally through direct laryngoscopy, presenting good clinical response. After six months the procedure was repeated, the patient started feeding without complications and evolved only with dysphonia and mild nocturnal cough. **Conclusion:** The PVFM treatment is based on the injection of botulinum toxin into the vocal folds. In the literature there are numerous studies involving the adult population, confirming the efficacy and safety of this treatment. However, when it comes to this disorder in children, there are not enough studies evaluating these parameters.

8698. Epidemiological Characteristics Of Chronic Sinusitis In Brazil

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Introduction: Chronic sinusitis is caused by recurrent inflammation of the facial sinus mucosa. It can be the consequence of an infection, allergy or any factor that hinders the correct drainage of secretion. The main symptoms are: mucopurulent discharge, nasal clogging, migraines and anosmia. **Objective:** To evaluate the occurrence characteristics of chronic sinusitis in the Brazilian states. **Method:** An ecological, descriptive study, based on data from the Hospital Information System (SIH / SUS) between 2013 and 2017, associated with literature review in the PubMed, MedLine and SCIELO databases. **Results:** In Brazil, 13,251 hospitalizations were registered due to chronic sinusitis. The Southeast was the region that presented the most cases, 7,555 (57%), the second region was the South with 2867 (21.6%). The northern region had the lowest incidence, only 579 hospitalizations (4.3%). The age group most affected in Brazil was between 50 and 59 years, 2480 cases (18.7%), followed by the age group from 40 to 49 years, with 2402 hospitalizations (18.1%). There was a small predominance of the female sex with 6700 cases (50.6%) while the male sex had 6551 (49.4%). 2014 and 2015 were the years with the highest and the lowest prevalence respectively, with approximately 2829 (21.3%) and 2495 (18.8%) hospitalizations. **Conclusion:** The highest hospitalization rate is found in Southeast Brazil due to the greater industrialization and the consequent atmospheric pollution, being one of the main risk factors for exacerbations and complications of this disease, mainly affecting individuals who are more fragile and older.

Keywords: sinusitis, otorhinolaryngology, epidemiology.

8701. Methicillin-resistant Staphylococcus aureus in Chronic Suppurative Otitis Media
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Introduction: Chronic suppurative otitis media (CSOM) is a chronic inflammation of the middle ear and mastoid cavity with recurrent ear discharges. It is one of the most common bacterial infections of otolaryngology. It usually begins in childhood as a tympanic membrane perforation due to an acute infection of the middle ear. *Staphylococcus aureus* is known as one of the most prevalent pathogens and the prevalence of methicillin-resistant *S. aureus* (MRSA) has been increasing. There are few antibiotics known as effective against this pathogen and the treatment have limitations since it evolves expensive special intravenous antibiotics. **Objectives:** To emphasize the increasing of CA-MRSA in CSOM and the effective management. **Resumed Report:** A nine months old child came to otolaryngology service due to a chronic otitis media without improvement with empirical treatment. A sample of otorrhoea was collected for culture and the patient hospitalized for intravenous antibiotic therapy. The culture evidenced MRSA and the treatment done with vancomycin. The child had no established risk factors and had other causes and pathogens excluded. With the proper medication, the patient developed well. **Conclusion:** In cases with well established risk factors, MRSA has traditionally been considered. However, MRSA has emerged in patients without risk factors and these cases are known as community acquired or CA-MRSA, infections that have been rising. It is imperative to remember this pathogen and collect samples for culture as often as possible in order to guide treatment and avoid sequelae and complications.

Keywords: otitis; *S.aureus*; resistant.

8703. Vibrant Soundbridge in Moderate Sensorineural Hearing Loss with Chronic Eczematous External Otitis: Case Report

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Introduction: The Vibrant Soundbridge is a semi-implantable device that uses an electromagnetic effector to propel the ossicular chain. The external component is the audio processor, and the internal component is the ossicle prosthesis surgically implanted. The candidates for the implant are adults with moderate to severe sensorineural hearing loss and speech discrimination scores greater than 50%. **Objectives:** To describe the surgical technique and the auditory result of bilateral simultaneous implantation of a middle ear hearing aid Vibrant soundbridge. **Resumed Report:** D.C.N., female, 68 years old, had bilateral moderate sensorineural hearing loss. Not satisfactorily adapted to the use of personal sound amplification product due to chronic eczematous external otitis with difficult to control pruritus. In view of this, a middle ear hearing aid was proposed as an alternative - Vibrant Soundbridge. Tomography of temporal bones was normal. Underwent simultaneous bilateral surgery with tympanomastoidectomy and internal unit coil coupling on the short process of the incus. In the comparative audiogram, in free field, mean auditory thresholds of 25 decibels in the frequencies of 500Hz to 4000Hz, with great satisfaction of the patient and relatives. **Conclusion:** The positive results obtained and provided by the Vibrant soundbridge amplifica-

tion system, partially implantable in the middle ear, predicts its use as an advantageous alternative in the rehabilitation of sensorineural hearing loss when the use of personal sound amplification product does not benefit enough or is impossible to be adapted.

Keywords: Vibrant Soundbridge, hearing aids, semi-implantable.

8704. Malignant Otitis Externa: Case Report And Literature Review

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Introduction: Malignant otitis externa (MOE) is a potentially lethal infection that begins in the external auditory canal (EAC) extending to the base of the cranium. The main agent is the *Pseudomonas aeruginosa*. The diagnosis can be established by clinical history (otalgia for more than one month, chronic purulent otorrhea, formation of granulation tissue, osteomyelitis and involvement or not of pairs of cranial nerves) associated with risk factors (diabetes mellitus, old age, condition of immunosuppression), in addition to laboratory exams (HSV, CRP) and imaging (computerized tomography, technetium-99 scintigraphy, magnetic resonance). Treatment is based on cleaning, treatment of the base disease, use of antimicrobials and surgery in cases of extensive osteomyelitis. **Objective:** To report the case of malignant otitis externa and conduct a literature review. **Case Report:** S.C., 86 years old, hypertensive and diabetic, presenting during two months a history of otalgia and otorrhea on the right, evolving with cervicofacial edema and ipsilateral facial paralysis. Laboratory tests showed increments on HSV, CRP and leukocytosis. Mastoid tomography evidenced, on the right, abscess in the parotid space with extension to the masticatory space, signs of otomastoiditis in anterior bone wall of EAC and erosions in the condyle of the mandible. It was decided for surgical intervention in the right ear with decompression of the facial nerve, radical mastoidectomy, correction of EAC stenosis and exploratory cervicotomny. **Conclusion:** Because it is a potentially fatal disease, the MOE needs a high index of early suspicion and treatment to reduce the mortality of the disease.

8705. Complication of Upper Respiratory System Infection with Retropharyngeal Abscess: Case Report

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Introduction: Upper airway infections and tonsillitis continue to be the most common etiologies of abscesses in the pediatric population. There may be direct dissemination, such as in the peritonsillar abscess, or indirect, as in the retropharyngeal abscess due to lymph node infarction (Rouviere's Lymph Node). **Objective:** To report a case of complication of upper respiratory system infection with retropharyngeal abscess. **Case Report:** Female patient, 7 years, had fever for 5 days and odynophagia. Initially evaluated in another hospital, being diagnosed with infection of several upper areas and medicated with Amoxicillin for 10 days. Subsequently, she developed an important cervicalgia and leukocytosis, being suggested the diagnostic hypothesis of meningitis. She was treated with Ceftriaxone and referred for pediatric eval-

uation. After discarding this hypothesis, the patient was referred for the otorhinolaryngological examination. She had a right paramedian protrusion in the transition from the rhinopharynx to the oropharynx and 2 cm palpable lymph nodes in the cervical area II bilaterally. The Contrast neck tomography demonstrated the presence of a small retropharyngeal abscess. Modified antibiotic therapy for intravenous Clavulin and submitted to a incision in the right paramedian region with drainage of purulent secretion. Patient presented good evolution, with improvement and without recurrence of the condition. **Conclusion:** Because of the anatomical location, the retropharyngeal abscess often requires a rapid approach, since in some cases it may evolve with severe consequences or even death.

Keywords: upper respiratory tract infection, complications, retropharyngeal abscess.

8708. Nasal Glioma in Infant Patient: Case Report And Review Of Literature

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Introduction: Nasal Glioma is a rare benign congenital malformation, which the more acceptable pathogenesis is an encephalocele that during the embryonic development lost its intracranial connection. It shows as a midline nasal mass with possible exteriorization to the nasal cavity, it is formed by neuro glial astrocyte cells intercalated with fibrous and vascular tissue. **Objective:** Present a Nasal Glioma case, discuss the clinical findings and its diagnostics correlating with the literature review. **Case Report:** G.V., 2 years old, with historic of bulging on bridge of nose zone since birth associated with bilateral nasal obstruction. Forwarded to oncology services of Erasto Gaertner Hospital with a previous diagnosis of angiomyxoma. The exams presented lesion on nasal vestibule to the left. Magnetic resonance showed solid heterogeneous expansive nodular lesion in the left side of nasal cavity's wall. Submitted to a surgery for excision of lesion and diagnosed by histopathological with nasal glioma. **Conclusion:** Encephalocele of the anterior type is a frontonasal herniation of cranium content through bone malformation due to deficiency of folic acid during pregnancy, without the closure of the primitive neural tube. An accurate differential diagnosis must be done when there is congenital nasal mass with clinical analysis, image and histological. Diagnosis must be confirmed as early as possible because, despite being benign, it should be treated surgically once it can lead to important malformations of the nasal structure due to the compression of adjacent structures.

8712. Complication of Odontogenic Rhinosinusitis with Subperiosteal Abscess: Case Report

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Introduction: Orbital infections can originate from sinusitis, cutaneous infections, facial fractures and odontogenic infections. The tomographic study is fundamental for an early and accurate diagnosis. An appropriate surgical treatment should be performed as soon as possible, enabling favorable results. **Case Report:** Male patient, 18 years old, initiated upper right pre-molar and molar pain one year ago,

when he attempted to perform tooth withdrawal on its own. Eight days ago, he developed pain in the same topography associated with right eyelid edema and erythema. Treated in another service with benzathine penicillin without improvement and referred for the otorhinolaryngological examination. He presented a carious process in the upper right pre-molar and the first upper right molar and right upper second molar fracture with periodontal edema, without secretion or fistula. There were also edema and bipalpebral erythema on the right, more pronounced in the infraorbital region. The tomography of the sinuses and ocular orbit demonstrated the presence of right sinomaxillary, subperiosteal and anterior ethmoid completely veiled. Also showed the fistulization with oral cavity. The hypothesis of odontogenic rhinosinusitis with right subperiosteal abscess was performed. The patient was submitted to antibiotic therapy with Ceftriaxone, right upper molar and first maxillary premolar extraction and maxillary antrostomy, anterior ethmoidectomy, associated with infraorbital external drainage. Patient presented good evolution, with improvement and without recurrence of the condition. **Conclusion:** Orbital complications often require a rapid multidisciplinary approach, since in some cases they may evolve with severe consequences or even death.

Keywords: odontogenic rhinosinusitis, complications, orbital abscess.

8713. Study of Hospitalizations For Acute Pharyngitis And Tonsillitis In 10 Years In Brazil

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Introduction: Fever, headache, odynophagia and halitosis are some of the symptoms of pharyngotonsillitis. Usually, it has a viral etiology, but about 30% of the patients suffer from a bacterial infection. **Objective:** To evaluate the patterns of hospitalizations caused by pharyngitis and tonsillitis in public service hospitals (SUS) in the Brazilian states over 10 years. **Method:** An ecological, descriptive study based on data from the Hospital Information System (SIH/SUS) between March 2008 and March 2018, associated with literature review in the databases of PubMed, MedLine and SCIELO. **Results:** In Brazil there were 93,020 admissions registered by pharyngitis and acute tonsillitis. The Northeast (NE) was the region with the highest number of hospitalizations, with 37,434 (40.2%), followed by the Southeast with 22,006 (23.6%), the South (SU) was the region with the lowest recorded number of cases: 8,936 (9.6%). The most affected age group was between 1 and 4 years, with 29,167 hospitalizations (31.3%), NE had 11,444 and the SU only 2,380. The most affected ethnicity was brown followed by white, with 38,444 and 21,078 respectively. Brown were majority in the NE (19,919), while white in the SU, with 6,354. There was a very small difference in the prevalence of gender, with 50.4% female, and 49.5% male. **Conclusion:** Knowing the profile of hospitalizations is important because it enables effective screening and intervention in the course of these diseases, with special attention to the public between 1 and 4 years of the Northeast, which were the most affected.

Keywords: pharyngitis, tonsillitis, epidemiology.

8717. Varied Manifestations of Rosai-Dorfman Disease and its Diagnosis

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Introduction: Rosai-Dorfman disease (RDD) is a rare, idiopathic, benign and self-limiting histiocytic proliferative disorder, usually seen in younger patients. It most commonly involves the cervical lymph nodes, with a predominant infiltration of sinusoidal histiocytes and classically presents with massive cervical lymphadenopathy. Extranodal disease occurs in about 43% of cases and produces different signs and symptoms depending on its location. **Objective:** describe the main clinical manifestations and findings in the imaging studies of RDD in otorhinolaryngological and cervico-facial territory that allow to raise the diagnostic hypothesis for this pathology. **Method:** a retrospective, descriptive study of a series of three cases by the chart analysis from 2012 to 2018. **Results:** our patients (A, B and C) presented very distinct manifestations. Patient A complained of nasal obstruction, rhinorrhea, frontal headache, hyposmia and cervical lymph node enlargement; patient B complained of hyposmia and ocular proptosis; patient C reported pain and pressure in hemiface on the right. However, all patients presented pansinusopathy on computed tomography of the paranasal sinuses, and anatomopathological, and the evaluation of the material showed an increase in lymphoplasmacytic, histiocytic and neutrophilic cells, which led to the diagnostic suspicion of histiocytosis. **Conclusion:** The difficulty in raising the diagnostic hypothesis is emphasized, since the RDD does not present a specific pattern of clinical manifestations. One approach that could help in this diagnosis would be the routine practice of requesting anatomopathological evaluation of the material found in the leukocyte counting paranasal sinuses to guide both diagnosis and treatment of diseases related to nasosinusal.

8719. Evaluation of the Endoscopic Transpterigoid Approach in the Sphenoid Encephalocele Secondary To Persistence Of Sternberg's Canal

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Introduction: Cerebrospinal fluid leaks associated to meningoencephaloceles of the sphenoid lateral recess are rare entities. A congenital bony defect at this level results in the persistence of lateral craniopharyngeal canal (Sternberg's canal), which is supposed to be the origin of these lesions. **Objective:** evaluate the efficacy of the transpterigoid approach to the lateral recess of the sphenoid sinus in a series of three cases of cerebrospinal fluid associated with meningoencephalocele, correlating with the results obtained in the trans-operative period and in the postoperative follow-up of these patients. **Method:** a retrospective, descriptive study of a series of three cases by the chart analysis from April 2017 to May 2018. **Results:** The average age of the patients was 66 years with a range from 61 to 71 years. The mean follow up was 7.5 months (minimum 7 and maximum 11 months). There were no complications in the trans-operative period and the proposed surgical plan was executed without difficulties or technical limitations; 1 patient presented cerebrospinal fluid within 7 postoperative days, but there was spontaneous resolution without the need to re-approach. **Conclusion:** the transpterigoid approach was effective and safe for access to the lateral recess of the sphenoid sinus, allowing wide exposure of the surgical field for cor-

rection of the fistulas and bone defects of the cranial base in the series of cases. The postoperative results were also favorable, once there were not complications or recurrences that required re-evaluation. The work corroborates with other studies found in the literature after its review.

8721. Changes of Language in Children with Cochlear Implant and Aasi with Spectrum of Hearing Neuropathy: Systematic Review

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Introduction: There is currently no doubt about the benefits of using the cochlear implant and hearing aids in the development of children with auditory neuropathy (ENA) spectrum. However, an explanation has not yet been found regarding language alterations in children with cochlear implants and hearing aids with spectrum of auditory neuropathy, such a situation being a major challenge for speech and hearing professionals. **Objective:** This study was carried out to try to clarify the changes in the speech and writing language of children with the spectrum of auditory neuropathy using a cochlear implant and / or hearing aids. **Method:** The search for scientific articles was carried out in Lilacs, Scielo, PudMed and Capes periodicals databases, covering the period from July 1997 to October 2016, using the following **Keywords:** auditory neuropathy spectrum, hearing aids, cochlear implant , Change of language and language. Included were studies that inform speech and writing language, auditory abilities, as well as their alterations, in users who use hearing aids and IC (Cochlear Implant), who have the spectrum of auditory neuropathy. **Results:** Initially, 193 articles were found from the searches. After applying the inclusion and exclusion criteria, 04 articles were included and analyzed, resulting in the language search of cochlear implant users and hearing aids. **Conclusion:** Thus, it was found that few studies specify the language alterations in cochlear implant users and hearing aids that present spectrum of auditory neuropathy.

8722. Epidemiological Analysis of the Occurrence of Chronic Tonsil and Adenoid Diseases in Brazil

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Introduction: The tonsils and adenoids are formed by lymphoid tissue with the function of assisting in the fight against infections, can be affected by viruses or bacteria. The chronic infection can cause difficulty in breathing, accumulation of secretions and snoring. **Objective:** To make an epidemiological analysis of hospitalizations, region, age and sex most affected by chronic diseases of tonsils and adenoids. **Method:** A descriptive, ecological study based on the Hospital Information System (SIH/SUS) between 2013 and 2017, associated with literature review in the PubMed and SCIELO databases. **Results:** Brazil had 261,412 hospitalizations, 127,492 were in the Southeast Region (SE), representing 48.77% of the country, the least prevalent region, was the North (NO), with 6,260 (2.39%). The predominant population was male, with 134,772 cases (51.55%), 65,599 in the SE and 3,253 in the NO. The most prevalent age group was between 5 and 9 years, with 111,332 hospitalizations (42.58%), 54,524 were in the SE, while the NO presented 2,748. The most common population was white,

with 119,874 hospitalizations (45.85%), the Indigenous population was the least affected, with only 47 hospitalizations (0.039%), but 25.47% of the patients did not report their ethnicity. **Conclusion:** The epidemiological profile shows that SE's children are the most affected by these pathologies, being important attention for an early diagnosis and effective treatment. In addition, groups with less access to consultations, such as indigenous, have fewer cases, this is due to the low number of diagnoses, and a more intense approach is needed.

Keywords: tonsillitis, otorhinolaryngology, epidemiology.

8728. Case Report: Eagle Syndrome as a Differential Diagnosis of Syncope

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Introduction: Eagle syndrome is the symptomatic elongation of the styloid process and/or calcification of the stylohyoid ligament. An elongated styloid process is defined by a length of at least 25mm, although only 4-10% of patients with elongated processes are symptomatic. The most common symptoms are throat and neck pain, and the sensation of a foreign body in the throat. Less frequent symptoms are referred otalgia, headache, carotidynia, dizziness and dysphagia. Syncope is a very rare symptom and it's due to a glossopharyngeal neuralgia which involves episodes of bradycardia, asystole and hypotension. Transcervical and transoral styloidectomy are effective treatments for Eagle syndrome with minimal adverse effects. Patients with classic symptoms of neck or jaw pain benefit most from surgery. **Objectives:** The purpose of this case report is to present a rare manifestation of Eagle Syndrome in a patient who benefited from the surgery, improving quality of life. **Resumed Report:** A 42-year-old woman, yoga teacher, presented to the clinic with a history of frequent syncope episodes, that has been investigated for months, accompanied by pain on the both sides of the neck, intensified with cervical rotation. Alleges loss in her labor. She was diagnosed with bilateral Eagle's Syndrome, confirmed by computed tomography, and was submitted to styloidectomy. The symptoms resolved after surgery. **Conclusion:** The diagnosis of Eagle's Syndrome is based on optimal anamnesis and physical examination and requires a high level of suspicious. This disease should always be thought as a differential diagnosis of recurrent syncope attacks.

Keywords: Eagle syndrome, syncope, styloidectomy.

8736. Medium-line Malformations: How Much Diagnostic Uncertainty Can Influence Surgical Results

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Introduction: malformations of the midline are difficult to diagnose, seeing that the anatomopathological is fundamental to confirm them. However, incisional biopsy is not indicated due to the risks of cerebrospinal fluid fistulas and meningitis. **Objective:** to describe three difficult diagnose cases, correlating with the surgical risks reported in the literature. **Methods:** retrospective and descriptive study of a series of three cases by the chart analysis correlating with the literature. **Outcome:** All patients presented with an increase in volume in the nasal dorsum from birth. Patient A: referred to our service with result of incisional biopsy of the lesion showing angiomyxoma; MRI discard-

ed hemangioma and suggested glioma or dermoid cyst; after excision of the lesion, pathology diagnosed glioma. Patient B: diagnostic hypothesis after clinical evaluation was dermoid cyst; MRI suggested lipoma or dermoid cyst; after excision of the lesion, anatomopathological diagnosed hamartoma. Patient C: referred with suspected encephalocele; MRI suggested extra and intranasal glioma communicating to the anterior fossa; after excision of the lesion, pathology diagnosed glioma. **Conclusion:** the diagnostic uncertainty in midline lesions limits surgical extension, seeing that in some cases, such as encephalocele, meningocele, glioma, aneurysmal bone cysts the approach tends to be more conservative whereas for hamartoma, hemangioma, angiomyxoma, dermoid cysts the excision should be more aggressive in order to avoid relapses. In this study, although the imaging tests guided the diagnosis, it was only possible to measure the surgical extension in the intraoperative, which could be more effective with the freezing biopsy.

8742. Recrudescence of Coalescent Mastoiditis and Need for Early Surgical Treatment

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Coalescent mastoiditis is one of the complications of acute otitis media (AOM) being more frequent in pediatric age. However, we have observed a resurgence of the disease in adults due to the indiscriminate prescription of antibiotics and the appearance of resistant microorganisms besides social and economic factors. **Objective:** To alert the increasing incidence of coalescent mastoiditis in order to carry out an investigation and adequate clinical diagnosis to perform an early surgical intervention and avoid intracranial complications. This study report 2 cases. The first, a 53 year old male with a chronic renal failure, renal transplantation, diabetic and high blood pressure. History of left otalgia of strong intensity, otorrhea, lasting a month. It evolved with vertigo and nausea. He entered the emergency room with fever of indeterminate origin, dizziness, vomiting and uremia. The second case, 40 year-old-male without comorbidities, single episode of left suppurative AOM for 3 weeks. All cases were unsuccessful with prior clinical treatment. Due to the worsening of the clinical picture and risk of complications, performed computed tomography of the ear that confirmed the diagnosis of coalescent mastoiditis. Thus, an open cavity tympanomastoidectomy with favorable and resolute clinical evolution was performed. In conclusion, some authors defend the cure with clinical treatment. In our experience, it does not justify delaying treatment with I.V. antibiotics when there is no favorable clinical. The surgical management in the cases of coalescent mastoiditis contributes to important clinical improvement and reduction of the risk of intratemporal and cranial invasion.

Keywords: coalescent mastoiditis; acute mastoiditis; otitis media.

8745. Laryngeal Dyskinesia

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Introduction: Laryngeal Dyskinesia (LD) is a rare movement disorder characterized by involuntary contraction of laryngeal musculature involved in vocalization process.

Is more common in women, starting at age of 30, evolving over 10 years. There are two forms of presentation: adduction form, with tense and strangled voice (intense larynx's shutdown); or abduction, that leads an air escape during phonation, with intermittent episodes of breathy voice or aphony (difficulty in closing the vocal folds). Etiology isn't well understood, and may be related to psychological, neurological or trauma disorders. **Objective:** This study aims to expose a diagnosis that should be recognized by otolaryngologist and then provide appropriate treatment. Abstract: This case is about a male patient, 67 years old, marathonist, complaining choppy voice, respiratory difficulty during physical activity and nasal obstruction. He is being followed by a psychiatrist for 5 years due to psychogenic dysphonia, unleashed after his wife's death and bankruptcy. Diagnosis of LD was a videonasolaryngoscopy finding, confirmed with stroboscopy. **Conclusion:** The LD is a movement disorder characterized by involuntary contractions with diverse clinical presentations. It's large variety of etiologies turns to be a difficult diagnosis for the otorhinolaryngologist. It is important to have a good anamnesis, with a physical and complementary examination for the diagnosis of this pathology.

8746. Glottis Stenosis Acquired Idiopathic: Case Report

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Introduction: Laryngeal membranes are unusual abnormalities characterized by membranous tissue in the supraglottic, glottic or subglottic. Depending on extension, may cause dysfunction and obstruction of airways. May be of congenital or acquired origin. **Objectives:** Describes a case of glottis stenosis acquired idiopathic with good result after laryngoplasty. **Resumed Report:** Female, 45 years old, black. Presents dysphonia and progressive dyspnea for a year. Afebrile. Previously healthy, denies family history of similar diseases, ethylism, smoking or manipulation of the airway. The videolaringoscopia revealed glottis stenosis with 85% obstruction, posterior opening, rosea mucosa, absence of ulcerated or vegetative lesions. Neck ct: laryngeal membrane. Patient was subjected to laryngoplasty and biopsy, whose histopathological revealed: acute and chronic inflammatory process, unspecific, ulcerating and granulation tissue. Absence of granulomas or neoplasia. Absence of amastigote forms-the techniques of wade, grocott and pas did not evidence microorganisms. Examinations, there were no evidence of parasitic forms, culture for leishmania, direct mycological, baar, pcr for leishmania negative. Biopsy with non-explanatory results. Serologies not reagents. Rheumatologist excluded rheumatologic causes. Patient completed seven months postoperative and follows monitoring. Performs videolaringoscopia monthly, with excellent response to laryngoplasty, resolution of dyspnea and improvement of vocal quality, good healing of vocal folds, absence of restenosis. **Conclusion:** Laryngeous web is an unusual cause of dysphonia and that can course with respiratory effort depending on the degree of obstruction. There are realations of traumatic cases, other congenitals, but in this, after research, no etiology was identified. The patient was subjected to laryngoplasty with excellent result.

8748. Osler-Weber-Rendu syndrome: Case report

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Introduction: Hereditary hemorrhagic telangiectasia (osler-weber-rendu syndrome), rare dominant autosomal disease, caused by multiple arteriovenous malformations. May have manifestations in various organs, such as nose, eyes, lungs, brain, gastrointestinal tract and genitourinary.

Objective: This report describes the clinical case of patient, male, 56 years with osler-weber-rendu syndrome. **Case report:** Male, 56 years old, white, unemployed. It refers epistaxis bilaterally since childhood. History of numerous episodes of hemoptysis, hematuria and enterorrhagia. Subjected to several chemical nasal cauterizations. He denies prior nasal surgeries. In irregular treatment for liver, congestive heart failure, anemia and chronic pancreatitis. In use of erythropoietin, ferrous sulfate and countless blood transfusions. Ex-chemical addict, stopped using cocaine and alcoholic beverages two years ago. Physical examination, hypocorral patient, tachycardic, eupneico, normotensio, afébrile, telangiectasias in face, tongue, trunk and lower limbs, edema in lower limbs and genital region. Endoscopic nasal with crusts in lower and middle cornets, wide septal perforation, active bleeding originating from posterior septal region to the right. Patient subjected to nasal tamponade and blood transfusion in immediate attendance, after clinical stabilization subjected to ligation in surgical center under general anesthesia. **Conclusion:** In osler-weber-rendu syndrome the manifestations of the disease are usually secondary to the bleeding, having as the most common symptom epistaxis recurrent. Presenting controversial gravity, 10 to 30% of patients need transfusions in their lifetime. Having as option of treatment local measures, systemic medications, vascular control, laser, surgeries and brachytherapy, which should be individualized.

8749. Gradenigo Syndrome, A Case Report of an Otitis Media Complication

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Introduction: The Gradenigo Syndrome is an uncommon otitis media complication after the antibiotics uprising. It has been described in 1907 by Gradenigo and it is an inflammatory process of the petrous temporal bone. It leads to purulent otorrhea, facial pain (due to the impairment of trigeminal nerve) and diplopia (due to the paralysy of abducent nerve). The petrous apicitis infection is potentially dangerous because it can progress medially and envolve meninges, cavernous sinuses and brain. **Objective:** Report a complicated case of Gradenigo Syndrome. **Resumed Report:** JLR, 56 years-old, hypertensive, diabetic. Patient seeks the service because of a hemicranious right side headache and diplopia. In the examination he had hemifacial tactil hipoesthesia and peripheral facial paralysis III (House Brackmann Scale) both to the right side. Magnetic resonance imaging showed signs of right mastoiditis and occlusion of the right internal carotid artery. After a lumbar puncture a secondary meningitis was discovered, the surgical approach was a right mastoidectomy. **Conclusion:** In this case the patient evolved with a harmful complication of media otitis without the typical clinics of this pathology. He recovered from his diplopia and hipoesthesia in the right side after surgery. The facial paralysy was recovered

partially. This case elucidates the importance of early intervention in this kind of complication to stop further dissemination of the infectious process.

8751. Factitious Dermatitis as a Cause of Oral Ulcer

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M.R.S., 45 years old, female, trash collector, native of Barra Mansa, for the past year has developed extensive ulceration on the lips with adhered crusts, yellow-green secretion, causing pain and difficulty of feeding. During the period she used Efurix (fluorouracil cream) on the lips, with progressive worsening of the condition. With no improvement after suspension of Efurix and Ciprofloxacin intravenous for 10 days. A biopsy of the lesion showed nonspecific ulceration. Culture evidenced Klebsiella pneumonia resistant to Carbapenems. Initiated Ciprofloxacin and Clindamycin unresponsive for 11 days, after association with Itraconazole orally patient evolved with clinical improvement. Cultures for fungi, Tuberculosis and Leishmaniasis negatives. After the results, it was decided to suspend antifungal and antibiotics after 14 days and the patient maintained clinical improvement and wound healing. This report aims to discuss possible differential diagnoses among some of the possible causes of oral ulcer, such as granulomatous infectious diseases, fungal mucosal infections, reaction to Efurix and factitious dermatitis. Considering the clinical evolution and the exclusion of other diseases by histopathological examination and cultures, the main hypothesis for this case would be Factitious Dermatitis with secondary infection. This condition is characterized by self-induced skin lesions, which can be of various forms, are located in easy reach in the hands of the patient, and should be considered when the hypotheses of organic diseases are excluded. Although it is a rare condition, the health professional should consider this diagnosis in the presence of oral ulcers, avoiding the delay in the conduct.

Keywords: oral ulcers, factitious dermatitis, secondary infection.

8752. Susac Syndrome: Case Report

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Introduction: The sudden loss of hearing must be regarded as a medical emergency, both the discomfort caused to the patient, and the need for early treatment. Susac syndrome is a rare syndrome, composed by the classic triad of progressive neurological dysfunction, associated with deafness and visual changes, being described in 1979 by susac et. Al. **Objective:** The present report describes the case of a 25-year-old patient, male, susac's syndrome. **Case report:** Male patient, 25 years old, white, previously healthy, states that there is approximately 1 and a half year began suddenly with turbidity visual initially in right eye, currently affecting also the left eye. Reports hearing loss important, sudden started 1 year; concomitant with bouts of dizziness not related to movement, lasting < 12:00 am, accompanied by neurovegetativos symptoms and two crashes of the own time due to instability. Reports not linked to vertigo, headache in fronto-temporal region, medium intensity. Audiometry performed that showed deep pans left and moderate right. Rnm with hiperdensas lesions in supratentorial region of encefalo,

involving white substance and angiorretinografia c/fluorescence with occlusion of branch of retinal artery. **Conclusion:** Is of great importance to the ent bringing the chance of susac syndrome, because the first manifestations can be initially only otorhinolaryngologic, whereas only 13% of patients with ss open frame with the triad complete.

8755. Report Case of Light Cupula of Vertical Semi-Circular Canal

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Introduction: Persistent nystagmus on Dix Hall-Pike and Head Roll tests indicates atypical Benign Paroxysmal Positional Vertigo (BPPV). BPPV is the most common origin of peripheral vertigo, and is well described in its latency, intensity, directions and duration of nystagmus. When there is persistent non-fatigable nystagmus, a difference between cupula and semi-circular canals endolymph density, may be the explanation. The Light Cupula theory has been described as a cause of this clinical finding, but its physiology is yet not well understood. In literature some Light Cupula from the horizontal semicircular canals are classically reported. **Objectives:** To report a case of Light Cupula of vertical semicircular canals, its symptoms and findings, compared to literature **Resumed Report:** 60-year-old female with clinical vertigo unleashed by cephalic movements, associated with intense nausea. There was presented a horizontal-rotational right nystagmus with persistent duration, at 3rd Eppley position. **Conclusion:** Light Cupula is a possible pathophysiology for persistent BPPV nystagmus. Not many cases are described on literature, especially vertical semicircular canals.

Keywords: light cupula, BPPV, persistent nystagmus.

8758. Epidemiologic Profile of Sensitization for Prevalent Aeroallergenic, in an Otorhinolaryngology clinic in Salvador, Bahia

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Introduction: The increase of the prevalence of allergic respiratory diseases has been vastly described in the medical literature, being allergic rhinitis the most frequent one. The cutaneous test is important for the diagnosis of allergic disorders and in the achievement of population sensitization profile. This test allows an specific allergen exposure reduction, being essential for proper treatment. **Objective:** To investigate the sensitization profile and reactivity during the skin prick test for aeroallergens. **Methods:** In this retrospective study, 813 patients were submitted to the prick skin test in the period from July 2013 to July 2015 aiming to evaluate the sensibility for aeroallergens. **Results and Conclusion:** The prevalence of allergic sensitization was 51.8% among the patients evaluated. Among the aeroallergens sample, there was a higher prevalence of sensitization to Dermatophagoides pteronyssinus (31.98%), with a high test positivity for house dust mite in all analyzed months, mainly in July and October, followed by domestic animal epithelium. There was a higher prevalence of sensitization in the female gender (62.47%) and in the age group between 30 and 40 years (22.8%). The results obtained in the present study showed that mites are the most frequent aeroallergens of sensitization, with higher prevalence among young adults and women, with higher prevalence among young adults and women, in the patients of this specialized clinic.

Keywords: hypersensitivity, allergens, mite.

8761. Lipoma of the Palatine Tonsil: A Case Report

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Introduction: Lipomas are benign tumors composed of mature adipose cells. They represent by far the most common mesenchymal neoplasm in the body, but are extremely rare in the oral cavity. The etiology is still unclear, but traumas or recurrent infections may be possible triggering factors. Most benign tumors of the tonsils are squamous papilloma or lymphangioma. In 2007 there were six cases of tonsillar lipoma described in English literature. Tonsillary lipomas are slow-growing lesions and may be asymptomatic or presented with foreign body sensation, dysphagia, cough, and in extreme cases, airway obstruction. **Objectives:** To report a case of lipoma in the palatine tonsil, which is a rare condition, and to review the literature regarding this entity. **Resumed Report:** Female, 25 years old, presenting dysphagia and odynophagia for 2 years with worsening in the last 3 months. Oroscopy had a pediculated lesion in the left tonsil, of whitish color and fibroelastic consistency, measuring about 3cm on its largest axis. Nasal endoscopy and videolaryngoscopy without alterations. The patient underwent left tonsillectomy under general anesthesia without intercurrences in March 2018. The histopathological evaluation of the lesion evidenced the finding of angiolioma, with no evidence of malignancy. In a follow-up of 3 months there was still no recurrence. **Conclusions:** The relevance of this report is mainly due to the rarity of the presented condition, considering the few cases described. The treatment is surgical excision and the recurrence is unusual and the prognosis is excellent.

Keywords: lipoma, palatine tonsil, benign tumor.

8763. Inverted papilloma of Sphenoid Sinus - A Rare**Location: Case Report**

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Inverted Papilloma is the most common benign nasosinus tumor, characteristic of being locally aggressive and usually inserts in the lateral wall of the nose, being able to affect also the maxillary sinus and ethmoidal cells. In the frontal and sphenoid regions are extremely rare. **Objective:** To report a case of inverted papilloma in the sphenoid sinus and its diagnostic and therapeutic aspects. **Case report:** Patient, male, 62 years old, complaining of persistent headache 10 years ago, hyposmia, rhinorrhea and nasal obstruction to the left, worsening 10 months ago. Nasal endoscopic examination revealed a large, reddish mass in a sphenoethmoid recess, originating from the left sphenoidal sinus. An image with soft tissue density in the left sphenoid sinus with apparent bony erosion of the sinus' roof was visualized on the computed tomography of the paranasal sinuses. Magnetic resonance imaging of the paranasal sinuses showed no signs of intracranial invasion. In the suspected erosion of the sphenoid roof, an endonasal endoscopic surgical approach was programmed in conjunction with Neurosurgery, using a Neuronavigation system. The patient underwent surgery with complete excision of the lesion. **Conclusion:** Inverted papilloma of the sphenoid sinus is a rare condition, but should be considered in the differential diagnosis of unilateral lesions in the sphenoid sinus.

8767. Metacronal Carcinoma of Scaled Cells with Basalous Carcinoma

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Epidermoid carcinoma (CPB), the most common neoplasm of the mouth, is a rare subtype of basalid carcinoma (CBE), usually affecting middle-aged men, mostly with a history of prolonged sun exposure and high alcohol and tobacco consumption. A case of squamous cell carcinoma affecting the lower lip and mandibular region with mandibular invasion and posterior right orbital basaloid carcinoma, such as T4aN1M0 (Estadio IVA), is described in a 68-year-old male, non-smoker and chronic alcoholic patient. The initial presentation of the case was deep ulceration, with mild pain in the lower lip, and biopsy with freezing was programmed, showing a tumor above and segmental hemimandibulectomy and exeradging of lower lip tumor with hemiglossectomy and deltoid graft. Patient evolved in good general condition, but presented new lesion in right orbit, superficial, ulcerated and painless. Diagnostic and prognostic factors are discussed, as well as a review of the literature regarding various aspects of epidermoid carcinoma and its subtype.

Keywords: squamous cell carcinoma; precancerous conditions; neoplasms of the lower lip.

8769. Portrait of Partial Thyroidectomy in the Brazilian Hospital Environment

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Introduction: The subtotal thyroidectomy is applied with the aim of reducing the presumable complications if it is held the total excision of the thyroid. Thus, the postoperative follow-up is indispensable to evaluate the effectiveness of the procedure, as well as to describe its epidemiological characterization. **Objective:** To analyze the morbimortality and incidence of partial thyroidectomy disease in Brazilian hospitals in last five years. **Methods:** Descriptive epidemiological study of the transverse type about Partial Thyroidectomy (PT) in the five Brazilian regions, from the Hospital Information System of SUS (SIH / DATASUS) from 2013 to 2017. The variables were: Authorization of Hospital Hospitalization (AHH), Average Hospital Stay (AHS), Total Value of Expenses (TVE) and number of deaths. **Results:** In partial thyroidectomy, there were 16,623 AHH in Brazil and the Southeast was among the regions with the greatest amount, 39% (n=6,575). National AHS it was 2.32 days, with the North (3.6 days) and the South (2 days) the ones that obtained higher and lower AHS, respectively. The TVE was R\$ 8.659.144,29 during the last five years and the Southeast obtained the largest investment, with R\$ 3.528.791,81 - while the Midwest was the smallest, with R\$ 476.969,25. Finally, the number of deaths it was 22, with a higher and lower occurrence in the Southeast (n=13) and in the Northeast (n=1). **Conclusion:** The Southeast region highlighted with a greater quantity of hospitalization (AHH), of TVE and number of deaths, while the North reached higher AHS - important data for surveillance in health and hospital management.

8782. Benefits of Adenotonsillectomy in Children with Obstructive Sleep Apnea: A review of Recent Clinical Trials
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Introduction: In children, Obstructive sleep apnea syndrome (OSAS) level was associated with race and environmental tobacco smoke. Besides, increased size of the pharyngeal lymphoid tissue is the primary risk factor for OSAS in obese. Despite, physical findings and questionnaire responses does not discriminate the severity of OSAS and Sleepiness assessed by parent report was not strongly predicted by OSAS, Pediatric Sleep Questionnaire symptom items reflect OSAS-related impairment of behavior, quality of life, and sleepiness. Although CPAP can be a first-line treatment in children and candidates for AT no longer have OSAS after 7 months of watchful waiting, adenotonsillectomy (AT) could be an option of treatment. **Objectives:** show the benefits of AT in children with OSAS reported in the last 5 years clinical trials. **Data Synthesis:** children with OSAS and growth failure benefit from AT to recover their growth rate. AT reduces daytime sleepiness and improves the performance in visual attention tests. As compared with a strategy of watchful waiting, AT reduce symptoms and improve outcomes of behavior, quality of life, and polysomnographic findings. IQ deficits associated with OSAS was reversible after AT compared to controls. Two randomized trials showed that AT resulted in significantly improvements in parent-rated quality of life measures and OSAS symptoms. Other, concluded that AT may have limited benefits in reversing any cognitive effects of OSAS, or these benefits may require more extended follow-up to become manifest. **Conclusion:** the AT can benefit children with OSAS, principally those at the beginning of school-age.

Keywords: adenotonsillectomy, OSA, OSAS, children.

8785. Report Cases of Intralabyrinth Hemorrhage and Sudden Hearing Loss Associated To Dengue Fever
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Introduction: Dengue Fever is an arbovirosis with clinical presentation of fever, muscle pain, cold-like symptoms, intense headache and platelets destruction,worsen cases can evolve to spontaneous internal bleeding.In literature just one case was found associating Sudden Hearing Loss(SHL)during Dengue Fever;despite the classical virus etiology of this disease, arboviruses were never described as a cause.Etiopathogenesis believes that some virus may have tropism to the cochlear never causing swelling and abnormal function,other theories questions a possible immuno-modulate damage to cochlea or labyrinth unleashed by viruses;hemorrhage hasn't been described as a possible mechanism during viral SHL. **Objective:** To report a series of cases of Sudden Hearing Loss and intralabyrinth hemorrhage,associated do Dengue Fever **Resumed Report:** There are a series of three cases of documented SHL in patients with clinical and laboratorial Dengue Fever. During etiological investigation, MRI showed intralabyrinth hemorrhage at the same side of the complaint. No other bleeding signs are symptoms occurred in any of the three cases. **Conclusion:** SHL is often associated to viruses infections, and some pathophysiology such as neuronal swelling and immunomodulate damage is well known. Dengue Fever has its hemorrhage clinical presentation also well established in literature. Association of

Sudden Hearing Loss and Dengue Fever is a rare condition; in this 3 cases the intralabyrinth bleeding finding brings a possible new etiological mechanism. As an endemic disease Dengue should be a differential diagnosis to SHL.

Keywords: dengue; sudden hearing loss; intralabyrinth hemorrhagy.

8793. Polysomnography Applied to Patients with Tinnitus: A Review
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Tinnitus has been defined as an “auditory phantom perception,” meaning that tinnitus results from an abnormal activity, in the absence of any internal or external acoustic stimulation. About 10 to 15% of the adult population is affected by tinnitus, and a relevant percentage of tinnitus sufferers experience symptoms severe enough to significantly affect quality of life, including sleep disturbances and work impairment. The self-rated complaints about tinnitus focus on emotional distress, auditory perceptual difficulties, and sleep disturbances. **Objectives:** To evaluate the works that show sleep disorders in patients with tinnitus, and sleep disorders assessed by polysomnography. **Data Synthesis:** We found four studies with polysomnography to assess sleep disorders in patients with tinnitus. The first study evaluated 80 patients who were military personnel without major psychiatric disturbances, and their tinnitus was associated with noise-induced permanent hearing. The second study was a prospective, case-control, nonrandomized study of 18 patients affected by chronic tinnitus who were compared with a homogeneous control group consisting of 15 healthy subjects. The last work evaluated questionnaires 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 ± 2.3 years) after their initial appointment at the clinic. **Conclusion:** There are few studies with polysomnography for the evaluation of patients with sleep disorders caused by tinnitus. This shows the need for more studies on this subject.

8802. Ameloblastic Fibrosarcoma of the Maxillary Sinus: Case Report
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Introduction: Ameloblastic fibrosarcoma is an extremely rare malignant neoplasm. Until now, about 90 cases have been reported in English literature. It is an odontogenic tumor and can arise from an ameloblastic fibroma. The most common region affected is the mandible, but in this report, we describe a case of an ameloblastic fibrosarcoma in the maxilla. **Objectives:** To report a case of a rare odontogenic tumor in the maxilla. **Resumed Report:** A twenty-two-year-old female patient was referred to an otorhinolaryngology service due to swelling on the right side of maxilla. The patient also mentioned loosening teeth in the upper right arch. These symptoms were lasting over six months. Pain or difficulties in eating were not reported. Extra-oral examination showed asymmetry characterized by enlargement of the malar region and, intra-orally, there was gingival and hard palatal swelling. Computed tomography showed an expansive lesion in the right

maxillary sinus. The patient underwent a biopsy and the pathology report suggested ameloblastic fibrosarcoma. Then a medial maxillectomy with safety margins was performed and the histopathological analysis confirmed the biopsy's result. Adjuvant chemotherapy and radiotherapy were associated and the patient did not demonstrate signs of recurrence until now (3 months of follow up after surgery). **Conclusion:** Due to the rarity of this diagnose, the report of new cases of ameloblastic fibrosarcoma is important to add further information, especially in relation of treatment and follow-up.

Keywords: ameloblastic fibrosarcoma, maxilla, odontogenic tumor.

8804. Burkitt's Lymphoma Naso-Sinusal- Case Report

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Introduction: Burkitt's lymphoma is considered an undifferentiated lymphoma originating in lymphocytes B, first described in 1958 by Denis P. Burkitt as a malignant neoplasm affecting the jaw of African children. The naso-sinusal presentation is rare and the prognosis is relatively poor, mainly due to the evolution of the disease, the delay in diagnosis and the institution of treatment. **Objectives:** The objective of this case report is to demonstrate the importance of diagnosis and early institution of treatment of this pathology. **Resumed Report:** RSS, male, 3 years, admitted to the otorhinolaryngology service complaining of epistaxis for 15 days associated with facial edema and unilateral ocular proptosis on the right side, besides bulging in the right submandibular region and visual loss referred by mother, initially , emergency service being performed antibiotic therapy without clinical improvement. The examination showed marked facial edema associated with proptosis and palpebral edema on the right. He was referred to a tomographic study that showed a homogeneous mass with soft tissue density, affecting the paranasal sinuses and nasal passages bilaterally, extending to the right orbit. Incisional biopsy was performed with immunohistochemical study with diagnosis of high grade B-cell lymphoma (Burkitt's Lymphoma). After diagnosis, he was referred to the oncopediatrics service for oncological treatment with a good initial response. **Conclusion:** Therefore, the knowledge of this pathology for diagnosis and early treatment is of great importance, resulting in good evolution and favorable prognosis.

8806. A Case Report of Lymphangiomatous polyp of the Palatine Tonsil

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Introduction: Lymphangiomatous polyps are benign and rare hamartomatous lesions. These lesions have already been described by different names, such as: angiomas, polypoid lymphangioma of the tonsil, hamartomatous polyps, lymphoid polyp or tonsillar lymphangiomatous polyp. The literature contains less than 30 reported cases. The symptoms are usually dysphagia, sore throat or the sensation of mass in the oropharynx. The curative treatment is done by wide excision. **Objectives:** Report a case of rare incidence and topography. Case report: Female patient, 13 years old, with oropharyngeal

foreign body sensation and mild dysphagia for solids. At the physical examination, the patient had grade III tonsils with a polypoid lesion in the upper pole of the right tonsil extending to the oropharynx. Cervical tomography showing right palatine tonsil enlargement and luminal bulge measuring 1.2 x 1 cm. The patient underwent tonsillectomy with block excision of the lesion. Histopathological analysis confirmed lymphangiomatous polyp of amygdala. **Conclusion:** The lymphangiomatous polyp of amygdala is a benign lesion of rare incidence, originating from the tonsillar stroma. The correct identification and differential diagnosis with other benign amygdala lesions are fundamental for patient follow-up.

Keywords: lymphangioma; palatine tonsil; polyps.

8805. Oncoctical Sinusal Papiloma

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Introduction: Oncocytic papilloma is a benign lesion of the schneiderian epithelium formed in the invaginated ectoderm of the olfactory plate. 3% of nasosinusal papillomas are rare. It prevails in the 5th decade of life. Unilateral nasal obstruction is the most common symptom associated with epistaxis and local pain. It is associated with squamous cell carcinoma in 15% of the cases. Surgical treatment is gold standard. It relapses 25 to 35%, usually at the site of the primary lesion. **Goal:** To report a rare case of nasosinusal oncocytic papilloma. **Summary report:**

Patient 72 years old, male, hypertensive, natural and appropriate Manaus-AM started 3 years ago with progressive left nasal obstruction associated with coryza, intermittent sneezing and hyposmia. At nasofibroscopy, vegetative, irregular, hardened, yellowish-whitish lesion occupying 100% left nasal cavity. The sinus CT scan showed a lesion with soft tissue density occupying the entire maxillary sinus, with widening of the infundibulum, and left nasal fossa, evidencing bone remodeling of the sinus. The lesion was performed with endoscopic sinusectomy combined with Caldwell-Luc. It was observed a lesion of the same aspect and originated in a floor of the left maxillary sinus. Anatomopathological confirmed diagnosis of Oncocytic Sinus Papilloma. In clinical follow-up without evidence of relapse. **Conclusion:** Oncocytic sinus papilloma is a rare lesion with malignancy potential. Differential diagnosis should be made with other intranasal malignancies. Patients should maintain follow-up due to the possibility of recurrence and malignancy.

Keywords: oncocytic papilloma, schneiderial epithelium, nasosinusal papillomas.

8813. Pleomorphic Adjustment of Lacrimal Gland: Case Report

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Introduction: Pleomorphic adenoma is a benign tumor found in the lacrimal and salivary glands. It consists of painless, dorsal mass that depending on its volume can lead to diplopia and exophthalmos. Lacrimal secretion may be impaired and the mobility of the ocular globe impaired, and the association of satellite adenomegaly is rare. The treatment is surgical with removal of the entire capsule from the tumor, thus avoiding relapses. **Objective:** to report a case of pleomorphic adenoma of the lacrimal gland. Case report: M.S.S,

57 years old, female, sought the otorhinolaryngology service, with complaint of right hemicranial headache for 10 years, of moderate intensity. Otorhinolaryngological examination and nasofibroscopy without alterations. He had a skull CT with a nodular formation, attenuation of soft parts, well defined contour, near the insertion of the lateral rectus, measuring 1.9 x 1.3 x 1.3 cm. The tumor was submitted to a surgical procedure and surgical resection. In the intraoperative, visualized well defined lesion adhered to periorbital fat and lacrimal gland. Anato-pathological showed mixed tumor of lacrimal gland, constituted by epithelial-glandular elements wrapped in complex connective tissue rich in fibroblasts, lymphocytes, and myxomatous cells, compatible with the diagnosis of pleomorphic adenoma. Surgical margins free of tumor involvement. Patient progressed without complications, with improvement of symptoms. **Conclusion:** Pleomorphic adenoma is a benign tumor of the lacrimal and salivary glands. Its diagnosis is of extreme importance for resolution of the condition through the treatment of the surgery.

Keywords: pleomorphic adenoma; lacrimal gland; headache.

8840. Extensive Mucosal Airway Leishmaniasis

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Introduction: Leishmaniasis is an infectious, non-contagious disease. The predominant clinical form is cutaneous and it is estimated that 3 to 5% of these cases develop mucosal lesion. Clinically, when it affects the oral mucosa, the disease presents granulomatous ulcers and mucous infiltration. The diagnosis can be made with the Montenegro skin test, serological tests, histopathological examination and immunohistochemistry. The treatment is medicated and the criterion of cure is defined by the regression of all signs. **Objectives:** to report case of extensive mucosal Leishmaniasis of the airway. **Resumed Report:** FCAS, 86 years old, male, rubber tapper, Lábrea-AM, with complaint of oral cavity lesion, associated with progressive nasal obstruction for one year and dysphagia for eight months, associated with weight loss and persistent cough. He presents a history of skin damage in adolescence without adequate treatment. The endoscopic analysis of the airways revealed a granulomatous lesion on the soft palate with uvula destruction, extending through tonsillar pillars and posterior wall of oropharynx and hypopharynx, as well as areas of stenosis and synechiae in cavum and velopharyngeal sphincter. Histopathological analysis confirmed the diagnosis. Inpatient, he started prophylactic corticosteroid therapy at high dose for 48h due to risk of airway obstruction, followed by treatment with pentavalent antimonial. **Conclusion:** Mucosal leishmaniasis is an extremely aggressive disease that can cause significant deformities in the patient. Early diagnosis and the institution of appropriate treatment are essential to avoid the sequelae of the disease.

Keywords: granulomatous disease, leishmaniasis, mucosal leishmaniasis.

8852. Maxillary Osteonecrosis After Otorhinolaryngological Procedure: Clinical Case Report

Heloisa Nardi Koerner, Victor Augusto Dardani Moreira da Silva, Ana Paula Perin Maia da Silva, Humberto Moreira da Silva, Pedro Augusto Matavelly Oliveira
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Osteonecrosis is a process of loss of integrity of the skin and mucosa, without healing for three months, with bone exposure. Osteoclasts can undergo bone turnover, culminating in tissue remodeling, resulting in hypoxia and hypocellularity. This can happen in processes of trauma, excessive use of electrocautery in surgeries or local infection, being the fungus commonly causing necrosis. Pain, halitosis, bone exposure and fistulization for skin or mucosa close the diagnosis for osteonecrosis. The case described is from a patient who underwent a septoplasty with turbinectomy, and, on four postoperative days, reported severe pain and edema in the palate region. The condition evolved with the need for hospitalization for drainage of purulent contents. The worsening of the evolution was diagnosed with left maxillary fistula associated with paranasal sinus infection. The patient was then submitted to hyperbaric chamber sessions and one month later the upper dental elements were removed with total maxillectomy with dental prosthesis placement. The biopsy showed bone remodeling with the presence of irregular hyphae. After the procedure there was improvement of the evolution without complaints in the reevaluation. In this report we review the clinical, diagnostic and therapeutic aspects of maxillary osteonecrosis.

8854. Atypical Periamigdalian Abcess: A Case Report

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Introduction: The periamigdalian area is the most frequent abscess forming region in the head and neck area.

Objectives: The goal of this report to present a complex treatment case of periamigdalian abscess in a young male patient.

Resumed Report: LS, 27 YO, male, came with an initial case of odynophagia, fever, general malaise and asthenia, it was administered intramuscular benzathine penicillin, single dose. After 48h, presenting no improvement, it was administered amoxicillin + clavulanate for 7 days. After 14 days, the initial symptoms returned again and the patient was put on intramuscular Ceftriaxone 1g, every 12h for 7 days. Nevertheless, 7 days after the halting the antibiotic, the patient had the same symptoms once again. The physical examination spotted edema and hyperemia in the inferolateral region with spontaneous pustular drainage in the superior left tonsil area. There was no trismus or uvula deviation. It was diagnosed as peritonsillar abscess and a tomography confirmed the diagnosis. The patient was treated with clindamycin 600mg every 12h for 14 days and recovered completely. **Conclusion:** The current case presented an abscess located in the inferolateral region with superior area drainage, a rare occurrence, furthermore, due to the absence of classical symptoms (trismus and uvula deviation), the diagnosis was verified only after the drainage. A potential inferolateral peritonsillar abscess diagnosis ought to be considered for complex and unusual cases of tonsillitis that lack of classical symptoms, such as uvula deviation and trismus and palate bulging.

Keywords: periamigdalian, abcess, atypical.

8855. Inverted Papilloma of the Nasal Vestibule Associated with Squamous Cell Carcinoma, A Very Rare Case

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There is an infinity of scientific articles about the association between the inverted papilloma and squamous cell carcinoma of the nose and paranasal sinuses, but most of

cases have as parameter papillomas originated from the side wall tissue of the nose (Shneiderian Epithelium). Although histologically the combination between inverted Papilloma and squamous cell carcinoma is a bit unusual, our following case has special features, once it treats a critical analyze of a rare presentation of squamous cell carcinoma focally invasive in squamous cellular papilloma and in an unusual area, nasal vestibulum and the relation between these two types of lesions. There is an infinity of scientific articles about the association between the inverted papilloma and squamous cell carcinoma of the nose and paranasal sinuses, but most of cases have as parameter papillomas originated from the side wall tissue of the nose (Shneiderian Epithelium). Although histologically the combination between inverted Papilloma and squamous cell carcinoma is a bit unusual, our following case has special features, once it treats a critical analyze of a rare presentation of squamous cell carcinoma focally invasive in squamous cellular papilloma and in an unusual area, nasal vestibulum and the relation between these two types of lesions.

Keywords: inverted papilloma; squamous carcinoma; nasal vestibulum.

8866. Lymphoma in the Nasal Cavity And Paranasal Sinus

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Introduction: Lymphomas are malignant tumors that are subdivided into Hodgkin's and non-Hodgkin's lymphomas. Some non-Hodgkin's lymphomas present extranodal involvement, and lymphomas of the paranasal sinuses are rare, presenting a nonspecific clinical picture that can lead to a late diagnosis. **Objectives:** The purpose of this case report is to demonstrate a differential diagnosis of mass in nasal cavity and paranasal sinus and the importance of early diagnosis. **Resumed Report:** AFA, female, 64 years, with complaint of moderate pain on the region of right frontal and maxillary sinus for 11 months, becoming more intense in the last week, associated with symptoms of unilateral nasal obstruction and periorbital edema on right hemiface, without anterior and posterior rhinorrhea. Presented degenerated mass in the right nasal cavity in rhinoscopy, compatible with computed tomography of paranasal sinuses showing hypodense mass in the nasal cavity and maxillary sinus on the right side. Excisional mass biopsy and drainage of right maxillary sinus secretion were performed. The anatomopathological results revealed an undifferentiated immature neoplasm in the right maxillary sinus, nasal cavity, sphenoid and ethmoidal fossa. The result of immunohistochemistry demonstrated non-Hodgkin's T-cell/NK cell lymphoma with high proliferating index and EBV immunoexpression. **Conclusion:** Early diagnosis of lesions in the nasal cavity and sinuses caused by other systemic diseases, such as non-Hodgkin's lymphoma, is an important factor contributing to the patient's good prognosis.

8883. Case Report: External Auditory Canal Cholesteatoma

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Introduction: EACC is a rare disease, mainly affecting the elderly^{1,2,3}. The evolution of cholesteatoma is slow and slightly symptomatic and its diagnosis can be late, evolving with

progressive bone destruction, affecting adjacent structures^{1,2}. The diagnosis is clinical, presenting usually with earache, otitis media, preserved hearing and intact tympanic membrane with erosion restricted to one point of the EAC^{4,5,8}. On diagnostic suspicion, computed tomography (CT) is recommended^{1,2,4}. **Objective:** To alert the otorhinolaryngologist about the external auditory canal cholesteatoma (EACC) and its surgical therapeutic possibility. **Resume Report:** Patient T.M.M.S.A., female, 30 years old, sought otorhinolaryngological treatment complaining about left hearing loss for 8 months, evolving with otitis media on the same side 2 months ago. Left otoscopy showed a large accumulation of epidermal debris in the conduit which, when removed, revealed intact tympanic membrane and extensive erosion of the posterolateral quadrant of EAC. Normal left otoscopy. Tonal audiometry revealed left moderate conductive hearing loss. In the suspicion of EACC, temporal bone CT was required, which revealed a large mass of soft tissue involving the left external ear, with a middle ear displacing ossicular chain, as well as bony involvement of the Chaussé spur. In the intraoperative, the cholesteatomatous lesion was removed, which occupied almost all the conduit towards the anterior wall. The patient evolved asymptomatic and tonal audimetry performed 2 months after the surgical procedure revealed normal auditory thresholds. **Conclusion:** It was possible to observe how the adequate surgical approach of a EACC can benefit the patient, even with improvement of the auditory thresholds.

8886. Acute Onset Dysphagia In Dermatomyositis And Rheumatoid Arthritis Overlap Syndrome

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Introduction: Dermatomyositis is a systemic inflammatory disease that causes skeletal myopathy. Symptoms such as dysphonia and dysphagia occur due to pharyngeal muscles damage, related to corticoid resistance. In addition, esophageal musculature involvement contributes to dysphagia. While Rheumatoid Arthritis rarely causes dysphagia due to dysmotility. **Objectives:** To report a case of acute onset dysphagia in a patient with superposition of Dermatomyositis and Rheumatoid Arthritis. **Resumed Report:** A 52-year-old female patient with diagnosis of Dermatomyositis and Rheumatoid Arthritis in pulsetherapy due to pulmonary decompensation with poor corticoid response presented with dysphonia and dysphagia for solids with acute onset. Videoendoscopy Swallowing Study was performed, evidencing a reduction of muscle strength with stasis and signs of salivary penetration. In the pasty consistency, it presented fractional swallowing with residues, penetration and aspiration, without evaluation with solids. In the perceptual voice evaluation, a humid voice was observed before and after swallowing, a signal classically associated with dysphagia suggesting penetration. Oral diet was banned until stabilization with pulsetherapy, in addition to indicated phonotherapy and physiotherapy. Due to dysphagic complaint, nasoenteral tube diet was suggested. Patient evolved with subcutaneous emphysema in the cricopharyngeal region and pneumomediastinum on the following day, being questioned the relation with the use of nasoenteral probe in a susceptible musculature or spontaneous rupture. She needed ICU support, evolving to death. **Conclusion:** Dysphagia in dermatomyositis is typically pharyngeal, with inflammatory myopathy. Nosological knowledge and the multidisciplinary approach are important factors for appropriate diagnosis and treatment. Autoimmune pathologies are important causes for otolaryngology morbidities.

8889. Submental Intubation in Complex Facial Fracture: Case Report and Literature Review
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Introduction: The management of the airways is one of the principles of patient care with face trauma, with or without other complications that offer a risk of death. Oro and nasotracheal intubation are the two main methods. However, there are situations in which they are contraindicated. The alternatives in these cases are: tracheostomy or submental intubation. **Objective:** To present a clinical case in which the submental intubation was chosen for the surgical approach and literature review on the subject. **Case report:** W. M. S., male, 20 years old, patient admitted to the Emergency Room of the Cajuru University Hospital, victim of a gunshot wound, entry through the left mastoid and exit through the right jaw. A computed tomography scan of the skull and face showed bilateral orbital floor fractures, bilateral maxilla, left jaw angle, left mastoid, pterygoid with comminuted lesion, zygomatic arch on the left, bone fragment in the nasal cavity (probable maxillary sinus origin), projectile shrapnel from entry into the right maxilla to the tip of the left mastoid. After clinical stabilization of the patient, correction of multiple face fractures was performed. Due to the lower morbidity rate, the need for evaluation of the dental occlusion, and contraindication to the nasotracheal intubation, it was opted for submental intubation. **Conclusion:** Submental intubation was satisfactory for the resolution of surgical cases of extensive fractures of the face, when nasal and oral intubations are contraindicated, being a simple technique, of fast execution and low morbidity.

Keywords: submental intubation; complex facial fracture; airway.

8891. Case Report: Odontogenic Keratocyst in Maxillary Sinus
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Introduction: Odontogenic keratocyst is a rare odontogenic cyst of epithelial origin. It is known for its aggressive clinical behavior, high recurrence rate, and its occasional association with genetic abnormalities, such as the nevoid basal cell carcinoma syndrome (Gorlin-Goltz Syndrome). It has a higher predominance in second and third decades of life, are slightly more common in men and the most frequent location is the mandible, specially the angle and ascending ramus. Its cystic nature has long been debated, and some studies classify the odontogenic keratocyst as a benign tumor, what would better explain the neoplastic nature of the lesion. **Objectives:** To describe a case of odontogenic keratocyst in maxillary sinus. **Resumed Report:** 32 year-old patient, male, complaining of maxillary pain for 2 years on the right side of the face. Some months ago, noticed gingival enlargement at the same side. Incisional biopsy of the gingival lesion was performed, and histopathological findings were compatible with odontogenic keratocyst. CT scan was performed, and revealed a big lesion occupying the right maxillary sinus, with destruction of its lateral wall. Surgical treatment was realized combining endoscopic sinus surgery and Calwell-Luc approach to remove the role lesion. Patient is still being followed-up, with no signs of recurrence so far. **Conclusion:** Due to its high recurrence

rate and also aggressive clinical behavior, the correct diagnosis is mandatory for the treatment of patients with odontogenic keratocyst, which should be followed after surgery.

Keywords: odontogenic keratocyst, maxillary sinus tumor.

8893. Case Report: Superior Orbital Subperiosteal Abscess in Complicated Acute Rhinosinusitis Managed by Endonasal Surgical Drainage
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Introduction: Orbital complications are the most common complications of acute rhinosinusitis. They include preseptal cellulitis, orbital cellulitis, subperiosteal abscess, orbital abscess and cavernous sinus thrombosis, according to Chandler's classification. It often results from delay in diagnosis or inadequate treatment. They occur most commonly in children and can result in dangerous complications such as meningitis, brain abscess and blindness, and therefore represent a threat to both vision and life. A superior subperiosteal abscess is a collection of purulent material between the periorbit and the superior bony orbital wall, and is typically a complication of frontal sinusitis. It is classically managed by external surgical drainage. **Objectives:** To describe a case of superior orbital abscess as a complication of acute rhinosinusitis. **Resumed Report:** 34 year-old patient, male, complaining of cephalgia that started 3 days ago. At the day he presented to the clinic, he had palpebral swelling on the right side, exophthalmos and complained of diplopia that started on that day. CT scan was performed and showed a superior orbital subperiosteal abscess. It also revealed a defect on the superior orbital wall, communicating the orbital space with the frontal sinus on the right side. Endoscopic endonasal surgery was performed, and there was no need of external access for the abscess, which was drained accessing the lamina papiracea. **Conclusion:** Orbital complications are relatively frequent as complications of sinusitis. The surgical treatment for the orbital abscesses can be managed by endonasal approach.

Keywords: orbital abscess; subperiosteal abscess; superior; surgical drainage.

8894. Method of Tracheostoma Conduction and its Extension
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Introduction: Tracheostoma is the opening in the cervical portion of the trachea, through the tracheostomy, creating a surgical airway. This procedure is indicated in cases in which respiratory distress can not be reversed in a short period of time. The stoma created can be definitive or not. There are few contraindications, the main one being the presence of laryngeal carcinoma. However, there are several complications, such as enlargement of the tracheostoma. **Objectives:** Evaluate the importance of tracheostoma, mechanisms of execution, enlargement and resolution after its specific functionality. **Data Synthesis:** Several situations make tracheostomy indicated, such as upper airway obstruction (VAS) due to congenital anomalies, foreign bodies in VAS, cervical trauma, neoplasias, bilateral vocal cord paralysis, prolonged orotracheal intubation, edema due to burns, infections or Anaphylaxis, previous or complementary time to other oropharyngolaryn-

gological surgeries, to facilitate the aspiration of the secretions of the respiratory tract, obstructive sleep apnea hypopnea syndrome. **Conclusion:** Currently the tracheostomy is widespread as a simple and effective procedure, with precise indications and well established technique. It is classified as preventive, curative, palliative, elective or emergency. Before starting the procedure, however, blood clotting, personal neck characteristics, presence of goiters, pulsatile masses or neoplasias in the region, infections or an inability to extend the cervical spine are necessary, as these can make the procedure difficult and dangerous. The success of the prognosis, therefore, is directly related to adequate indication and postoperative care.

8904. Craniometry Analysis in an Abnormal Skull

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Introduction: The skull may present additional ossification centers, small supernumerary bones, called suture bones that occur along the sutures. **Objectives:** Evaluate the different anatomical presentations of the anomalous skull, comparing them with the literature, showing the impotence of knowledge for the medical professional. **Resumed Report:** The object of the study, presented in good handling conditions, is fully dry and treated accordingly to the local procedure. Full cranial measurements were carried out, especially the measurement of the circumference, anteroposterior and latero-lateral diameter, using an analog caliper rule, Castro Viejo compass, magnetic resonance and tape-measure. We found a measurement of 60.2 cm for the circumference, 27.4 cm for the latero-lateral diameter and 33.0 cm for the anteroposterior diameter. Furthermore, there were 60 wormian bones in the skull and a hole that, probably, indicated the absence of one more suture bone. The complete measures follow in the table below. By Broca's technique we found a cranial volume of 2,630 liters (L). **Conclusion:** Given the fact, it is concluded that the skull is an anatomical variation rarely found, both by the size, measurements, diameters, circumference and the number of sutural bones. Exacerbated volume of cranium, in the first instance, is not caused by hydrocephalus because the impress absence of the encephalic sulcus and gyrus along the inside of the frontal and parietal bones, despite the presented macrocephaly. The knowledge of anatomical points and sutures is necessary for the knowledge of any anatomist and medical professional.

8908. Vascular Carotid Reconstitution

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Introduction: Irrigation of the head and neck originates from the common carotid arteries. Its partial or total obstruction on one side causes severe neurological sequelae, from paralysis of one half of the body, as well as difficulties in the elaboration of words among others. **Objectives:** This article was the result of researches in the MEDLINE, SciELO and PubMed databases, citing authors according to their importance to the subject, evidencing the importance of the knowledge for the carotid reconstruction. **Data Synthesis:** The reconstruction of the carotid artery can be done with autologous grafts, the saphenous vein being the most used, or biomaterials. Myocutaneous flaps of the pectoralis muscle can be used in a few cases to reconstruct the pharynx, with no intention to protect the vascular graft. The materials used to make the patches are the great saphenous

vein, the bovine pericardium, the synthetic grafts and the cervical grafts. The complications related to the various types of patches are basically the same: bleeding, infection, thrombosis, embolization, restenosis, formation of pseudoaneurysms and rupture, this being an important complication associated with a high rate of morbidity and mortality. **Conclusion:** Arterial ligation is a valid option for situations with difficult internal carotid artery control and in those with massive bleeding, often in patients with multiple penetrating traumas, with indication for damage control in the cervical region.

8911. The Epidemiology and Importance of Professional Voice

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Introduction: The voice is a form of communication, being exclusive to human beings. Among the most affected professional categories, we highlight teachers, telephonists, singers, actors, auctioneers, telemarketing attendants and bankers. Teachers are the group most affected by voice disorders due to their work activity, which can result in loss of quality of the work tool, periods of remoteness, reassignment of function, abandonment of the profession and complications in the speech apparatus. **Objectives:** To characterize the epidemiology of voice professionals and to identify the prevalence of vocal symptoms and other complaints associated with work. **Data synthesis:** Fifty-two articles analyzed demonstrate that at least 70% of the active population depends on the voice professionally. As a result of vocal disturbances, 97% of the re-adaptations and 62% of the licenses in the city of São Paulo are professionals related to teaching, as teacher, day care educator and pedagogical coordinator. About 86% of teachers have vocal disorders and such illnesses lead to personal problems. According to the Ministry of Health, 802 sickness benefits were granted for voice disorders in 2016. **Conclusion:** Dysphonia or loss of voice generates great impact for individuals, especially those who use it as a working tool. The financial demand needed to cope with the benefits and relocations of ill people has heavily burdened public coffers. Concurrently, there is the prejudice to students' learning due to teacher turnover and the breakdown of pedagogical practices, as well as causing anguish and anxiety in professionals.

Keywords: epidemiology of voice, vocal complaints, professional voice.

8912. Jugular Vessel Aneurysm Repair

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Introduction: Venous aneurysms are rare, affecting people of various ages and sexes. Its etiology remains uncertain. Although computed tomography, phlebography and magnetic resonance help the precise diagnosis, the gold standard for the diagnostic method of venous aneurysm is still ultrasound with duplex color image flow. **Objectives:** Evaluate the importance of the correction of jugular aneurysms, their prevalence, to study the most common techniques and their benefits to the patients. **Data Synthesis:** Venous aneurysms can affect neonates, children, adolescents, adults and the elderly and may develop in any part of the vascular system. Venous aneurysms may present in various forms, such as fusiform or saccular. This distinction is important for the

surgical strategy. Congenital vein aneurysm is an anomaly of the venous wall development, which occurs as a consequence of smooth muscle hypoplasia, leading to elastic deficiency of the venous wall. The etiology of the aneurysm was described as degeneration of the venous wall, resulting in thinning of the elastic and muscular layers of the vein wall. **Conclusion:** Although venous aneurysm is considered a relatively simple case, surgical treatment is indicated in most cases, especially when symptomatic, disfiguring or progressive.

8914. Relevance of Predictive Diagnosis in Cases of Deceit of Genetic Origin

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Introduction: Hearing impairment is a disorder that presents a high prevalence: it affects about 5% of school children and 10% of the adult population. If profound, hearing impairment affects the most diverse aspects of the lives of its carriers, including educational preferences, communication strategies, family and social relationships, and professional opportunities. **Objectives:** To evaluate the presence of a family group with genetic deafness and to compare what has been described in the literature. The participants of this study belong to 11 families with an average of 4.7 people. **Data synthesis:** From the medical point of view, deafness is a pathological condition. This statement, which seems so obvious in the context of medicine, is not so for many deaf people who consider themselves to be a separate cultural group, who have different values, beliefs and behavior patterns based on their own deafness and who do not consider themselves to be disabled, but only different; Deafness as a culture is a natural consequence of grouping deaf children into special schools and using a common manual language, the language of signs. **Conclusion:** The mapping and molecular characterization of the genes causing deafness, and the identification of their corresponding products and functions, will make an extraordinary contribution to understanding the pathogenesis of deafness.

Keywords: hearing, communication, deafness.

8917. Origin of Laryngeal Paralysis

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Introduction: Laryngeal paralysis may be secondary symptoms of other pathologies. They may originate from central or peripheral nervous system pathologies, mechanical trauma of the neck, head and thorax. They can also originate from surgical causes, infectious and inflammatory processes; May be secondary symptoms of varied syndromes, intoxications, psychogenic, idiopathic and iatrogenic causes. **Objectives:** Evaluate the different etiologies of laryngeal paralysis, to compare them with current literature, showing the importance of knowledge of these conditions. **Data Synthesis:** Laryngeal paralysis has known causes and originates in central nervous system pathologies, neck and mediastinal tumors, aneurysms, cardiac hypertrophy, inflammatory and infectious processes, idiopathic and iatrogenic factors (Pinho & Pontes, 1991). Traumatic causes, surgical causes, lead poisoning, eating disorders, psychological causes and a diverse range of already classified syndromes, and others to be defined (Hungary, 1986) can be found. **Conclusion:** Through-

out the discussion, we could observe that Laryngeal Palsy can have causes of the best known, as a result of postoperative, infection situations, and others, even less improbable causes.

8918. Surgical Correction of Cleft Lip and Palate on Patient with Crouzon's Syndrome: A Case Report

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Introduction: Crouzon's syndrome or type I facial and skull dysostosis is a genetic disorder, inherited by a dominant autosomal pattern. The causing factor is a mutation on the gene that codifies the receptor for the type 2 fibroblast growth factor (FGR-2). Its otorhinolaryngologic manifestations, such as cleft lips and palate, need surgical repair. **Objectives:** demonstrate the association between Crouzon's syndrome and cleft lips and palate, and also the efficacy of the surgical repair. **Case report:** Infant, 18 months, feminine, born to term by a c-section, syndromic. Has bilateral coronal craniosynostosis, suggestive of Crouzon's syndrome, associated with bilateral transforameric cleft and anterior rotation of premaxilla. Submitted to surgical correction at the age of 13 months. It was done a cheiloplasty, with Spina's technique and repositioning of the premaxilla with reduction of the vomer and posterior rotation of the nasal complex and premaxilla. Post-op with complications with relevant esthetic improvement and progress on the acceptance of oral diet. Craniosynostosis programmed to be realized after correction of the cleft palate. **Conclusion:** Crouzon's syndrome is a dominant autosomal genetic disorder. It may show manifestations such as cleft lip and palate, hypoplasia of maxilla, sticking nose and hearing loss. Surgical repair allows functional and aesthetic improvement, but is the multifactor treatment the contributes the most to quality of life in these kinds of patients.

8921. Case Series: Diode Laser Treatment in Turbinete Hypertrophy - Outpatients Under Topic Anesthesia

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Introduction: Inferior turbinate hypertrophy is a common cause of nasal airway obstruction. The mainstay of treatment is still with the use of pharmacologic therapy, but there is a significant number of patients that are refractory to this treatment and require surgery. Many surgical techniques have been used over the years, such as turbectomy (total and partial), submucous resection, laser surgery, electrocautery. Among these options, outpatient endonasal diode laser surgery appears to be effective, safe and well tolerated. It has been shown that endonasal laser treatments cause limited tissue trauma with minimal bleeding, and reach a high patient acceptance. **Objectives:** To describe how useful diode laser can be for ambulatorial procedures under local anesthesia, including turbinate reduction, specially in cases of hypertrophy and rhinitis. **Resumed Report:** We performed turbinate reduction in 8 patients using only topic anesthetics (lidocaine 20% and tetracaine 5%). All patients were comfortable during the procedure, and had no important pain. The reduction of the turbinates were made submucosal, in a similar way to the reduction using electrocoagulation. The patients had a good evolution, with very few crusts. No bleeding was observed. After 6 months, they had a significant improvement of nasal congestion complaints. **Conclusion:** Diode laser surgery for turbinate reduction appears to be an effective, safe and well-tolerated treatment option for therapy-resis-

tant turbinate hypertrophy. It can be done under local anesthesia, as an ambulatorial procedure.

Keywords: diode laser, turbinate reduction.

8924. Tonsillotomy by Fractionated Ablation with CO₂ Laser: Novel Technique

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Palatine tonsillectomy in adult patients is mainly indicated for recurrent tonsillitis, but also for upper airway obstruction secondary to tonsillar hypertrophy, excess of caseum and halitosis. This surgery has high morbidity (post operative pain with hard control, feeding problems) and potential risk of complications, such as abundant bleeding with surgical reintervention. Our study presents a novel therapeu-

tical procedure to treat recurrent tonsillitis, caseum and halitosis in adult patients, avoiding the complete resection of the tonsils. This procedure, unprecedented in the literature, called tonsillotomy by fractionated ablation with CO₂ laser, promotes a fractionated not surgical ablation of the palatine tonsils, partially preserving the tonsil's surface. Its clinical efficiency was tested. 20 patients were submitted to one session of tonsillotomy by fractionated ablation. No complications occurred, and the procedure was fast (5 minutes) and completely well tolerated without anesthesia. After one year, there was a complete recovery of recurrent tonsillitis disease in 95% of the patients, and after 6 months there was a statistically significant improvement of halitosis and caseum. The average of satisfaction level was 10 after 3 months and 8 after 1 year. 55% of the individuals didn't need surgery anymore due to the procedure efficiency. We concluded that tonsillotomy by fractionated ablation with CO₂ laser is an efficient and safe procedure for chronic tonsillitis in adults, and it must be incorporated to daily clinical practice.

Speech, Language and Hearing Sciences

Oral Presentations

8055. The Influence of the Voice Sample Length in Perceived Overall Voice Quality Analysis in the Brazilian-Portuguese Language

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Introduction: Many factors influence the reliability and the accuracy of the vocal perceptual-auditory analysis. Some are widely investigated, such as clinical experience and training, others not that much. **Objective:** To analyze the influence that the voice sample length (VSL) has on the perceived degree of voice quality deviation. **Methods:** Three VSLs were defined by varying the amount of continuous speech. VLS1 considered numbers 1 to 20 (42 syllables); VLS2 was a customized length (mean of 18.73 syllables corresponding to 3 seconds of only-voiced segments) and the VLS3 considered numbers 1 to 10 (15 syllables). Each VLS was followed by 3 seconds of the vowel /a/. Three voice specialists rated 71 voices (53 dysphonic; 18 vocally healthy) according to the overall voice quality (G). Three sessions were performed to evaluate each VSL variant. **Results:** The intra-rater reliability was "almost perfect" for all evaluators in VSL3 ($\kappa > 0.826$); "substantial" and "almost perfect" in VSL2 (0.684 to 0.897) and "fair" to "almost perfect" in VSL1 (0.447 to 1.000). The inter-rater reliability was "moderate" for VSL1 (0.554), "substantial" for VLS2 and VSL3 (0.622 and 0.618). The Gmean was different between the VSLs (p -value < 0,001); it was perceived as more severe for VSL1 (1.39) and as less severe for VSL3 (1.18). **Conclusion:** The perceived voice quality changes for different VSLs. Longer VSLs seem to be perceived as more deviated, shorter VSLs seem to be more reliable.

Keywords: voice disorders, evaluation, auditory perception.

8056. Acoustic Voice Quality Index (AVQI) at Different Voice Sample Lengths in the Brazilian Portuguese

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Introduction: Voice acoustic analyses with multidimensional approach are gaining importance in the clinical practice. The Acoustic Voice Quality Index (AVQI) rates the voice quality in a scale from 1 to 10 and presents good correlation with the perceptual-auditory analysis of voice. The ideal sample length was not yet determined for the Brazilian Portuguese. **Objective:** To analysis the variations that different continuous speech length has on the AVQI accuracy. **Methods:** Voices of 71 subjects (53 dysphonic; 18 vocally health) were recorded: vowel /a/ + numbers 1 to 20 (42 syllables). Three different voice speech lengths (VSL) were edited: VSL1, 1 to 20 + 3s vowel /a/; VSL2, customized length (mean of 18.73 syllables corresponding to 3s of only-voiced segments) + 3s vowel /a/; VSL3, 1 to 10 (15 syllables) + 3s vowel /a/. Three voice specialists perceptually judged the overall voice quality. AVQI's precision and concurrent validity were assessed. **Results:** Intra and inter-rater reliability were acceptable. VSL3 ($r=0.665$) presented the higher concurrent validity. The best area under the ROC curve was for

VSL2 (0.821). VSL1 and VSL2 presented fair scores. All AVQIs thresholds were very low (VSL1=1.8, VSL2=0.79, VSL3=0.470). The AVQI specificity was 100% for VSL1 and VSL2, and 75% for VSL3; sensitivity was higher for VSL3 (74%). **Conclusion:** The best perceptual-acoustic correlation was obtained for 1 to 10. The best diagnostic accuracy was found when the vowel and the voiced continuous speech had the same length.

Keywords: voice disorders, acoustics, evaluation, auditory perception.

8058. Static Posturography with Dynamic Tests HORUS: Reference values from 20 to 89 years

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Introduction: Posturography is an efficient toll to evaluate the vestibule-spinal reflex by analyzing body oscillations. **Objective:** Establish reference values of the test in normal subjects. **Method:** Multicentric study approved by the ethics in research committee under the number CAEE:88284318.1.0000.5479. 297 volunteers without story of any vestibular, neurologic or orthopedic pathology. 172 women and 125 men were analyzed in groups of 20-59, 60-69 and 70-89 years of age. First subjects were tested for the limit of stability in mediolateral and anteroposterior axis. Next oscillations were measured asking the subjects to stay in Romberg position, the most immobile possible, in seven conditions: stable surface with eyes open (1), with eyes closed (2), unstable surface (pillow over the platform) with eyes open (3), with eyes closed (4) and looking at horizontal optokinetic and one tunnel shaped (5,6 and 7). The analyzed parameters were the area of oscillation, median speed of oscillation, median frequency of oscillation and center of pressure localization. The Horus Brazilian made posturograph was used for the tests. **Results:** In the group aged 20-59 the upper limit of the area of oscillation were: 229, 334, 1081, 2653, 1520, 1664, 1441mm² for conditions 1 to 7 and the lower limit of stability were 12863 and 19290 for females and males respectively. As the age group raises the values changed accordingly. **Conclusion:** The results must be used as a guide to detect equilibrium disorders by the HORUS Static Posturograph as well to follow the evolution of the disorders providing objective results for therapies.

8106. Auditory and Phonological Awareness Findings in a Group of Children with Cleft lip and Palate

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Introduction: Hearing disorders may compromise the speech intelligibility of children and, disadvantages in language skills development, like phonological awareness. Children with cleft lip and palate tend to have hearing loss and difficulties of phonological awareness, without reference in the literature of this association. **Objective:** Analyzing the audiological and phonological awareness findings in a group of children with cleft lip and palate. **Methods:** Observational cross-sectional study approved by the Ethical Committee in Research (1.974.629), with a group of patients enrolled in an extension project consisting of 36 children. The sample was of 22 children between 4 and 12 years, of both genders. The children's parents answered the questionnaire to verify the history of otitis media. The Sequential Evaluation Instrument – CONFIAS was used to analyze phonological awareness. To

verify the auditory acuity, the children performed the pure tone audiometry. **Results:** Due to the non-attendance in the scheduled appointments, 7 children were excluded. Thus, the sample consisted of 15 children, 93.4% had a trans foramen cleft palate; 93.3% with difficulties in phonological awareness at the syllable level; 86.7% at the phoneme level. The history of otitis media appeared in 92.9% of the children. The audiological tests were performed on 12 children, with 72.7% presented conductive hearing loss. There was no association between phonological awareness and auditory findings. **Conclusion:** Children with cleft lip and palate presented phonological awareness difficulties, even though there was no association with the audiological findings, it was not ruled out the possibility of a relationship between the variables.

8123. BAHA Attract Implant System: Speech Perception Results

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Introduction: Sensory deprivation causes changes in the functioning of the central auditory system and manifests itself as a significant reduction in the individual's performance. The evaluation of ability and performance of auditory perception is essential for a better programming of the BAHA Attract system. **Objective:** To evaluate the results of speech perception tests in pre and post-surgical conditions. **Methods:** The study was developed in Hospital of Rehabilitation of Craniofacial Anomalies. Eight individuals with bilateral external and / or middle ear malformation, aged 11 to 18 years, with moderate to severe conductive hearing loss participated. They were divided into group 1 (n= 4), implanted on same side of hearing aid use, and group 2 (n= 4), implanted on the opposite side to the hearing aid use. They were submitted to speech perception tests in quiet in the pre-surgical condition without hearing aid, with the BAHA coupled to the softband, as well as on activation of the implant and after three and six months of implant use. **Results:** The mean sentence recognition threshold in quiet in groups 1 and 2 were, respectively, 57 and 55 dBHL without hearing aid, 26 and 24 dBHL with softband, 23 and 31 dBHL on activation, 19 and 28 dBHL after three months and 20 and 27 dBHL after six months of implant use. **Conclusion:** The individuals implanted on the same side of the use of hearing aids obtained better sentence recognition thresholds until six months of BAHA use.

Keywords: BAHA attract; bone anchored; speech perception.

8126. Musical Theatre Actors: Voice Handicap In Singing and Speaking

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Introduction. Musical theatre actors, besides the social use of the voice, use it in their performances in the modalities sung and spoken. **Objective.** Measure and compare the vocal handicap in singing and speaking in a population of musical theatre actors. **Methods.** 34 musical theatre actors, both male and female, regardless of whether they are students or professionals, with or without vocal complaints and/or voice changes answered the protocols: Voice Handicap Index-10 (0 to 40 points) and Modern Singing Handicap Index (0 to 120) (both translated and validated into Brazilian Portuguese); in both the

higher the score is the higher the voice handicap will be. **Results.** 21 professionals and 13 students participated, 24 without and 10 with vocal complaints, with a mean age of 26.35 years. Averages of the scores: Modern Singing Handicap Index= 27 (minimum=6, maximum=75, standard deviation=16.85), Voice Handicap Index-10= 5.82 (minimum=0, maximum=20, standard deviation=4.82). There was a positive correlation between the two, indifferentiation regarding sex and indifferentiation between the group of professionals and students; in the Voice Handicap Index-10 the group without vocal complaints obtained smaller scores than the complaining group, which was not observed with the Modern Singing Handicap Index. **Conclusion.** In this sample with predominance of men, professionals, young adults, we observed a moderate vocal handicap. The speech-specific handicap protocol differentiated the groups with and without vocal complaint. Further studies that deepen the understanding of handicap in relation to singing activity should be considered.

Keywords: voice; voice disorders; dysphonia; voice-related occupational effects; questionnaires.

8139. Protocols for Evaluation of Speech Intelligibility with Hearing Protection Device: Pilot Study

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Introduction: Commonly, workers report communication difficulties when use hearing protection devices (HPD) and this complaint may contribute to inappropriate use of HPD. There are no systematic protocols and comprehensive material to evaluate the effects of HPD on worker communication and safety. **Objectives:** To evaluate the influence of silicone plug on the speech intelligibility of normal hearing individuals through protocols with words and sentences. **Methods:** Ten university students with normal hearing and no audiological complaints were evaluated using a free field system and lists of monosyllables and sentences. Speech intelligibility was evaluated at intensities of 60, 65, 70 and 75 dB SPL without noise with HPD; and with noise and signal-to-noise ratios (SNR) of +10, +5, 0, -5, -10, -15 and -20, with and without HPD. **Results:** Without noise, percentages of hits with HPD were above 95%; with noise, hits decreased as the SNR more unfavorable. Regarding comparison with and without HPD, percentages of hits were higher without HPD, with significant differences for monosyllables (60dB SPL/SNR -5, p-value=0.029; 65dB SPL/SNR -10, p-value=0.005) and for sentences (60dB SPL/SNR -10, p-value=0.07; 65dB SPL/SNR -5, p-value=0.022). Concerning SNR-20, the percentages of hits were 0% for all intensities evaluated. **Conclusion:** Hit percentages were lower with HPD in most situations, regardless of the speech intensity or the list used. Regarding the protocols developed in this study, they can benefit workers who present complaints of communication, properly conducting the orientation of HPD use, trying to minimize communication effects.

Keywords: Hearing; Speech intelligibility; Signal-to-noise ratio; Noise effects; Ear protective devices.

8154. Comparison of Two Protocols Aimed to Evaluating Impact of Dizziness In Patients with Vestibular Disorders

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Introduction: Researches have focused on investigate the association of vestibular diseases and psychological symptoms. It is known that dizziness can be associat-

ed or aggravated by psychological disorders. **Objectives:** To analyze emotional impact caused by dizziness/vertigo symptom in vestibulopathic patients treated at an University Hospital through the application and comparison of two protocols, validate to Portuguese language: Dizziness Handicap Inventory(DHI) and Questionário de Impacto Emocional da Vertigem(CIEV).**Methods:** Quantitative, descriptive and cross-sectional research, approved by Ethics Committee(protocol 2.344.836). Male and female individuals, aged over 15 years, attended at an Ambulatory of Otoneurology, were selected. All participants had complaints related to dizziness/vertigo. Information about diagnostic hypotheses/exams was collected from patients' medical records and an amnesia was performed. Then, DHI and CIEV were applied. The obtained scores were calculated and analyzed. **Results:** 37 patients were evaluated, aged between 23 and 85(average 58.1+16,3), 24 (64,8%)females. More than one type of dizziness were described by the participants: 21(47,7%) referred vertigo, 23(52,2%) instabilities. Scores from DHI varied from 14 to 88 points(48,2+22). 27(72,9%) participants were classified as moderate/severe handicap. Functional scale had the worse handicap perception. Otherwise, the score in CIEV varied from 2 to 35 points(18,9+8,2). 26(70,2%) participants were classified as tendency to develop anxiety levels from dizziness symptom. 22(81,4%) participants classified as moderate/severe handicap in DHI were also classified as risk in CIEV. **Conclusion:** Those results suggest that both questionnaires are effective to explore emotional impact of dizziness. However, they approach different aspects and can be considered complementary.

Keywords: dizziness, quality of life, questionnaires.

8168. Correlation Between Language Changes, Non-Verbal IQ, and Behavioral Problems In Early Childhood

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Introduction: Language changes may compromise the quality of life of children. Intelligence is built based on historical, social, and cultural components, and language plays an important role in this combination. Studies indicated a correlation between behavior problems and cognition. Behavior problems are composed of internal self-directed and external actions directed to others or to the environment. **Objectives:** to relate non-verbal language and intelligence performance and behavioral problems in children with language changes. **Methods:** (CEP 1.681.979/2016) 134 pre-school children from 4-5 years were evaluated from a random sample, and selected from those who presented a mild/moderate or severe disorder in the language assessment test (LAT) and an average or below-average (below 79) intelligence quotient (IQ) in the SON-R test, these results being related to the performance in the Behavior Problems Inventory (BPI). The study used a descriptive analysis. **Results:** 12.68% of the schoolchildren presented a performance below the expected in the tests (LAT and SON-R), of which 76.47% were male. Of these, 58.82% presented a language change and 64.70% presented a change in the IQ assessment, while 23.52% presented changes in both tests. 55.55% had internal problems and 44.44% had external problems. Regarding the total of behavior problems, 05 had clinical performance, of which 03 had language change and 02 had behavior change. **Conclusion:** It was found that the behavioral problems identified were directly related to language or cognitive changes found in specific assessments.

8209. Neural Plasticity in Individuals with Sensorineural Hearing Loss: Use of Long-Latency Auditory Evoked Potentials with Speech Stimulus

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Introduction: Auditory plasticity refers to changes that occur in the sensory system responsible for the transmission of acoustic information. These changes can be observed from the performance of patients with the use of the sound amplification apparatus, and can be visualized by long-latency auditory evoked potentials. **Objectives:** To characterize long-latency auditory evoked potentials in subjects with sensorineural hearing loss, comparing these before and after the use of the hearing aid. **Methods:** Fifteen adults and elderly of both sexes, aged 55 to 85 years, with mild to moderate sensorineural hearing loss, symmetry between the ears, without prior experience with any type of hearing aid. The long-latency auditory evoked potentials. was performed under conditions with and without hearing aid at 75 dBnNA (speech stimulus) in sound field, in two moments (first: performed up to one week after hearing aid adaptation, second: performed after 6 months of hearing aid adaptation. **Results:** Comparing first with second evaluation, in the condition without hearing aid, a statistically significant difference was observed for P300 latency (p-value=0.031) and P2-N2 amplitude (p-value=0.024), with decreased latency and increased amplitude in the second evaluation. In the condition with hearing aid, there was a statistically significant difference in P2N2 amplitude (p-value= 0.024) with increased amplitude in the second evaluation. **Conclusion:** The long-latency auditory evoked potentials is an important procedure to be used in clinical practice, aiming to monitor the neural plasticity after auditory stimulation in adults and elderly with mild to moderate sensorineural hearing loss.

Keywords: evoked potentials, hearing aids, neural plasticity.

8210. Cortical Processing with Verbal and Non-Verbal Stimulus in Autism Spectrum Disorders

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Introduction: Individuals with Autism Spectrum Disorders can present communicative, cognitive and language impairments. Considering that the development of language depends on the adequate functioning of the peripheral and central auditory pathway, it is observed the importance of the complete audiological evaluation, in special the Central Auditory Nervous System, in this population. **Objectives:** To compare the cortical processing with verbal and non-verbal stimulus in individuals with Autism Spectrum Disorders.

Methods: 30 individuals, seven to 12 years old, of both sexes: 15 children with Autism Spectrum Disorder and 15 with typical development matched by sex and chronological age. Participants had normal hearing and absence of other disorders. The Long Latency Auditory Evoked Potentials evaluation was made with tone burst and speech stimulus. **Results:** Regarding the latency of the stimulus effect, the average of the P1, N1, P2 and N2 components (p-value <0.001) were longer for the speech stimulus. Also there were stimulus effect for the P3 amplitude, being the average larger amplitude for the speech stimulus (p-value = 0.001) in both groups. Although there wasn't statistically significant difference to the group effect, it was observed that the individuals with typical development presented larger amplitude of the P3 component to

the both ears when compared to individuals with Autism Spectrum Disorders in both stimulus. **Conclusion:** Both groups presented differences in cortical processing between verbal and non-verbal stimulus, however it was observed that individuals with Autism Spectrum Disorders can present lower neuronal processing responsiveness to both stimulus.

Keywords: autistic disorder, evoked potentials auditory, child.

8214. Central Auditory Processing in Elderly People with and without Hypertension

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Introduction: the hypertension and advancing age are considered risks for hearing deficits. **Objectives:** to compare performance on central auditory processing tests between hypertensive and non-hypertensive elderly subjects. **Methods:** study approved by the Research Ethics Committee of the Institution under number 48433015.4.0000.5334 was carried out with elderly people with normal auditory thresholds, divided into hypertensive and non-hypertensive individuals. A basic audiological evaluation and a central auditory processing battery were performed: Pitch pattern sequence test, Masking Level Difference, Random Gap Detection Test, Dichotic listening test, and Test of Speech Intelligibility with monoaural competition message. Statistical analysis was performed by Student's t-test comparing both groups. **Results:** 25 subjects were evaluated, 9 hypertensive and 16 non-hypertensive. The average for each group were, respectively: 75.7% and 69.7% in the Pitch Pattern Sequence test ($p=0.626$); 13.3 and 15.5 in the Masking Level Difference ($p=0.273$); 10.8 and 23 in the Random Gap Detection Test ($p=0.076$); 92% and 84% in the right ear ($p=0.176$) and 92.6% and 90% in the left ($p=0.451$) in the Dichotic listening test. In the Synthetic Sentence Identification test, the average for the right ear of the groups with and without hypertension were, respectively, 56.5% and 64.4% for noise ratio 0 ($p=0.424$), 50% and 53.7% for -10 ($p=0.7$) and 45.5% and 53.7% for -15 ($p=0.934$); while in left ear: 60% and 61.2% for 0 ($p=0.893$), 52.2% and 48.7% for -10 ($p=0.734$) and 40% and 32.5% for -15 ($p=0.429$). **Conclusion:** No difference was observed for any tests in the comparison between groups.

Keywords: hypertension, auditory perception, aging.

8259. Sound Localization and Temporal Processing in Children with Sleep Quality Impairment

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Introduction: The quality of sleep can interfere with the overall health of children, with implications for child development, behavioral, learning, attention, and memory skills. **Objective:** To correlate sleep quality with sound localization and temporal processing skills in children. **Methods:** This study was approved by the Committee of Ethics in Research of the institution involved (CAAE: 13033313.3.0000.5417). Participants included 18 children, aged between 7 and 12 years (average = 9.26), normal peripheral hearing and tympanometry curve type A. The Obstructive Sleep Apnea Questionnaire (OSA-18) and the following central auditory processing (CAP) tests were performed: verbal (VSMT) and nonverbal sequential memory tests (NVSMT), sound localization and Random Gap Detection Test (RGDT). **Results:** There was no statistical difference between OSA-18 and Central Auditory Processing, but there was a tendency towards a positive correlation be-

tween OSA-18 and RGDT ($R = 0.391$). In relation to the negative correlation, there was a tendency between the OSA-18 and the sound localization, ($R = -0.176$), VSMT ($R = -0.344$) and NVSMT ($R = -0.159$). We emphasize the limitation of the work by the small sample. **Conclusion:** In this sample, we observed the influence of sleep quality on the tests that evaluate the sound localization, ordering and temporal resolution abilities. It was evidenced that children who presented worse performance in RGDT, sound localization and verbal and nonverbal sequential memory tests, presented OSA-18 scores corresponding to poor sleep quality.

Keywords: speech-language pathology, hearing, sleep.

8274. Criteria for Feeding Tube Removal in Preterm

Newborns in the Neonatal Unit

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Introduction: The feeding tube removal obeys the routine criteria adopted in each Neonatal Unit service, and there is no systematization of these to assist health professionals in the food transition. **Objectives:** To evaluate the criteria used for feeding tube removal in preterm newborns treated in a Neonatal Intensive Care Unit. **Methods:** Cross-sectional study with 20 preterm newborns at the Marly Sarney Maternity Hospital in São Luís, Brazil. It was applied the Readiness Assessment in Premature Infants, in those in favorable clinical conditions for the speech-language intervention. The quantitative variables were analyzed descriptively, through mean, mode and percentages. **Results:** The corrected gestational age means were 35 weeks and weight of 1847g; 35% of the newborns presented conditions for withdrawal of the feeding tube, with maintenance of alertness (100%), presence of adaptive (100%) and protective (57%) oral reflexes, strong (85%) and rhythmic (100%) suction force, coordination between suction/breath/swallowing (100%) and absence of stress signs (85%). And 35% had contraindication for withdrawal due to weak suction (57%), no rhythm maintenance (87%) and alertness (85%); 30% had coordination of suction/breath/swallowing functions (66%) and presence of adaptive reflexes (100%), but did not maintain adequate alertness (66%). **Conclusion:** It is assumed that the corrected gestational age, weight, clinical stability, coordination of suction/breath/swallowing, presence of oral reflexes and absence of stress signs during stimulation of non-nutritive suction are criteria that must be adopted for the feeding tube removal.

Keywords: feeding methods, tube feeding, premature.

8391. Rehabilitation Program for Adults with Chronic Otitis Media: Approach to Difficulties Due to Auditory Alteration

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Introduction: Individuals with chronic otitis media (COM) who have not yet had audibility restored are potentially subject to daily auditory difficulties. **Objectives:** 1) To identify otological and auditory characteristics, restriction to auditory participation (RAP) and use of communication facilitating strategies (CFE) among individuals with COM. 2) To evaluate the effect of psychoeducational rehabilitation groups on RAP and on the use of CFE. **Methods:** Fifty one adults with a history of COM participated in this study. Otological and audiological data were collected, and questionnaires were applied to verify level of RAP and use of CFE. Sixteen individuals participated in a rehabilitation program, composed of five group meet-

ings, in which a psychoeducational approach was carried out regarding communication strategies. **Results:** It was observed that 41 individuals had otological symptoms since childhood or adolescence, 42 mentioned auditory difficulties, and 38 had signs of sensorineural alteration in the worst ear, with mean loss of 48 decibels. Individuals presented variability in level of RAP and in use of CFE, but on average had moderate restriction (39.5/100 points) and moderate use of strategies (32.5/56 points). The effect of the rehabilitation program was increase in the use of CFE, and awareness of negative feelings associated to hearing difficulties. **Conclusion:** Individuals with COM tend to have a long time of hearing deprivation, and a moderate level of restriction to auditory participation. The rehabilitation program demonstrated potential to support individual with COM in dealing with their hearing difficulties, while audibility is not achieved by otologic surgery or other means.

8396. Application of the Speech, Spatial and Qualities of Hearing Scale (SSQ) Adapted for Brazilian Portuguese in Cochlear Implant Users

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Introduction: When considering different disabilities, hearing loss can be one of the most devastating and consequential to the development of oral communication. The Cochlear Implant has been indicated as a rehabilitator resource for people with severe/profound hearing impairment. The battery of tests utilized for hearing screening in this population is efficient to quantify the hearing loss, however, its results do not reflect the day to day communication difficulties. **Objective:** To evaluate the use of the questionnaire Speech, Spatial and Qualities of Hearing Scale (SSQ) to analyze the hearing abilities and everyday acoustics experiences of cochlear implant users. **Methods:** The sample of the study consisted of adults and elderly users of bilateral or unilateral cochlear implant, of both sexes, selected through randomization. The SSQ consists of 49 questions, divided in three parts: hearing speech sounds (14 items), spatial hearing (17 items), and hearing quality (18 items).The scale was self-applied, with the researcher available for clarifying of possible queries.The analysis was performed through sum of answers for each subdivided part, graded in a 0 to 10 scale. **Results:** From January to April of 2018, 15 participants filled the SSQ. In general, women with age between 30 to 59 and with an implantation period superior to 3 years, had the higher scores. Quality of hearing was the SSQ part with the best overall performance. **Conclusion:** The instrument was relevant to evaluate or grade the overall adaptation of the implant, since the users with higher implantation period had higher scores.

Keywords: SSQ; auditory perception; cochlear implant.

8409. Verification of the Use and Effectiveness of the FM System in the Adaptation Process for a Public Hearing Health Program

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Introduction: The frequency modulation system (FM system) is a complementary electronic device for hearing aids' fitting, adaptation process and intelligibility speech improvement. **Objective:** To verify effectiveness of FM system in hearing aid users of electronic devices from a public hospital. **Methods:** 216 patients, that received FM system device

between 2013 and 2016, were invited, by telephone, to participate in this study. After their verbal consent, an interview with their parent/legal guardian was done, which consisted in 12 questions regarding the use of FM system and their perception of child's school/social activities after FM system's introduction. **Results:** From 216 FM system users, we were able to contact only 30. The age ranged from 9 to 20 years, for both gender. Among these 30 participants, 20 used FM system, being seven of them unsystematically device users and 13 regular users (which 7 used the device only in school and 6 daily). All of FM system users reported an improvement in their academic performance and in their self-reliance. Furthermore, the study evidenced that none of them used FM system associated with any other electronic equipment. The 10 participants whose do not used their FM systems claimed that theirs schools had difficulties to adapt to the system and/or that they did not notice any benefits during use. **Conclusion:** Most of the individuals in this study used the FM system, resulting in an improvement of their academic performance.

8428. Sustained Auditory Attention Ability Revised Test and Applicability In Children

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Introduction: The ability of sustained auditory attention is fundamental for the development of learning. In Brazil there is a need of standardized instruments to assess the sustained auditory attention ability. **Objectives:** To develop a new version of computerized Sustained Auditory Attention Ability Test (SAAAT), and to verify the performance of children in this instrument. **Methods:** Research Ethics Committee:45786014.0.0000.5417. Randomization of monosyllabic order of the original computerized SAAAT word list was performed, inclusion of reaction time parameter, modification of the duration interval of each word to 1.4 seconds, and reduction to four the number of times presentation of the word list. The sample consisted of 264 normal-hearing children, six to 11 years old, divided into six groups, according to the age group, and submitted to the new computerized SAAAT. To determine the performance of child, the total error score (inattention and impulsivity), the vigilance decrease and the reaction time were considered. **Results:** There was a statistically significant difference between the different age groups, in the types of error inattention ($p=0.000$) and impulsivity ($p=0.000$), in the total error score ($p=0.000$), with a moderate negative correlation between these variables and age. There was a statistically significant difference in reaction time ($p=0.000$), with a moderate negative correlation between these variables and age. **Conclusion:** The performance of children in this test was influenced by the age factor. Younger children presented higher score of total error score and shorter reaction time, in relation to older ones. The vigilance decrease was similar for all ages evaluated. FAPESP(Grant no. 2014/07044-6).

8458. Characterization of the Neonatal Hearing Screening in a Public Maternal-Child Hospital Linked to the "Rede Cegonha" Brazilian Health Strategy

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Introduction: The Rede Cegonha Brazilian health strategy(BHS) aims to qualificate and humanize of care for pregnant women and their babies. It includes the Neonatal

Hearing Screening(NHS) for the early detection of hearing abnormalities. **Objectives:** To characterize clinical and phonoaudiologically, women admitted to the neonatal rooming-in and/or Neonatal-ICU of a maternal-child public hospital in which the Rede Cegonha BHS is implemented, and their babies performed the NHS. **Methods:** Cross-sectional, retrospective and documentary study. The data were collected from medical records of a maternal-child public hospital. The sample was composed by 1,818 mother-baby dyads;babies performed the NHS from May/2014 until May/2015. For data analysis, the statistical program SPSS-version21.0, and descriptive and correlation analysis were performed. The study was approved by the Research Ethics Committee of UFCS-PA and the hospital (Approval documentn.1,332,958 and 1,387,303,respectively). **Results:** 918 (50.5%) were male; the mean weight was 3191.89 (± 617.02 grams); the mean Apgar at the first minute was 8.06, at the fifth minute, 9.20, and the mean gestational age was 39 ± 1 weeks. In 359 babies some indicator of risk for hearing loss (IRHL) was identified. Among the IRHL, the association of NHS failure was significant in neonates exposed to HIV and congenital cytomegalovirus, and to ototoxic drugs. In neonates without IRHL, this association occurred in the presence of jaundice, respiratory dysfunction, sepsis and mothers'urinary infection during pregnancy. **Conclusion:** Significant associations between NHS failure and maternal/baby characteristics that weren't considered as IRHL (jaundice, respiratory dysfunction, sepsis and mothers'urinary infection during pregnancy) were found. These findings indicate that professionals of phonoaudiology need to be aware of different pathologies related to pregnancy-puerperal cycle and their medical treatments, in order to better understand their findings.

8530. Different Parameters for Evaluating Otoacoustic Emissions Suppression In Children

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Introduction: Otoacoustic emissions suppression is a promising tool for assessing the auditory efferent inhibitory effect on cochlear functioning, which may improve the ability to understand speech in demanding situations and protect the cochlea against intense noises. However, there is a gap between the acquired scientific knowledge and its application in clinical practice due to a few methodological issues. White noise at the intensity of 60dB SPL is the most common contralateral stimulus used to evaluate the inhibitory effect, however, this stimulus might trigger the acoustic reflex and thus interfere with the suppression response of the Otoacoustic emissions. Therefore, we will also use 50dB SPL noise as another evaluation parameter. **Purpose:** To study Transient Otoacoustic Emission Suppression (TEOAE) comparing the signal-to-noise ratios 0dB and +10dB. **Method:** Eleven normal-hearing children aged 8-12years were evaluated. The Transient Otoacoustic Emission was collected with linear clicks at 60dB SPL. Suppression investigation was performed with contralateral white noise at 60 and 50dB SPL. **Results:** There was no significant difference between the magnitude of the inhibitory effect obtained with contralateral noise at 60 and 50dB SPL (signal-to-noise ratios of 0 and +10dB, respectively). **Conclusion:** Otoacoustic emissions suppression was similar to both intensities of contralateral noise, suggesting that 50dB SPL might be a reliable noise intensity for assessing the efferent inhibitory effect in humans.

Keywords: hearing; otoacoustic emissions; suppression; efferent pathways.

8532. Effects of Vocal Therapy Associated with Surface Electromyographic Biofeedback in Behavioral Dysphonia: Randomized Controlled Double-Blind Clinical Trial

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Introduction: Behavioral dysphonia affects laryngeal and cervical muscles during phonation. There are few investigations about vocal therapies to explore self-perception and participation of the body musculature in the dysphonia. In order to improve these issues, the electromyographic biofeedback can be used. **Objectives:** To analyze the effects of vocal therapy associated with surface electromyographic biofeedback in women with behavioral dysphonia. **Methods:** This is a randomized controlled double-blind clinical trial (Ethic's Committee:1.235.463; Clinical Trials: RBR-9C73CM). Twenty-two adult women with behavioral dysphonia were randomly divided into two groups: Experimental Group (EG) - vocal therapy associated with electromyographic biofeedback in sternocleidomastoid and suprahyoid muscles (Biotrainer® software); Placebo Group (GP) - vocal therapy associated with placebo electromyographic biofeedback (Miograph® software). There was applied the Vocal Therapy Program. Both groups completed eight sessions, twice a week, 30 minutes each session. The assessments were performed before, after, one and three months after the therapy: vocal evaluation, surface electromyographic, vocal self-assessment, vocal symptoms, musculoskeletal pain and voice-related quality of life. The statistical tests applied were: Friedman Test, Mann-Whitney Test, Pearson's Chi-Squared Test, Paired T-Test and Repeated Measures ANOVA ($p < 0.05$). **Results:** There was improvement in vocal quality, vocal symptoms, quality of life and muscular electrical activity during rest, independent of the group intervention. The improvement in muscle electrical activity during phonatory tasks and body musculoskeletal pain occurred only in the EG. **Conclusion:** Biofeedback was more effective than traditional therapy on behavioral and muscular aspects of the laryngeal and cervical muscles in women with behavioral dysphonia.

8548. Vocal Fundamental Frequency Measure of Dysphonic Teachers with or without Laryngeal Affection: Partial Results

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Introduction: Teachers present several incorrect vocal uses that can affect the voice, causing complaints and even laryngeal infections. The fundamental vocal frequency could be affected by it. **Objective:** It is to verify the vocal frequency of the teachers with or without laryngeal infections that present complaints. **Methodology:** It is a transversal, quantitative and retrospective study; the Ethics committee on Human Research (23081.016945/2010-76) previously approved it. The data selection criteria were: to be a teacher, to present vocal complaints, laryngeal examination, no hearing loss or changes in the stomatognathic system, non-smoker, non-alcoholic, no previous neurological, endocrine, psychiatric, gastric or chronic respiratory diseases. The data was divided in two groups: the first without laryngeal affection (n=19) and the second with laryngeal affection(n=13). The sustained vowel utterance /a/ was collected in usual pitch and loudness at maximum phonation time using a professional digital recorder. It was used the vowel /a:/ shortest time, edited among all the subjects excluding the vocal attack and the final utterance. It results in an analysis window of 4 s. Through Multi Dimensional Voice Program Advanced of Kay

Pentax® the fundamental frequency was extracted from both groups. The regular female voice frequency is between 150 to 250 Hz. **Results:** The average vocal frequency was= 195,322 in the first group and it was Hz= 198,722 Hz in the second group. **Conclusion:** The fundamental frequency of voice in both groups presented within normality. The complaints and laryngeal affections seem not change the fundamental frequency.

Keywords: vocal complaints, fundamental frequency, voice, larynx.

8559. Evaluation of Auditory Training Program in Children Undergone Placement of Ventilation Tubes

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Otitis media is one of the most common infections during childhood, and can damage the processing of auditory information. Auditory training is an intervention based on neuroplasticity that aims to reorganize the neural substrate and improve altered auditory abilities. This study aimed to evaluate the efficacy of auditory training in children and adolescents with history of otitis media. The sample was composed of 38 subjects, divided into three groups: auditory training group - formed by 20 children who underwent an auditory training program; visual training group- 14 children who performed a visual training program; and non-intervention group - formed by four subjects who did not undergo any type of stimulation. All children performed peripheral auditory evaluation and auditory processing battery. Auditory training and visual training programs were conducted with activities from a website. After the auditory training sessions, there was a statistically significant difference in performance for all behavioral tests (<0.001). In visual training group, there was no significant difference in the performance of behavioral tests and percentage of subjects within normal values. Regarding to the non-intervention group, the descriptive analysis of the average percentage of correct answers in the behavioral evaluation revealed a slight improvement in dichotic digits and synthetic sentence identification with ipsilateral competing message tests, and worse reassessment performance in frequency pattern and gaps in noise tests. Auditory training was effective as an intervention strategy to re-adjust the altered auditory skills in subjects with a history of otitis media.

Keywords: otitis media, child, auditory perception.

8594. Neonatal Hearing Screening in Children Exposed to the Zika Virus during Pregnancy

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Introduction: The Zika virus, identified in Brazil in 2015, infected a considerable number of people, which led the country to declare an epidemic in the same year. The National Health Service developed protocols in 2015 and 2016 to assist infected children. The guidelines recommended neonatal hearing screening among other orientations. **Objective:** To verify the occurrence of "fail" in the neonatal hearing screening. **Methods:** A transversal descriptive study, undertaken at the Fernandes Figueira Institute, approved by the ethics committee (526756616000005269). We included in the study 45 children exposed to the virus who presented no risk indicators for hearing impairment (Health Secretary/ National Health Service 2013). Twelve exposed children were excluded as they presented risk indicators for hearing impairment. The expo-

sure to the virus was confirmed when the laboratory analysis result was positive to the polymerase chain reaction, for either mother or baby. We applied the Transient Evoked Otoacoustic Emissions test and the Brainstem Auditory Evoked Potentials test. The neonatal hearing screening was considered altered when the "fail" occurred in at least one of the exams, in at least one ear. **Results:** We ascertained an occurrence of 6.66% fail in the Otoacoustic Emissions test, and an occurrence of 6.66% fail in the Evoked Potentials test. When the two procedures were jointly analyzed, we found 93.33 % pass and 6.66% fail. **Conclusion:** The neonatal hearing screening is necessary for infants exposed to the Zika virus, indicating the need for complementary tests to reach an earlier diagnosis.

Keywords: newborn, hearing loss, Zika virus.

8596. Frequency Following Response(FFR) and Auditory Brainstem Response in patients with Traumatic Brain Injury

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Introduction: Traumatic brain injury entails damage to the peripheral and central auditory pathways, affecting the sensory and cognitive processing of the patient, which can impact their quality of life. **Objective:** To assess the integrity of the auditory pathway in individuals with traumatic brain injury. **Methods:** We assessed seven individuals with an average age of 40 years, who suffered mild traumatic brain injury. The individuals were submitted to electrophysiological assessment of auditory processing. We performed auditory evoked potential of the brainstem with click stimulus at 80dBHL and the Frequency Following Response with complex stimulus-syllable/from/ to 80dBSPL, displayed monaurally. **Results:** We observed a delay in waves I and III latencies (42.9%) and in wave V bilaterally (28.6%). I and III waves, and interpeak intervals were within normal patterns in both ears in 14.3% of the individuals. In the Frequency Following Response, we observed delay in latencies of waves V, A, D, E, F, O, with a higher occurrence for wave A (71.4%) in the right ear and wave F (71.4%) in the left ear. Three individuals showed absence of waves D, E, O or F. **Conclusion:** We observed an alteration in the electrophysiological assessment for both click stimulus and complex stimulus, with a higher occurrence of the changes for the complex stimulus. These findings show that the responses obtained reflect different neural processes, with greater damage to those related to the neural coding of speech sounds in individuals with brain injury.

Keywords: electrophysiology, hearing, speech perception, cognition, brain injuries.

8605. The Influence of Auditory Feedback and Vocal Rehabilitation on Prelingual Hearing Impaired Individuals Post Cochlear Implant

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Introduction: Auditory alterations may interfere with building adjustments or with the proper use of the structures involved in speech and voice production due to the lack of auditory feedback. **Objectives:** To verify changes in the perceptual and acoustic vocal parameters in prelingual hearing impaired adults with cochlear implants, after vocal rehabilitation. **Methods:** 20 literate adults with profound prelingual sensorineural hearing loss participated. individuals were implanted late, were fluent users of oral language, presented normal results in laryngoscopy and were distributed into two groups: Group 1 (study) and 2 (control) both with ten patients each and matching mean age. Patients from Group

1 underwent a protocol of vocal therapy, 12 individual sessions comprising vocal exercises and plosive consonants production training. Group 2 only underwent vocal recordings. Auditory-perceptual evaluation of voices was performed by three judges and the acoustical analysis used the PRAAT. **Results:** A statistically significant reduction in the overall vocal degree, in the vocal instability, in the degree of resonance, in the modification of variability values of fundamental frequency and statistically significant improvement in the production of [b] and [d] was observed in Group 1. Group 2 did not present significant changes in any of the analyzed parameters. **Conclusion:** The cochlear implanted adults submitted to vocal rehabilitation presented changes in the auditory-perceptual and acoustic parameters, with reduction of the overall voice severity, vocal instability, degree of resonance change, in variability values of fundamental frequency and in VOT of consonants [b] and [d] after vocal intervention.

Keywords: voice, cochlear implantation, rehabilitation.

8613. Cochlear Implant Candidacy in Children: Contribution of Speech Intelligibility Index

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Introduction: The speech intelligibility index-SII is a measure that best relates to for amplified speech sounds and can be considered one of the predictors of language outcomes. The response of this index at entry levels of 65 dB SPL has been used as a tool in cochlear implants candidacy in children. **Objective:** To evaluate the relationship between vocabulary performance and audibility for speech. **Method:** 65 children between 6 and 17 years of age, hearing aid users, were evaluated in a public clinic in São Paulo, regarding the performance of receptive vocabulary (Peabody Picture Vocabulary Test - 4) and its relation with audibility measured by the speech intelligibility index in the 65 and 55 dB SPL inputs (respectively: intensity of conversational speech and at a distance of two meters). **Results:** Audibility tends to be higher in the group with superior vocabulary performance. There was no significant difference between the audibility distributions in the 65 dB SPL input. However, there was a significant difference between the audibility distributions measured in the input of 55 dB SPL. **Conclusion:** Speech intelligibility index measured at 55 dB SPL, related to incidental hearing, was a better indicator of disadvantage in vocabulary tests and may have a greater sensitivity as cochlear implant criteria. Many children perform well on conversational levels, but when the distance from the sound source increases incidental learning of new vocabulary is compromised. The findings of this study suggest the use SII measured at 55 dB SPL for cochlear implant candidacy in pediatric borderline cases.

8615. Perception of Overall Severity of Voice Deviation in Synthesized Voices: Predictive Factors

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Introduction: The synthesized voices are an excellent strategy for training auditory-perceptual analysis of voice quality and may improve the clinical performance in this type of evaluation. **Objective:** To determine which parameters used in the production of synthesized voices are predictors of overall severity of voice deviation. **Method:** 871 synthesized /É/ vowel samples of both genders, with deviations of roughness,

breathiness, and tension were generated by SimuVox and submitted to perceptual analysis. The severity of vocal deviation using a 100-point visual analog scale (VAS) was identified by three speech-language pathologists. Nine parameters used by the synthesizer to produce the signals were analyzed: Jitter%, open quotient, vocal fold stiffness, vocal fold separation, vocal fold stiffness asymmetry, subglottal pressure, wow size, tremor size, and pulsatile noise amplitude. Beta linear regression analysis was used to estimate the predictor parameters of overall severity. **Results:** Four parameters were selected as predictors of severity of voice deviation. The Jitter %, tremor size, subglottal pressure and open quotient exerted a positive effect on the perception of the severity of voice deviation. The model presented good adequacy, being able to explain 75% (pseudo-R² = 0,75) of the variability of overall severity of voice deviation. The model presented good adequacy, being able to explain 75% (pseudo-R² = 0,75) of the variability of overall severity of voice deviation. **Conclusion:** Jitter %, tremor size, subglottal pressure and open quotient parameters are the main predictors of the perception of overall severity of voice deviation in synthesized signals generated by SimuVox.

8616. Study of the Impact of Deafness In Sports Practice

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Introduction: The practice of sports is important to maintaining a healthy life. The physical exercises practiced since childhood provide the individual with incredible benefits to the body, mind and in addition to contributing to socialization. **Objectives:** The objective of this research was to analyze the impact of deafness on sports practice, and the benefits that the cochlear implant and/or hearing aid can contribute to its practice. **Methods:** A questionnaire was applied in two groups, the first with 20 hearing impaired athletes with cochlear implants and/or hearing aids and the second with 20 hearing impaired non users. The questionnaire was composed of 25 semi-structured questions about the impact of deafness on sports practice. **Results:** The athletes of both groups reported having no difficulty in performing sports due to deafness. The athletes of both groups reported having no difficulty in performing sports due to deafness. Most users of cochlear implants and hearing aids avoid using their instruments while playing sports so as not to break them, using lip reading for communication. No equilibrium problem was reported. Communication between athletes was facilitated in groups where all were users of Libras. **Conclusion:** Hearing impairment is not an obstacle to the practice of sports, athletes adapt to their performance, even without the use of the cochlear implant and/or hearing aid.

Keywords: sports, deafness, hearing aid, cochlear implant.

8659. Vocal Auto Perception Before and After the Exercise of Sound Blowing in the Straw in a Group of Teachers

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Introduction: Vocal self-perception has been valued in clinical practice because it considers the subjects perspective in relation to the impact that his or her voice can produce on the listeners. **Objective:** To evaluate vocal self - perception before and after exercise of the sonorized blow in the straw in a group of teachers. **Method:** A prospective study, with control group. Forty-one elementary school teachers participated in the study. As inclusion criteria, the following were adopted:

to be a female teacher and to come up to a value of ≥ 5 points in the Voice Disorder Screening Index (ITDV). They were divided experimental group(EG) ($n = 30$) and control group(CG) ($n = 11$) and were submitted to an intervention. The teachers answered the question of self-perception 'what do you think about your voice ?'always before and after the intervanyion. GEperformed the sonorized blowing exercise in the straw for five minutes in eight meetings and the GC had vocal orientation. **Results:** in the comparison between the pre and post intervention parameters in the EG, there was an increase in the amount of responses that considered their voices as good and very good, and fewer responses on the reasonable scale and discrete increasement on the bad scale. There was a statistically significant difference between the pre- and post-experimental group ($p: <0.05$) and there was no statistically significant difference in the control group ($p: > 0.05$). **Conclusion:** the sonorized blowing exercise with the straw favored the internal sensations, increasing the perception about the voice.

8735. Analysis of the Audiological and Electrophysiological Evaluation of a Subject With Aphasia: New Evaluation Perspectives

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Introduction: Wernicke's aphasia compromises oral expression and comprehension and manifests anomia (difficulty in naming objects and repeating words). In these cases, the audiological evaluation is important to understand the receptive speech difficulties and the integrity of the auditory pathway. **Objectives:** To analyze the results of behavioral and electrophysiological evaluation of hearing in a case of Wernicke's aphasia, considering its anomia. **Resumed Report:** Tonal audiometry (air and bone), speech test (correct responses to repetitions and descriptions of words - alternative meaning processes), Mis-match Negativity and Frequency-Following Response- speech were performed. Normal auditory thresholds, speech recognition threshold of 20dB right ear and 5dB left ear, speech recognition percentage index describing the word: 32% (monosyllables) and 52% (disyllables) in the right ear and 44% (monosyllables) and 72% (disyllables) in the left ear. If only repetition was considered, the results would be 8% (monosyllables and disyllables) of the left ear, 12% (monosyllables) and 4% (disyllables) of the right ear. Electrophysiological potentials were present and within normal range. **Conclusion:** When the anomia imposed by aphasia is considered, by means of the alternative meaning processes, it is possible to obtain better thresholds and percentages of correct answers in the speech tests. The normality of the auditory pathway at subcortical and cortical levels can be confirmed by the normal results of the electrophysiological potentials. Therefore, not only the pure tone thresholds but also the thresholds of speech were found, encouraging the use of new means for the accurate evaluation of the aphasic patient.

8741. Speech Recognition in Noise and Temporal Auditory Processing in Unilateral Cochlear Implants

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Introduction: Severe and profound hearing loss generates great losses in speech recognition, even with technological advances in hearing aids and especially in cochlear implants, hearing comprehension in unfavorable acoustic conditions, especially in the presence of competitive noise, is still a challenge even for listeners. The tests of temporal auditory processing

have been studied in the hearing population and constitute an important ability for the understanding of speech. **Objectives:** analyze the performance of unilateral implanted individuals in the tests of temporal auditory processing and verify the relation with the speech recognition in noisy situation. **Methods:** Participated 15 hearing impaired individuals, unilaterally implanted post lingual. For the evaluation, the following tests were used: GIN (gap in noise), RGDT (random gap detection test), PPS (pitch pattern sequence) and sentence recognition in 20-multitalker noise. **Results:** Smaller gap detection thresholds were observed in the GIN test (14.85 ms) than in the RGDT test (21.28 ms). The mean PPS test was 29.6%. The statistical analysis shows no relation of association between sentence recognition in noise, PPS, GIN and RGDT. There is evidence of (negative) association of significance between the PPS and RGDT variables. **Conclusion:** Individuals who presented better performance in the RGDT test, with lower gap detection thresholds presented higher percentage indices in PPS. There was difficulty in performing the GIN and RGDT tests only with the formal instruction of the test authors.

Keywords: speech in noise, auditory processing, co-clear implants.

8750. Brainstem Auditory Evoked Potential with Click and iChirp Stimuli in Adults with Normal Hearing

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Introduction: Studies demonstrate advantages in the use of the iChirp stimulus in relation to the click on determination of electrophysiological thresholds, because it provides a greater amplitude of the wave V, especially at lower intensities. **Objective:** To compare the results obtained on Brainstem Auditory Evoked Potential using the click and iChirp broadband stimuli in adults with normal hearing. **Methods:** Cross-sectional study with 20 ears of individuals between 18 and 50 years old. The Brainstem Auditory Evoked Potential was conducted using both click and iChirp broadband stimuli in initial intensity of 80dBnHL, decreasing until electrophysiological thresholds. The data analysis was performed by the Shapiro-Wilk tests and t -Student test for paired data, with a significance level of 5%. **Results:** The absolute latencies of waves I, III and V for the iChirp stimulus were significantly increased in relation to the click stimulus at the intensity of 80dBnHL. It should be noted that at this intensity with the iChirp stimulus, the 20 ears had a V wave, 19 ears had a wave III, and only 4 ears presented a wave I. The iChirp stimulus had significantly larger amplitudes only at the intensity of 40dBnHL. Electrophysiological thresholds were similar for both stimuli. **Conclusion:** The iChirp stimulus can be used in clinical practice as reliable as the click on the determination of electrophysiological thresholds, but it can not be used for differential audiologic diagnosis since waves I and III were not observed in all ears evaluated at high intensity.

Keywords: evoked potentials; electrophysiology; hearing.

8762. Vocal, Sociodemographic and Quality of Life Aspects in Patients Undergoing Treatment for Head and Neck Cancer

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Introduction: Voice and swallowing disorders due to head and neck tumors may have a negative impact on patients' quality of life and require speech therapy. Objective. Analysis of the quality of life, sociodemographic and clinical charac-

teristics of patients being treated or treated by tumors of the head and neck. **Methods:** The medical records of all the patients evaluated during the one year period in a speech and language pathology outpatient clinic in the area of head and neck tumors of a tertiary hospital were analyzed. Data from the screening and speech-language anamnesis, vocal aspects and quality of life indices were considered. **Results:** Predominant women (78.5%) with mean age of 57 years. The complaint of dysphonia was the most frequent (88%), followed by the complaint of dysphagia (54%). The vocal alterations were of moderate degree, with presence of roughness, decreased pitch and decreased intensity, affecting the quality of life. Complaint of dysphonia associated with complaints of dysphagia affected quality of life in emotional aspects more than isolated vocal complaints. The clinical evaluation of swallowing has shown that small adjustments in the consistency of the group diet are necessary. **Conclusions:** Head and neck cancer and its treatment often damage muscles essential for swallowing and phonation efficiency, as well as causing changes in the mucosa and musculature of the tissues, and may alter the physiology of these functions. The population characterization in the clinical, epidemiological and quality aspects of life allows the understanding of demand by optimizing therapeutic care.

8770. Spectral Overlays Improve Reading Rate: Relation between visual and Auditory Temporal Processing

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Introduction: Spectral overlays, colored transparencies placed upon texts, are used to improve reading performance in readers with processing deficits in the magnocellular visual system. This neurological visual deficit could be associated with a magnocellular auditory temporal processing deficit. **Objectives:** study the relation between visual and auditory processing deficits. **Methods:** 68 children (53% boys, 9–12 years, mean age = 11.2 years) from the 5th and 6th grade of a State Elementary School, Jacareí city, SP, Brazil. Rate of Reading Test (RRT, Portuguese version) evaluated the effects of spectral overlays on reading rate. The Melodic Duration Pattern Test (TPD) assessed auditory temporal ordering (ability to correctly discriminate the order/sequence of occurrence of a melodic acoustic signal). **Results:** The auditory temporal ordering was normal for 62% of the sample and altered for 38%. Immediate improvement of at least ≥5% in the reading rate, with the use of the spectral overlays, was observed in both groups (TPD Normal = 29%, Altered = 58%). Children with altered TDP are three times more likely to improve reading rate with the overlays, when compared to peers with normal TPD (Odds Ratio = 3.41; CI = 1.22 – 9.51; chi-square = 5.69; p = 0.017). **Conclusion:** More children with altered Duration Pattern Test improved reading rate with the use of spectral overlays. Therefore children with altered auditory temporal ordering processing probably also have a coexisting deficit in visual processing. Both RRT and TPD demonstrated to be an important tool to evaluate alterations in the visual and auditory processing.

8808. Identifying the Effects of Hearing In Musicians

Filarmonica Orchestra
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Unicesumar

Hearing loss induced by high sound pressure level (PAINEPS) is one of the most common occupational diseases currently in Brazil, but is preventable. The type and the sever-

ity of the damage depends on the sound pressure level (SPL), time and frequency of exposure. The consequences of hearing damage arise auditory symptoms such as: tingling, difficulty in understanding speech and difficulty of sound localization. Thus, the overall objective was to identify the effects of a hearing in musicians Philharmonic Orchestra. To carry out the survey was a questionnaire adapted to 14 questions in 49 musicians of the Philharmonic Orchestra located in a city in northern Paraná. By the findings mentioned it was verified that 88% of subjects reported not having trouble listening, but 45% of musicians had hearing complaints and with the ear fullness cited for eleven (20%), dizziness for ten (18%) and ear pain for four (7%). Regarding the buzz thirty-eight (59%) reported feeling it after some exposure to NPS, only two of these subjects had longer than 24 hours. Based on the results found in this study, it can be stated the importance of continuing studies related to the hearing of the musicians as well as conducting periodic monitoring of hearing these professionals, deepening for possible guidelines and create promotion and health prevention measures hearing, in order to enable greater professional performance time and well-being of musicians.

8853. Early Speech-Language Intervention in Thyroidectomies

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Introduction: Thyroid cancer is the most common endocrine neoplasia and thyroidectomy is the indicated surgical treatment. Due to the complaints of dysphonia and dysphagia it is fundamental to understand recovery mechanisms, spontaneous or through speech-language intervention. **Objective:** To analyze laryngological, vocal and quality of life data considering the time elapsed between surgery and speech-language assessment. **Methods:** Eighteen patients after total thyroidectomy performed videolaryngoscopy, auditory-perceptual vocal evaluation and completed questionnaires on quality of life; were divided into two groups regarding the time between surgery and speech and language assessment (GA = up to three months, GB = over three months); and were compared in relation to the evaluation data. **Results:** Seventeen women and one man, aged between 16 and 73 years (mean 52.89 years) participated; seven patients had papilliferous carcinoma and 11 nodular goiter; eight reported dysphonia and ten dysphonia and dysphagia. The majority had unilateral vocal fold immobility; signs of gastroesophageal reflux were more present in GB, as well as the most impaired quality of life; there was no difference between the groups regarding the general degree of dysphonia, roughness, breathiness, strain, asthenia and loudness, but pitch was more altered in GA. **Conclusion:** In the group evaluated later, a less altered pitch was found, which could indicate a spontaneous improvement of this aspect, although there were mild to moderate vocal alterations in other perceptual-auditory aspects, a greater presence of reflux and a greater negative impact on quality of life than would justify the earlier speech therapy intervention.

8864. The Severity of Neurological Injury In Stroke and the Swallowing Function

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Introduction: Stroke is the main cause of neurological disability. The National Institutes of Health Stroke Scale (NIHSS) scale is a validated neurological assessment tool. The dys-

phagia is a prevalent stroke outcome and it can lead to complications such as dehydration, malnutrition and aspiration pneumonia. However, the NIHSS scale does not consider the swallowing impairment to grade stroke severity. **Objective:** to verify the relation between the NIHSS scale and swallowing function. **Method:** Our study included post-stroke patients admitted to speech pathologist clinical assessment, older than 18 years. It was placed in a public hospital in Salvador-BA, from October 2017 to January 2018. Data was collected in the medical records and in the Speech Pathology Hospital Service's database. The swallowing evaluation was based on the Bed-Side Speech-Pathology Clinical Assessment Protocol. **Results:** 30 patients (66,7% male), mean age \pm 60 years. The mild and the severe dysphagia were identified in 3 patients, each, while only 1 individual had moderate dysphagia. Although, the median of NIHSS score were lower for individuals classified with normal (5) and functional swallowing (6) compared to mild (16) and severe (14) dysphagia, the relation between NIHSS score and swallowing diagnosis was not statistically significant ($p=0,152$). Nevertheless, when the swallowing variable were dichotomized, within the normal (6) and impaired swallowing grouping (14), the swallowing diagnosis showed statistically significant relation with the NIHSS score ($p= 0,01$). **Conclusion:** the NIHSS scale does not represent a predictor of swallowing grading, yet it may represents a supporting tool to indicate manifestation of dysphagia.

8872. Phrases In Noise Test (PINT) Brazil: Effectiveness of the test in Different Groups of Children with Hearing Loss

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Introduction: PINT Brazil is effective to evaluate the perception of speech in noise in children from four years of age with hearing loss (HL) using cochlear implants (CI) and Frequency Modulation System (FM). **Objectives:** The aim of this study was to verify the effectiveness of the PINT Brazil in other groups of children with different types of HL and users of hearing aids (HA). **Methods:** This is a descriptive research, cross-sectional with quantitative approach. The first group consisted of 13 children with moderate to severe sensorineural HL, adapted with of hearing aids, and the second group consisted of five children diagnosed with auditory neuropathy spectrum disorder (ANSD) adapted with HA and/ or CI, all users of the FM System. Tukey's Test T was used to compare situations: only with HA and / or CI and FM System. Resultse **Conclusion:** The obtained results showed that a significant difference and advantage with the FM System. The PINT Brazil test was effective in both groups to evaluate speech perception in noise. Concluded that the PINT Brazil test can be used to improve protocols for indication, fitting and monitoring the use of the FM System in these children.

Keywords: speech perception, noise, signal-to-noise ratio, speech discrimination tests, hearing tests, child.

8879. Adapted Compressed Speech Test: Reference Values in Children

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Introduction: The Compressed Speech Test is a procedure for evaluating the auditory closure ability, belonging

to the evaluation of the Central Auditory Processing. The test is originally composed of two lists of 50 compressed words in 60% of its speed. Considering the extension of the application, Folgearini et. al. (2016) adapted the instrument, to the Adapted Compressed Speech Test, with two lists of 25 words, selected from the original test and phonetical balancing. However, the test still do not have the normality values for children. **Objective:** To identify reference values to the Adapted Compressed Speech Test in children aged from 7 to 11 years and 11 months. **Method:** It were used as eligibility criteria: age between 7 and 11 years and 11 months, normal auditory thresholds bilaterally, tympanometric curve type "A", normality in the Dichotic Digits Test (DDT) – used for screening, absence of evident neurological and/or psychiatric impairment, speech disorder or learning difficulties. Basic audiological evaluation, Dichotic Digits Test, Randon Gap Detection Test and Adapted Compressed Speech Test were performed. **Results:** The study is in progress, but until the present date, the sample was composed of 11 subjects, with a mean age of 8.4 years, six of them are female and five are male. The mean scores were 79% in the right ear and 85% in the left ear, suggesting that lower values may indicate risk in the auditory closure ability. **Conclusion:** It was possible to find reference values to the children's age group.

Keywords: audiology; child; hearing.

8880. Analysis of Difference Between the Behavioral Hearing Thresholds and the Results Obtained Through the Auditory Steady State Response (Assr) in Young Adults

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Introduction: Hearing is the sense which allows us to receive auditory information, therefore it facilitates efficient social interaction. Any loss in this function damages the communicative process, so it must be diagnosed and treated as soon as possible. Nowadays, both objective and subjective hearing tests are available. Pure Tone Audiometry (PTA) is the most widely used subjective way to evaluate this sense. However, for those who are unable to respond subjectively, we can try objective techniques like the Auditory Steady State Response (ASSR). Both will search for patients' minimum hearing responses, applying different approaches. **Objective:** To evaluate normal-hearing young adults with no hearing complaints by analyzing their hearing sensibility and, based on statistical indicators, calculate the average of the differences between the results obtained in both procedures in order to verify the existence of correlation between them. **Method:** We studied the hearing responses from 30 normal-hearing subjects through PTA and ASSR at 0.5/1/2/4kHz. **Results:** When we calculated the average of the differences between the tested frequencies, they ranged from 10,47 to 18,22 with no strong correlation, except at 1000 Hz whose results were uncertain. **Conclusion:** We concluded that the average of the differences of hearing values obtained in PTA and ASSR were reasonably elevated mainly at 500 Hz, and at a lower level at 4000 Hz. Although the scores obtained in both tests had not shown strong correlation, they were slightly better at 500 Hz. The results for 1000 Hz are inconclusive regarding any existing correlation between these two tests.

8884. Singing Voice Tessitura: Comparison Between Dysphonic Teachers with and without Laryngeal Disorders - Preliminary Results

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Introduction: The singing voice tessitura corresponds to the number of musical notes produced with vocal quality, from the lowest to the highest frequency. It reveals the vocal expressiveness and plasticity. **Objective:** To verify and compare the singing voice tessitura of dysphonic teachers with and without laryngeal disorders (LD). **Method:** Cross-sectional, quantitative and retrospective study with survey in a research database approved by the Research Ethics Committee with Human Beings of UFSM (23081.016945/2010-76). Selection criteria of the database records: being a teacher; presence of vocal complaints; not presenting hearing loss and/or alterations in the stomatognathic system; non-smokers or

alcoholics; no history of neurological, endocrinological, psychiatric, gastric, or respiratory diseases; out of the menstrual period, premenstrual or pregnancy, influenza or respiratory allergy in the evaluation. Individuals were asked to perform a glissando toward the low frequencies of the vocal tessitura sustaining the lower tone they could achieve with musical quality and effortlessly and later, the same towards the high frequencies. These emissions were analyzed acoustically by the Multi Dimensional Voice Program Advanced from Kay Pentax®. The records were divided into: non-LD group ($n = 24$) and LD group ($n = 18$). **Results:** Non-LD group: low=148.1 Hz; high=495.5 Hz; LD group: low=137.9 Hz; high: 535.01 Hz. **Conclusion:** The dysphonic teachers with LD presented a greater contrast of the singing voice, contrary to what was expected, since the LD carriers usually worsened vocal performance. This suggests that, even in the presence of LD, a voice limiter, the teachers still have vocal flexibility.

Keywords: voice; larynx; phonation.

Speech, Language and Hearing Sciences

E-Posters

8034. Clinical Evaluation of the Bicros and Conventional System in a Medium and High Complexity Hearing Center
 Ariane Figueiredo dos Santos Gonçalves, Maryana do Nascimento Chediak Coelho, Caroline Rondina, Tatiana Ferreira Brandão, Isabella Casella de Sousa
Cefac

Objective: to present satisfaction in the use of the BICROS system in relation to the conventional system. **Methods:** It was performed in the area of auditory adaptation of the CEAL, with 30 individuals, where after passing the otorhinolaryngological evaluation and audiometry, the patient underwent a selection of the conventional apparatus and followed by the selection of the BICROS system. **Results:** most of the collected data indicate positive responses for the use of both systems, represented in twelve participants, equivalent to 40% of the total. For the individual comparison between the Bicros and Conventional system, there was no preference dominance, showing 30% of the results for each system. There were no participants who did not benefit from both systems. **Conclusion:** it was concluded that the use of the BICROS hearing aid in relation to the conventional device in patients attended at CEAL, were not significant in relation to user satisfaction, where most would use both systems.

8037. Mismatch Negativity in Children and Adolescents with Diagnosis of Stroke
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Introduction: The Stroke in the childhood can cause damage to the skills in the central auditory processing disorder. The Mismatch Negativity (MMN) it is a potential instrument for evaluating this population, since it is a quick and objective examination. **Objectives:** To Analyze the answers of MMN in children and adolescents with diagnosis of Stroke and compare with control group. **Methods:** Transversal and comparative type study. The sample consisted of 72 children and adolescents, divided into a study group (with Stroke) and control group. To perform the electrophysiological procedure MMN, the electrodes were fixed in Fz (active electrode), M1 and M2 (reference electrodes) and front (earth electrode) positions. The intensity used to evoke the potential was 80 dBNA, the frequent stimulus used was 1.000 Hz and the rare stimulus was 2.000 Hz. **Results:** In the comparative analysis between right ear and left ear of the stroke group, no statistically significant difference was found for latency and amplitude values. Similary, no differences in latency and amplitude were found for any of the ears in relation to the female and male sex. The latency values of MMN were increased in the study group of children and adolescents with Stroke. There was a statistically significant difference in latency values in the comparison between the control and study groups. **Conclusion:** Children and adolescents affected by stroke present increased latency responses in the evaluation of MMN when compared to the control group, indicating alterations in central auditory processing skills.

Keywords: stroke; evoked potentials, auditory; electrophysiology; auditory perception; children.

8040. Comparison of the Internal Noise Level in Fixed and Mobile Cabins Used in Audiometric Tests in Paraná and Santa Catarina

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Crefono3

Introduction: The acoustic cabin, the audiometer, phones and bone vibrators used in audiology evaluation must be assessed periodically in order to maintain the quality of the audiometric exam and to avoid the noise from interfering in the data collection thus generating inaccurate reports. **Objective:** The objective was to assess and compare the quality of noise environment in fixed and mobile audiometric cabins used in the region belonging to CREFONO 3 (the Third Regional Council of Speech Therapists), in Paraná and Santa Catarina - Brazil, regarding ISO 8253-1. Materials and **Methods:** A partnership was established between the Auditory Perception Center of Universidade Tuiuti do Paraná and CREFONO 3, and the analysis of the Ethics Committee was excused since this does not involve procedures with human or animal beings. Data collected from CREFONO 3 were assessed and the sample consisted of 50 fixed and 25 mobile cabins. The device used for measuring sound pressure was from Brüel & Kjaer, model 2150, and the method used was a direct measurement. **Results:** The study showed that 11 fixed (22%) and 19 mobile cabins (76%) failed the assessment, with Lmax values higher than the ones allowed by ISO 8253-1 in at least one of the evaluated frequencies. Statistical analysis revealed $p>5$, with no significant difference among the means for the results of all cabins tested. **Conclusion:** Fixed cabins were evaluated as more efficient in the quality of noise environment necessary for the audiology evaluation than mobile cabins.

8041. Access to Hearing Health Service In Curitiba-PR for the Elderly with Hearing Loss and Tinnitus

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UTP

Introduction: Access to health services and the degree of user satisfaction with such services is an important aspect within the Unified Health System because the information provided by these services can establish a more participatory practice and help evaluate service providers, all in order to improve the quality of care. In addition, access to health care is considered the right of all Brazilians, which then makes this topic, involving social, political, economic and technical organizational. **Objective:** To determine the incidence of complaints of hearing loss and tinnitus in a group of seniors and their access to hearing health services in Curitiba. **Method:** 578 elderly, attending general practice clinic of two public hospitals in the city. Three questionnaires were applied: for user identification, to check for hearing loss/tinnitus and on access to hearing health services. **Results:** Of the 578 subjects, 187 (31%) had hearing complaints and 112 (20%) had tinnitus; of these, 72% have never had an audiological evaluation, 12% received treatment for tinnitus without success, 16% reported having hearing aids, 14% had hearing aid devices managed by SUS; 76% of the sample showed the desire to carry out an assessment and be awarded hearing aids; 37% did not know where to seek help. **Conclusion:** The number of individuals with hearing complaints in the studied group is significant, as is the number of people with hearing complaints such as tinnitus who have never had a hearing examination. The access of people to public programs is deficient in this group.

8044. The Impact of Vocal Warm-Ups and Cool Down Exercises and the Perception of Vocal Disadvantage In Amateur Religious Singers

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Introduction: the Vocal Warm-up and Vocal Cool Down exercises are, respectively, fundamental for a good improvement in the vocal quality and speech-dialing adjustments of the voice. **Objectives:** the objective of this study was to evaluate the voice and perception of the vocal disadvantage after the Vocal Warm-Up and Vocal Cool Down exercises, in religious amateur singers. **Methods:** this is an analytical-descriptive and cross-sectional study conducted with female individuals, over 18 years of age and who have never performed speech-language therapy. The participants were evaluated using the Modern Singing Handicap Index protocol, as well as vocal quality in 4 moments: before the Warm-up Exercises, after the Cool Down Exercises, after the Choir Rehearsal and after the Cool Down Exercises using the scale of GRBASI. The sample was divided into two groups: G1 - young women 23 years old on average and G2 - young ladies 45 years old on average. **Results:** we observed that after the Vocal Warm-Up, the parameters of instability (G1) and roughness (G2), increase of the Maximum Phonation Time (G1), reduction of the Sudden Vocal Attack (G1 and G2) and negative impact on the Defect Domain (G2) of Modern Singing Handicap Index. **Conclusion:** in conclusion, the Warm-ups and Cool Downs exercises are procedures that benefit the religious amateur singers and all those who use the voice as a working instrument, it helps to maintain the vocal health and prevents wear of the hearing aid.

Keywords: voice quality, dysphonia, voice training.

8054. Hearing Screenings with the Smartphone App uHear: A Systematic Review

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Introduction: The use of smartphone apps has been considered by the World Health Organization among the hearing screening tools in population studies. **Objective:** To summarize findings of hearing screening using the smartphone app uHear. **Data Synthesis:** A systematic review was conducted in the databases Pubmed, Science Direct, Lilacs, Scopus, Web of Science and CINAHL using the descriptors 'screening', 'hearing loss' and 'mobile applications'. All studies published that used uHear as a hearing screening tool were included. Sixty-eight papers were located, from which five were selected for reading of the title and abstract, and deemed eligible for inclusion in the review after the full texts had been read. Investigations had been conducted from 2012 with the maximum of 100 participants, coming from hospitals and clinics, with ages between 15 and 94 years. With the intent to investigate the validity of the app, the assessments were conducted in a quite room or an acoustically treated environment, with supra-aural or in-ear headphones, in a self-applied way. The results were analyzed by ear, comparing the results obtained by uHear with the audiometric ones. The sensitivity and specificity of the screening test with uHear compared to the audiometry varied from 100% to 76.5% and from 90.7% to 64.0%, respectively. Two studies indicated that uHear has greater precision in high frequencies and three indicated that their average thresholds were worse than the audiometric ones. **Conclusion:** The studies suggested that uHear is a fast, easy and accessible hearing screening

tool, however, does not replace standard audiology.

8062. Cross-Cultural Adaptation of the Brazilian version of the protocol The Levels of Speech Usage

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Introduction: The Levels of Speech Usage (LSU) instrument is a self-assessment scale that indicates the current amount of speech during day life perceived by the individual. It can be applied in healthy adults or people with communication disorders in different life situations. **Objective:** To perform the cultural equivalence of the Brazilian version of LSU. **Methods:** First, LSU was translated into Brazilian Portuguese by three English-speaking Speech-Language Pathologists. Next, a back-translation was performed by another Speech-Language Pathologist. A committee of Speech-Language Pathologists compared the translated protocol to its original version and approved it by the name of LSU-Br. The Brazilian Portuguese version also contains five answer options: "restrito", "eventual", "frequente", "intenso", "extremo". One answer must be chosen considering the voice usage of the individual during the last year. The given response will be the protocol result. A total of 31 individuals answered to the LSU-Br. Within the answers there was the option "not applicable" in order to identify any questions misunderstood or not appropriate for the Brazilian culture. **Results:** 31 subjects answered to the protocol. No cultural and conceptual barriers were founded. **Conclusion:** The cultural equivalence of the Brazilian version of The Levels of Speech Usage, the LSU-Br was verified. The LSU for Brazilian Portuguese validation is in progress.

Keywords: voice; speech; protocols; self-assessment; speech language and hearing sciences.

8073. Characterization of Late Posterior Escape In Deglutition

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Introduction: Swallowing is a synergic, sequential and harmonic neuromuscular process, without risk of penetration and aspiration. The deviations of this function constitute dysphagic processes, which are characterized by the alteration of the swallowing process. Based on the findings of functional swallowing videonoscopy examinations performed at a reference hospital in the city of Porto Alegre, an event attracted the attention of members of the team performing the same. The images of many tests, in different patients, signaled the descent of a contrasting residue, after physiologically closing the swallowing of test offerings. **Purpose:** To describe and characterize the posterior escape of food residue in swallowing, considered late by the team and not described in the current literature. **Methods:** Data collection was performed through the analysis of each functional videonoscopy examination of swallowing previously recorded in a specialized outpatient clinic. The images were studied individually by the researcher, in order to identify and select images that confirm the event being studied. **Results:** The event was studied in 45 exams of the 200 analyzed. The exams selected for the study showed late posterior residual leakage in at least one consistency. The higher frequency of late posterior leakage occurred with the liquid. The analysis showed significance of the event under study with the population that presented more

advanced ages of our sample. **Conclusion:** Late posterior leak occurs predominantly in the liquid consistency, in the medial direction in the laryngopharyngeal region, in the older population and without gender predominance.

Keywords: deglutition disorders; deglutition; medical examination; aging.

8074. Swallowing Assessment Protocols: Guiding and Limitations

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Introduction: Dysphagia is a symptom of change in the deglutition process that leads to difficulty in forming or moving the food bolus safely and efficiently. Investigative methods of dysphagia are divided in clinical and instrumental assessment, which require protocols to conduct their practices. **Objectives:** The aim of this study was list information about protocols used by speech therapists responsible for evaluation of swallowing in adults and elderly of a public reference hospital, as well compile guiding items and limitations of these instruments. **Methods:** Qualitative study carried out in a public reference hospital. Six speech therapists, that perform clinical and instrumental evaluation of swallowing in adult and elderly population, answered a questionnaire, which sought information about the protocols used in clinical practice of participants. The obtained data were analyzed by the method of thematic analysis of the content. **Results:** Data were grouped in four thematic categories: Lack-items, Offer limitations, Guiding items and Limitations to instrumental examination. All participants reported using data-dialing protocols in their evaluations, mentioned they have limitations and confirmed the need of creation an assessment protocol molded to the institution demand. **Conclusion:** This study verified the demand of creation a protocol to clinical and instrumental evaluation of swallowing in adults and elderly, customized to the studied hospital. It was identified guiding items and limitations in the instruments used by the participants, which will contribute to the construction of a molded protocol to the institution.

Keywords: deglutition disorders; clinical protocols; evaluation; diagnosis; indicators.

8075. Dysphagia in Moderate Laryngomalacia: Speech-Therapy Intervention

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Introduction: Laryngomalacia is the most common cause of stridor in infants and the most common congenital anomaly of the larynx. Considering that swallowing interrupts breathing, infants with respiratory distress may not be able to safely coordinate sucking, swallowing, and breathing, leading to dysphagia and aspiration. **Objective:** This study aims to describe the signs and symptoms of dysphagia in an infant with moderate laryngomalacia and speech-therapy intervention during neonatal period. **Case presentation:** Term infant (41w1d), birth weight 3830g, suitable for gestational age. Hospitalized with 7 days of life due to choking, cyanosis, and noisy breathing. During the clinical swallowing evaluation was observed an abnormal pattern of nutritive suction, increased

inspiratory stridor, difficulties in maintaining success breastfeeding, saturation decrease, episodes of cyanosis and worsening of respiratory distress. The infant had a nasogastric tube and oxygen nebulization. The intervention consisted of swallowing training and modification of consistency to gradually increase oral volume, favoring better coordination of sucking, swallowing, and breathing functions. The transition time from the nasogastric tube to full oral feeding was 28 days, with a total of 22 interventions. The videofluoroscopy study revealed no penetration/aspiration and gastroesophageal reflux. At 41 days of age, the infant reached full oral feeding without difficulties. **Conclusion:** This study reinforces the importance of speech-therapy intervention for the diagnosis and assertive treatment aimed at the safety of oral feeding.

Keywords: infant, deglutition disorders, laryngomalacia.

8077. Prevalence of Vestibular Disorders in Workers Exposed at Height

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Introduction: The fall of exposed workers is one of the main reasons for serious and fatal work accidents. Work in height is considered any activity performed above 2.00 meters from the lower level, where there is a risk of falling. The risk of falls can be caused by a number of health conditions, such as dizziness, vertigo and other disturbances of balance, which can lead to fatal accidents. **Objective:** To estimate the prevalence of vestibular disorders in workers exposed to height. **Methods:** Quantitative research, Cross-sectional study with data collected from medical records of 279 workers exposed to height. In the medical record, information was collected from the year 2017 on screening protocols with assessment of postural balance and coordination: Romberg, Romberg-Barre, Babinski, Unterberger, Index-Nose and Diadokinesia, and Vestibular Function Test results. **Results:** 96.1% were male, 52.4% were between 31 and 40 years of age, and 63.1% were between 1 and 10 years of job. There were alterations in the balance and coordination screening protocols, 25.5% of the individuals, of these 9% presented alterations in the vestibular test. Chi-square test revealed a significant association between age (41 to 50 years), length of job (21 to 30 years) and vestibular disorders. **Conclusion:** There is a lack of research on this subject and the periodic application of a protocol for screening can guarantee the health and safety of workers exposed to height.

Keywords: occupational groups; height, vestibular function test, cross-sectional studies.

8078. Efferent Pathway Inhibitory Effect in Patients with Turner Syndrome

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Introduction: Turner syndrome is a genetic disorder that affects females and encompasses a large phenotypic variability. However, the study: efferent pathway inhibitor system and Turner syndrome is still unpublished. This effect is related to sound localization ability, discrimination in noise and protection from loud noise. **Objectives:** study the occurrence and magnitude of efferent pathway inhibitor system in

patients with Turner syndrome. **Methods:** This study is part of the "Audiological and Neuropsychological Characteristics" in a cohort of individuals with Turner syndrome accompanied in a University Hospital" (Approval CEP/IPPMG, n. 1864085). Exclusion criteria were: hearing loss; other associated genetic alterations. Included were patients who had karyotype for Turner syndrome, in these Transient Otoacoustic Emissions were applied to contralateral noise, both at 60 decibels, considered inhibitor system equal or larger than 1 decibel. Resultse **Conclusion:** The sample was constituted by 28 individuals (56 ears) aged between 6 and 31 years. The system inhibitor occurred in 24 (42.8%) of the ears, in 17 (70.8%) the effect ranged between 1 and 3 decibels; in 6 (25%) ears there was a variation between 4 and 7 decibels; and in only 1 (4.1%) it was larger or equal to 8 decibels. There were no system inhibitor in 57.2% of the ears. Regarding the magnitude of effect, the amplitude of the responses ranged from 1 to 3 decibels in 70.8%, with mean values of 3 decibels. We suggest new studies about this topic.

Keywords: turner syndrome; efferent pathway inhibitory effect; medial efferent system.

8079. Audiological Characteristics in a Patient with Turner Syndrome: A Case Report

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Introduction: Turner syndrome is a genetic abnormality that affects females, characterized by several chromosomal abnormalities, being monosity the most frequent type. It is known that this syndrome is related to a wide range of anatomical and physiological changes. The hearing function in the Turner syndrome, mainly the central portion is still little explored, which is known to date is that several audiological disorders may be associated with the syndrome. **Objectives:** To present the results obtained in the audiological assessments of a patient with Turner syndrome. **Resumed report:** KLSP; female; 06 years; with the cytogenetic diagnosis of Turner syndrome. In anamnesis and clinical observation have not been verified craniofacial, linguistic changes; school and hearing complaints. In the examination of karyotype was found monosity (X0). In the basic audiological assessment, tonal and vocal hearing thresholds were verified within the normality in both ears, with the presence of ipsi and contralateral acoustic reflex present, except in the frequency of 4000 Hertz bilaterally. Transient Otoacoustic Emissions have submitted responses present in bilaterally, with above 3 decibels amplitude at all frequencies. In search of efferent pathway inhibitory Effect, it has been used contralateral noise and stimulus to 60 decibels, in which was observed bilaterally presence, being 5 decibels in the right ear, and in the left ear 6 decibels. **Conclusion:** On the realized assessments, we verified normality in the peripheral and central auditory system.

Keywords: turner syndrome; efferent pathway inhibitory effect; audiological assessment.

8080. Association of Tinnitus Complaint to Findings in Pure Tone Audiometry In Adults

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Introduction: Tinnitus is a perception of a sound without its being produced by an external source. The presence of tinnitus can suggest an alteration of the auditory system. It's frequently related to ear pathologies, mainly co-

chlear. There is a strong relationship between tinnitus and hearing loss, but it may be present in subjects with normal hearing. Tinnitus is a complex symptom of being studied, one of the main reasons is its diversity of causes, which leads to a heterogeneity of the population affected by it. **Objective:** To verify the association of the complaint of tinnitus to the findings on pure tone audiometry, gender and age. **Methods:** The sample was composed by audiometric tests of subjects attended at an Audiology Service of a philanthropic hospital. Were included exams from subjects that reported tinnitus during the anamnesis. Were excluded exams from subjects who reported bilateral or unspecified tinnitus who had different types of hearing losses between the ears in tonal audiometry. **Results:** The sample consisted of 428 exams. Of all subjects who reported tinnitus, 69.9% had unilateral tinnitus. There was association between tinnitus and type of hearing loss, the most frequent being the sensorineural type, followed by the mixed type. There was an association between tinnitus and age, being more prevalent in subjects between 45 and 59 years old. There was no association of tinnitus with gender or degree of loss. **Conclusion:** There was a significant association between tinnitus complaint and age, as well as between tinnitus complaint and sensorineural hearing loss.

8081. Cervical Vestibular Evoked Myogenic Potential in Adolescents without Otoneurological Complaints

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Introduction: Cervical Vestibular Evoked Myogenic Potential (cVEMP) evaluates the vestibular function from muscular responses resulting from high intensity sound stimulation that activate the saccular macula. The neural responses formed, mediated by a reflex arc of three neurons involving the inner ear, the brainstem and the vestibulospinal pathway, are recorded by surface electromyography. **Objective:** to evaluate and analyze cVEMP responses in adolescents and verify possible associations between latencies and age, ear and sex. **Methods:** A cross-sectional study with 73 adolescents, females and males, aged 12 to 17 years, with normal hearing thresholds and no otoneurological complaints. All of them underwent peripheral auditory evaluation and cVEMP. **Results:** It was observed that the mean latency of P1 and N1, in the age group of 12 to 14 years, was 15,57 ms and 24,26 ms, respectively. In the age group 15 to 17 years P1, the mean of P1 was 14,73 ms and N1 23,98 ms. No statistically significant differences were found in the comparison between latencies, sexes and ears. In the comparison between the age groups, there was an inverse correlation between latencies and age of adolescents. **Conclusion:** It was possible to measure values for latency of P1 and N1 waves in adolescents. In the present study was found, through a negative correlation, a strong association between age and latency; that is, as longer the child's age, is lower the latency of P1 and N1 waves in both ears.

Keywords: adolescents; vestibular evoked myogenic potentials; evoked potentials; vestibular function tests.

8088. Analysis of the Food Progression of Dysphagic Patients in the Phonoaudiology Service of a University Hospital

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Introduction: Swallowing is a complex activity, composed of voluntary and involuntary actions, in order to safely carry liquid and food from the oral cavity to the stomach, providing adequate nutrition and protection of the airways.

Objective: analyzing the food progression of dysphagic patients undergoing phonotherapy. **Method:** a retrospective survey, carried out at the University Hospital of the Federal State of Maranhão, with data collected from January 2016 to July 2017 in the charts, protocols and records of the phono-audiology service. The sample was composed with data from 15 patients using alternative feeding route. For descriptive and inferential analysis, the Chi-square test and Pearson's linear correlation were used through the Stata 14.0 program. **Results:** the mean age of 48 years was found, being 73.3% women. All 15 used a nasoenteral tube. 100% progressed in the Functional Oral Intake Scale after speech therapy, with a mean time of 7 days of therapy, and of sessions 8. An association between time of therapy with the variables "clinical worsening" and diagnosis of "Stroke" and "Hepatic Encephalopathy". While the variables age, sex, specialty and respiratory conditions, didn't present significant correlation. **Conclusion:** there was progression in oral feeding after speech therapy and withdrawal of the alternative feeding route. The clinical worsening, the diagnoses of stroke and hepatic encephalopathy were the factors that interfered the most, extending the time of therapy, which was also associated with the number of sessions.

Keywords: deglutition disorders; speech therapy; food methods.

8092. Correlation between Clinical Signs and Aspiration In Neonates

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Introduction: The recent literature has shown an increase in the swallowing disorder of preterm infants. The many causes of dysphagia in preterm infants include low birth weight, gastroesophageal reflux, neuromuscular disorders, genetic disorders and respiratory infections. Some studies report signs and symptoms of dysphagia, such as a decreased sucking ability, history of cyanosis or apnea, and desaturation or coughing during feeding. **Objectives:** Correlate clinical signs of penetration and aspiration with videofluoroscopic swallowing study findings in preterm infants with suspicious of dysphagia. **Methods:** A total of 29 preterm infants with suspect dysphagia who were referred for videofluoroscopic swallowing study at a secondary university hospital were enrolled in this retrospective study during period 2016 to 2018. Clinical characteristics and videofluoroscopic swallowing study findings were analyzed. **Results:** Mean gestational age was 30 weeks and mean birth weight was 1,100g. The most common reason of referral for videofluoroscopic swallowing study was desaturation, choking and change in cervical auscultation in preterm infants during feeding. Aspiration was observed in 8 infants (27,5%) and change in cervical auscultation and choking were the clinical predictor of aspiration in videofluoroscopic swallowing study. Penetration was observed in 17 infants (58,60 %) and change in cervical auscultation, choking and desaturation were the clinical predictor of penetration in videofluoroscopic swallowing study. **Conclusion:** The present results help describe the symptoms correlated with swallowing disorder and can identify infants who need objective exam, allowing adequate intervention.

Keywords: dysphagia, premature infant, videofluoroscopic swallowing study, aspiration, penetration.

8093. Signs and Symptoms of Laryngopharyngeal Reflux and its Relation to Complaints and Vocal Quality

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Introduction: The relation between dysphonia and laryngopharyngeal reflux (LFR) has been increasingly evident.

Objective: To verify the association between LFR with age, vocal deviation and voice complaints. **Methods:** 97 patients aged 18 to 70 years who referred to the otorhinolaryngology service for voice or reflux complaints of both sexes. Endolaryngeal findings were classified using the Reflux Finding Score (RFS) scale. The vocal complaints were questioned to volunteers and related to examination.

They were subjected to sustained vowel voice recording and linked speech. The perceptual-auditory evaluation was performed by two speech therapists, classifying the general degree of vocal deviation based on the GRBASI scale. The evaluation was by consensus of the answers and the data were submitted to correlation analysis. **Results:** Mean scores on the RFS scale were 6.26. Of the 49 individuals with vocal complaints, 34 were women with a mean age of 44.9 years, with a mean RFS score of 5.5 points, 41.6% of the individuals with a score above 7. Of the volunteers without vocal complaints, 27 were women with a mean age of 41.2 years. The mean of the RFS scores was 6.94, with 61.2% with a score above 7. When correlating age with the RFS scores, a moderate correlation was obtained, with a trend that the higher the age, the higher the findings endolaryngeal reflux. **Conclusion:** There is a relationship between reflux complaint, laryngeal findings and age; the isn't association between LFR signs with vocal disturbance or complaint.

Keywords: dysphonia; gastroesophageal reflux; voice quality; otolaryngology.

8094. Translation and Cross-Cultural Adaptation of the Brazilian version of the Adapted Borg CR10 for Vocal Effort Ratings

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Introduction: Cross-cultural adaptation is essential for use of protocols in other language than originally developed.

Purpose: To develop the cultural and linguistic adaptation of the Brazilian version of the Adapted Borg CR10 for Vocal Effort Ratings. **Methods:** The Adapted Borg CR10 for Vocal Effort Ratings was translated into Portuguese by two Brazilian bilingual SLP, whose translations were compiled into one version and back-translation into English was performed by a third bilingual SLP. After translation and back-translation, the items of translated version were compared with the original instrument and the discrepancies were modified by consensus of a committee composed of three SLP, resulting in the version translated into Brazilian Portuguese entitled "Escala Borg CR10-BR adaptada para esforço vocal".

For cultural equivalence of the Portuguese version, the option "not applicable" was added to the categorical scale and 15 individuals with dysphonia, with otorhinolaryngological medical diagnosis, responded to the instrument after reading the perceptual-auditory evaluation protocol CAPE-V phrases. **Results:** During the process of translation and cultural adaptation, no item was changed and/or eliminated from the questions. The "Escala Borg CR10-BR adaptada para esforço vocal" kept the same structure as the original, with a scale ranging from 0 to 10, with 0 being "no vocal effort at all" and 10 being "maximum vocal effort". **Conclusion:** The Brazilian version of the Adapted Borg CR10 for Vocal Effort Ratings, entitled "Escala Borg CR10-BR adaptada para esforço vocal"

la Borg CR10-BR adaptada para esforço vocal", presents cultural and linguistic equivalence to the original instrument.

Keywords: voice; exercise test; protocols; surveys and questionnaires.

8097. Militaries Self-Evaluation of Communicative Behavior when Speaking in Public

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Introduction: The military police officer is an example of a professional who uses communicative and voice skills as working tool. **Objective:** To understand how the military police officers evaluate themselves before the challenge of speaking with/in public, identifying situations of nervousness, manifestations of anxiety and symptoms of voice and speech and their impacts on public speaking. **Methods:** 253 military police officers participated, men from all ranks and graduations of the city of Montes Claros - Minas Gerais. All the city officers who met the inclusion/exclusion criteria were invited and answered two self-assessment tools: Scale for Self-Assessment in Public Speaking - SSPS and the Communicative Contexts Questionnaire - CCQ. **Results:** In the SSPS, the mean values of the negative subscale (20.49) were higher than those of the positive subscale (18.86). The overall mean score in the SSPS was 39.35. Concerning the nervousness situations, the mainly indicated ones were giving oral presentations (55.7%) and being insecure about the content to be presented (43.4%). Of the manifestations of anxiety, the main symptoms of voice and speech were sweating (31.2%) and vocal tremor (24.1%). As for self-assessment and voice symptoms, tremor in the voice was the most reported symptom (23.7%), while the most reported speech symptom was speaking faster (31.6%). **Conclusion:** The negative perception of the military police officers surpasses the positive perception in the public speaking situation. Manifestations of nervousness and anxiety before this situation were present in most of the population evaluated.

Keywords: voice; speech; protocols; self-assessment; military personnel.

8099. Otitis Media Prevalence in Adults Referred to Audiological Assessment

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Introduction: Otitis media can be defined as an inflammation of the middle ear without reference to etiology or pathogenesis. Its resolution can be quickly and completely, but if not well treated, it may compromise hearing. **Objectives:** To analyze the prevalence of otitis media in the patients referred to audiological assessment in an audiology service of a philanthropic hospital in Porto Alegre/RS. **Methods:** Anamnesis data were analyzed, considering the subjects attended between the years of 2011 and 2015. A total of 1109 anamnesis were analyzed and those with otitis media reports were included, making a total of 469. The anamnesis from subjects with ages under 20 and over 60 were excluded, resulting in a final sample of 317. The prevalence of otitis media was analyzed with relation to gender and age group. **Results:** 32.58% of the women presented otitis, of which 55.79% in both ears, 20.17% in the right ear and 24.03% in the left ear. In men the prevalence was 20.84%, of which 48.80% in both ears, 28.57% in the right ear and 22.61% in the left ear. A higher prevalence of otitis media was observed in the age group of 50-59 in both genders. **Con-**

clusion: There was a higher prevalence of otitis media in females, in the age group of 50-59, and affecting both ears.

8100. Detection of Risk of Dysphagia in Patients with Stroke in a University Hospital in the Interior of Sergipe

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Introduction: The stroke can occur with global motor complications and sequelae regarding speech and deglutition.

Objectives: To identify and characterize patients at risk of dysphagia diagnosed with Stroke admitted to a University Hospital.

Methods: Study approved by the institution's Ethics and Research Committee (ordinance 2.081.522). Participants were patients hospitalized at the Hospital Universitário de Lagarto from May to November 2017, with a diagnosis of stroke, with maximum time of 48 hours of hospitalization at the time of the approach and Glasgow above 12. Patients underage and with exclusive feeding by nasoenteric tube were excluded. To detect risk, a disease-specific oropharyngeal dysphagia screening instrument was used, in which clinical characteristics and oral motor aspects were observed, as well as meal follow-up. **Results:** Of the 37 patients included in the study, 35 (94.6%) presented a risk for dysphagia. Of those at risk, 18 (51.3%) were female, with a mean age of 72.3 years old; in 32 (91.9%), the stroke was ischemic; with 25 (71.4%) having at least two comorbidities, highlighting systemic arterial hypertension. Regarding the screening, the main alterations found in the patients were: facial asymmetry (75.7%), voice alterations (70.3%) and speech difficulties (67.5%). **Conclusion:** The vast majority of the patients in the study presented a risk for dysphagia, showing the importance of performing the screening, even in the acute phase of the stroke, with subsequent intervention in the confirmed cases, thus reducing consequences such as pulmonary infections, malnutrition and death.

Keywords: stroke, deglutition disorders, screening programs.

8101. Evaluation of Swallowing in Children with Microcephaly Resulting from Intrauterine Infection Caused by Zika Virus

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Introduction: Microcephaly is a congenital malformation of multifactorial cause that causes delay in neuropsychomotor development. Studies demonstrate the occurrence of congenital infection and microcephaly associated with Zika virus infection during pregnancy. **Objective:** To characterize the biomechanics of swallowing of children with microcephaly resulting from intrauterine infection by the Zika virus. **Methods:** Study approved by the Ethics and Research Committee (60049216.1.0000.5546). Evaluation of swallowing in children with microcephaly caused by intrauterine infection by Zika Virus accompanied at the Clinical School of Speech, Language and Hearing Sciences, Federal University of Sergipe. For the evaluation, a specific protocol for the clinical evaluation of swallowing was applied, using food from the children's routine. After the evaluation, there was a classification regarding the presence or absence of dysphagia and its degree. In addition, data on gestation, birth, development and the feeding oral ingestion scale of these children were analyzed. **Results:** Eight children, 75% male, were evaluated.

The age range was between one and two years old. All infants were exclusively orally fed, 75% at level 5 in the oral intake scale. In the evaluation, all the children presented alterations in the oral motor system, exacerbated oral reflexes and other alterations. All children had dysphagia, mainly for liquid consistency. **Conclusion:** The assessment of swallowing with subsequent intervention should be part of the protocol of speech and hearing assistance to these children, at an early stage, thus avoiding possible consequences such as respiratory infections, malnutrition and, in some cases, death.

Keywords: Zika virus, microcephaly, deglutition disorders.

8103. Speech-Language Intervention on the Hospital Bed in a Patient with Chronic Obstructive Pulmonary Disease: Case Report

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Introduction: The chronic obstructive pulmonary disease is characterized by airflow limitation with loss of lung function. Such changes may compromise the swallowing dynamics, increasing the risks of respiratory infections. **Objectives:** To describe the speech-language intervention in the hospital bedside in a patient with chronic obstructive pulmonary disease. **Resumed report:** 73-year-old patient, hospitalized with respiratory discomfort and exacerbation of chronic obstructive pulmonary disease. She remained mechanically ventilated for 42 days, 26 in the orotracheal tube. With 46 days of hospitalization, it was performed the ventilated weaning and requested the speech-language evaluation, with a mixed diet, with oral liquids. The performance of the blue die test, with discharge of bluish secretion through the tracheostomy, showed an important alteration in the structures of the oral motor system and cough absence. Oral feeding was suspended, with rehabilitation indicated. Rehabilitation was delayed due to pneumonia with general condition worsening. One month later, rehabilitation began, with further condition improvement, but with severe oropharyngeal dysphagia after reevaluation. Indirect therapy was carried out, daily, aiming at adapting the biomechanics of swallowing and weaning in the tracheostomy. After 90 days, the patient was discharged, safely swallowing saliva, without secretion, spontaneous cough and no tracheostomy, but still with severe dysphagia and feeding alternative route. The patient was referred for outpatient multidisciplinary follow-up. **Conclusion:** Patients with Chronic Obstructive Pulmonary Disease should undergo evaluation and speech-language intervention as early as possible, aiming at safe feeding, reduction of hospitalizations and improvement in life quality.

Keywords: chronic obstructive pulmonary disease, deglutition disorders, dysphagia.

8104. Recurrence Rate of Benign Paroxysmal Positional Vertigo in the Elderly: Systematic Review

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Introduction: Benign Paroxysmal Positional Vertigo is the most prevalent cause of dizziness in the elderly population and is characterized by brief episodes of vertigo, nausea and positional nystagmus. Its recurrence rate can vary between 15 and 50% and frequently results in a restriction of head movements. The disturbance of the body balance allied to this attitude of limitation of movements ends up compromising the daily activi-

ties in the affected individuals. In addition, dizziness may lead to emotional changes that contribute to a significant worsening in the quality of life, mainly in the elderly. **Objective:** To verify the frequency of recurrence of Benign Paroxysmal Positional Vertigo in the elderly. **Data Synthesis:** A total of 158 articles were found, of which five contemplated the proposed selection criteria. Four studies obtained were retrospective, and only one was longitudinal. The samples of the selected articles varied in the composition of the age group. Some studies presented samples with subjects less than 60 years old, but in their results, it was possible to extract data by age group. One study had a sample composed exclusively by elderly. All articles presented a higher prevalence of female gender. Three studies found a frequency of Benign Paroxysmal Positional Vertigo recurrence in the elderly around 35%. The highest frequency was described in a study with 57 elderly individuals aged 61 to 81 years who reported recurrence of 43.9%. **Conclusion:** There was a high frequency of Benign Paroxysmal Positional Vertigo recurrence in the elderly population, ranging from 14.8 to 43.9%.

8105. Clinical Evolution of a Case of Pediatric Dysphagia Oropharyngeal due to Congenital Heart Disease

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Introduction: Congenital Heart Diseases (CHD) are changes in cardiac structure and function during the intrauterine development, divided into acyanotic and cyanotic. Children with CHD tend to have difficulties in the process of feeding, characterized as oropharyngeal dysphagia (OD). **Objectives:** Relating the CHD characteristics with the clinical speech therapy in a case of OD. **Case report:** Study approved by the Research Ethics Committees, number 1900382. Boy with one year and nine months, birth for term and cesarean delivery, with hospitalization with one month of life due to bronchiolitis and weight loss. Diagnosed with CHD acyanotic type of interatrial communication and interventricular communication, being introduced feeding tube of nasoenteral type (NET), with two months, due to weight loss. He was interned for other two times for pneumonia (4 and 6 months) and one for CHD correction surgery (10 months). After hospital discharge, he was referred to outpatient care speech-language therapy. In clinical evaluation of swallowing, he was diagnosed moderate to severe OD for liquid consistency, needing to keep NET. After 12 therapeutic sessions, he was evolved to OD mild grade, with coordination between sucking, breathing and swallowing (SxBxS), rhythm and mature sucking pattern, ending into the removal of NET. Remains with OD mild grade due to feeding previous escape. **Conclusion:** On CHD breathing is short and accelerated, leading to changing in coordination SxBxS, rhythm of sucking and lip mobility, characterizing OD. Clinical evolution led to the introduction of foods, with adaptation of function.

8107. Low Weight and Feeding Disorder in a Twin Preterm: Case Report

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Introduction: To ensure proper survival, growth and development of a newborn (NB) need adequate nutrition. Those younger than 37 weeks are preterm (PTNB), and those born with a weight between 1501g and 2500g are referred as low birth weight (LBW) and below 1500g are very low birth weight (VLBW). The avoidant Eating Disorder (AED) or food refusal is

given by the persistent failure to meet the nutritional and /or energy needs appropriate associated with one - or more - of the following: significant weight loss (or failure to achieve the expected weight gain or delayed growth in children); significant nutritional deficiency; dependence on enteral nutrition or oral nutritional supplements; interference in psychosocial functioning. **Objective:** Exploring the speech-language diagnosis of a feeding disorder case. **Case report:** Case report approved by the Research Ethics Committees, 1.900.382, of a fraternal twin girl, gestational age of 33 weeks weighing 1.376 kg, she was hospitalized for 42 days in a neonatal ICU, with reduced weight to 1.200 kg at hospital discharge, she was referred for investigation of pediatric dysphagia. **Conclusion:** The patient, with a corrected age of 20 months, diagnosed of Neuropsychological Development Global Delay and Food Refusal established by the difficulty in gaining weight and the necessity of nutritional supplement with infant formula, associated to her gestational age and VLBW at birth, as well as to the twin situation, whose development and skills were compared to her brother's. PTNB and VLBW need greater time for equating body growth and development with chronological age expected.

8108. Cervical Auscultation and Electromyography in the Pharyngeal Phase of Swallowing

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Introduction: Cervical auscultation (CA) is a complementary method of swallowing clinical evaluation and surface electromyography (EMGs) involves the electric potential of skeletal muscle fibers. **Objective:** Associating acoustic data of CA with EMGs of the muscles involved in pharyngeal phase of swallowing without disturbances. **Method(s):** This is a cross-sectional study approved by Research Ethics Committee 1.389.050. All participants signed the informed consent form. Cervical auscultation was analyzed through the DeglutiSom® software and the electromyographic activity during swallowing by Miotec® EMGs by swallowing 90 ml of water. The quantitative variables were expressed as means and standard deviation. The Student's t-test was used to compare means. The association between variables was evaluated by the Pearson correlation coefficient. The level of significance adopted was 5% ($p < 0.05$). **Result(s):** Fifty-seven adult women participated in this study. The mean age was 23.4 years. We found that the higher mean frequency of the auscultation peak, lower was the average of the supra-hyoid muscle peaks; and the higher intensity of the auscultation, higher was the peak, and the average of the supra-hyoid muscle. The peak muscle activity of the supra-hyoid region was larger than the peak muscle activity of the infra-hyoid region for swallowing 90 ml of uninterrupted water. **Conclusions:** The acoustic swallowing parameters in healthy individuals are associated with the electrical activity of muscles involved in the pharyngeal phase of swallowing. These data complement the clinical swallowing evaluation and collaborate for the most accurate diagnosis. Establishing correlations between the CA with EMGs involved in swallowing.

8109. Speech-Language Pathology Findings in a Case of Microcephaly and Cerebral Palsy

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Introduction: The diagnosis of microcephaly is performed by measuring the cephalic perimeter, defined by the

perimeter below three standard deviations of the expected development curves. Within the microcephaly is commonly associated with cerebral palsy. Cerebral Palsy is a result of a static lesion that occurs in the pre, peri or postnatal period, affecting the central nervous system in the maturation phase.

Objective: Describing clinical and speech-language pathology findings in a case of microcephaly associated with cerebral palsy. **Case report:** Approved by Research Ethics Committee 1.900.382. Male patient, with 2: 2 years of age and diagnosis of quadriplegic spastic cerebral palsy, microcephaly, epilepsy and low visual acuity of central origin, in clinical care. He was assessed using the PAD-PED protocol. On the functional and structural evaluation, the boy had lips parted at rest and tongue in the oral floor, presence of rooting reflex, decreased intra-oral pressure, inadequate sucking pattern and adequate frequency and swallowing of saliva. In the direct assessment of swallowing, alterations with solid and liquid consistency were found in the preparatory, oral and pharyngeal phases of swallowing. The established speech-language diagnosis was moderate to severe oropharyngeal dysphagia. **Conclusion:** The microcephaly and cerebral palsy association resulted in the presence of structural and functional speech-language pathology disorders, with a reserved prognosis in relation of the feeding process, considering the degree of commitment and associated diseases. Therefore, it is emphasized the speech-language therapist importance, at an early stage, in the multidisciplinary team of neuromuscular diseases' treatment.

8113. Study of High Frequency Thresholds in Marine Workers with Metabolic Alterations

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Introduction: the association between metabolic changes and hearing loss is described in the literature. Specifically, changes in lipid metabolism and glucose have a direct influence on the inner ear, either through changes in the cochlear microcirculation and decreased motility of the outer hair cells, or through changes in cochlear homeostasis, respectively. **Objective:** to analyze, in a marine worker population, the relationship between changes in high frequency thresholds with changes in lipid metabolism and glucose. **Method:** Retrospective cohort study with analysis of occupational exams of 159 maritime workers, male, aged between 21 and 57 years, conducted between 2013 and 2015. The variables collected were: age, rate of cholesterol (mg/dL), rate of glucose (mg/dL) and average of the auditory thresholds of high frequencies (3kHz, 4kHz and 6kHz) of both ears. The data were associated and was applied Pearson's chi-square test whereas the value of $p < 0.05$ as statistically significant. **Results:** 66.7% of the workers had altered cholesterol values, 32% of whom had alterations in the high frequencies of the right ear and 27% of the left ear, with only the association with the right ear being statistically significant. Regarding glycemia, 8.8% of the workers had altered values, of which 50% presented alterations in the high frequencies of the right ear and 50% of the left ear, with the result of both ears being statistically significant. **Conclusion:** the results corroborate the literature data on the damage of metabolic alterations on hearing.

Keywords: auditory thresholds, high frequencies, metabolic alterations, maritime workers.

8114. Characterization of the Evoked Myogenic Potential**Vestibular Ocular in Adolescents**

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Introduction: The ocular vestibular evoked myogenic potential (oVEMP) is a potential of short latency, composed of myogenic responses obtained through the extraocular contralateral musculature, resulting from the auditory stimulation that activates the utricular macula. Normal standards in adults have been established, however, there are few published data on the normal responses in adolescents. **Objectives:** To analyze the responses of the oVEMP in adolescents with hearing thresholds within the standards of normality and without auditory and vestibular complaints. **Methods:** A cross-sectional study with 46 adolescents aged 12 to 17, with normal hearing thresholds and no otoneurological complaints. The used acoustic stimulus was the tone burst, with alternating polarity in the 500Hz frequency and 100dBNA intensity. **Results:** It was obtained that the N1 mean latency was 10.7 ms and 10.5 ms, while the one of P1 was 15.9 ms and 16.2 ms, respectively in the right and left ears. The mean asymmetry index was 10.2%. There was no statistically significant difference in N1 ($p = 0.728$) and P1 ($p = 0.632$) latencies between ears. No statistical differences were found for oVEMP latencies in relation to the sexes of the participants. **Conclusion:** The data of the present study allowed the characterization of the normal values of ocular vestibular myogenic responses in adolescents of 12 to 17 years old without otoneurological complaints from the evaluation of otolytic function (oVEMP).

Keywords: vestibular evoked myogenic potentials; vestibular function tests; adolescent.

8119. Changes in Hearing Thresholds between Health**Children and Childhood Cancer Survivors**

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Introduction: Cancer treatment have substantially improved survival rates of children. Childhood cancer survivors have a poorer quality of life once it is considered as a stressful experience. It health complications across their life span due to late effects of cancer treatment. In of the deleterious side effect is ototoxicity, which has a severe potential effect in childhood language development. **Objective:** To evaluate hearing thresholds of childhood survivors. **Method:** Transversal cohort study carried out an Oncology Ward in a public hospital (Aracaju-Sergipe) approved by the Ethics and Research Committee #33665014.7.0000.5546. Audiological evaluation was performed in 31 children (3 to 12 years old) of, divided in two groups: G1: Healthy group and G2: Cancer treatment group. Procedures, for both groups, were performed in two sections: anamnesis and conventional pure tone audiometry. **Results:** Average age was ($\pm 2,5$) years and most of them were male (60% for both groups). 18,8% of G2 took almost two years to discover cancer and 81,3% had chemotherapy. Conventional pure tone audiometry revealed normal hearing thresholds for both groups. Despite of it, G2 had worse hearing thresholds compared to G1 ($p=0,00$). Head and neck cancer's children had lower thresholds with significant difference at 4,6 and 8 kHz frequencies compared to leukemia and lymphoma cases ($p=0,00$). **Conclusion:** Childhood cancer survivors have normal hearing thresholds; however, they have elevated thresholds compared to healthy children.

Keywords: childhood, hearing loss, cancer survivors.

8125. General Dysphonia Risk Screening Protocol applied in Musical Theatre Actors

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Introduction: The risk of dysphonia can be measured from the General Dysphonia Risk Screening Protocol which is composed of 16 subscores and a final score. Musical theatre performers have different conditions in their routine, such as excessive demands for vocal use, which predisposes them to higher risk of dysphonia. **Objective:** Measure the risk of dysphonia in a population of musical theatre actors. **Methods:** 34 theatre actors, both male and female, regardless of whether they are students or professionals, with or without vocal complaints and/or voice changes answered the General Dysphonia Risk Screening Protocol, which ranges from 0 to 131 points; in which the higher the score, higher the risk will be. Comparisons were made between the groups based on the analysis of the final score. **Results:** 21 professionals and 13 students, 24 without and 10 with vocal complaints, with a mean age of 26.35 years participated in the study. The mean score found was 36.57 (Minimum=16.8, Maximum=71.9, Standard Deviation=13.23). Higher scores were found in the group that presented vocal complaint and there was no difference regarding being a professional or student and neither regarding the gender of the participants. **Conclusion:** In a population of musical theatre actors with predominance of professionals, young adults, of the male gender, a high risk of dysphonia was observed, with higher scores in individuals with vocal complaints. Future studies should pay attention to the need for a complementary and specific questionnaire for musical theatre actors.

Keywords: voice; voice disorders; voice-related occupational effects; dysphonia; questionnaires.

8128. Prevalence of Silent Aspiration in Pediatric Population

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Introduction: Children with dysphagia are at risk of aspiration, defined as the entry of material into the airway below the level of the true vocal folds. The laryngeal cough reflex protects against aspiration, however, in some individuals, aspiration in the absence of cough/other response, known as silent aspiration may occur. Aspiration can be an acute event or a chronic recurrent syndrome and the effects on lung development can be devastating leading to pulmonary problems such as recurrent wheezing, recurrent pneumonias, and the development of severe impairment of lung function and pulmonary scarring that can occasionally lead to death. **Objectives:** Verify the prevalence of tracheal aspiration in pediatric patients who underwent videofluoroscopic swallowing study in a secondary university hospital. **Methods:** A total of 54 pediatric patients with suspected dysphagia who were referred for VFSS from January 2017 to May 2018 were enrolled in this retrospective study, by analysis of exam report. **Results:** In this period, 54 exams were done in the institution. The average age of patients were 0.74 years (8,8 months). Of these 61.1% presented swallowing abnormalities, being 31.48% laryngeal penetration (Penetration and Aspiration Scale level 2 to 5) and 29,63% of aspiration (Penetration and Aspiration Scale level 6 to 8) and 88% of aspirations were silent. **Conclusion:** This study strengthens the importance of objective exams to be done in pediatric population due to high prevalence of silent aspiration, which can't be detected in the clinical evaluation.

Keywords: pediatric dysphagia; aspiration, videofluoroscopy.

8129. Voice-Related Quality of Life in Musical Theatre Actors
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Introduction: The voice-related quality of life protocol has been used in different populations. The vocal demand of musical theatre actors is high, in addition to the need for excellence in the execution of different adjustments. Such a reality may interfere with the quality of life of these individuals. **Objective:** To measure the voice related quality of life in a population of musical theatre actors. **Methods:** 34 musical theatre actors, men and women, regardless of whether they are students or professionals, with or without vocal complaints and/or voice changes, answered the Voice Related Quality of Life protocol (translated and validated for Brazilian Portuguese) that ranges from 0 to 100 points, the higher the score is, the better the voice-related quality of life will be. **Results:** 21 professionals and 13 students participated, 24 with no complaint and 10 with vocal complaint, with a mean age of 26.35 years. The mean score found was 84.92 (minimum=40, maximum=100, standard deviation=12.42). There were no statistical differences neither in the scores between professionals and students, nor in relation to gender, but lower quality of life scores were found in the group that presented vocal complaint. **Conclusion:** In this sample with predominance of men, professionals, young adults, we observed low impact on quality of life, with higher scores in individuals without vocal complaint. For future studies, it's proposed to compare the quality of life with the career time and to investigate the presence of previous vocal disorders.

Keywords: voice; quality of life; voice-related occupational effects; questionnaires.

8130. Feeding Journal Proposal for Pediatric Dysphagia
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Introduction: Dysphagia is a change in the swallowing process that can affect any age, from the baby to the elderly, and may be associated with several pathologies, occurring from neurological or mechanical diseases, among others. The food diary is a tool used to establish the quality and quantity of an individual's feeding. **Objective:** To propose a feeding diary to children from zero to six years old to assist in the evaluation of dysphagia. Material and **Method:** A review study approved by the Research Ethics Committee of the institution number 1900382 with the organization of a child feeding screening protocol, established through the fractionation and quantity of daily food, type of consistency and food used, as well as the skill with different food utensils and the time of ingestion. **Results:** This food diary was designed for children, easy to understand for parents and/or caregivers, as well as for different health professionals, whose protocol allows checking daily meals for a week, specifying the occurrence or not of the symptoms of dysphagia like gaging, drowning, coughing, sneezing, hiccups and/or sleep during the feeding process. By this protocol it will be possible to establish the frequency of these symptoms associated to the type of food and the consistency used. **Conclusion:** The children's feeding journal is an easy-to-use resource for tracking information about the feeding process, possible deviations, disabilities, and the frequency of childhood dysphagia symptoms.

8131. Physical Activity and Hearing Function in Patients Undergoing Cancer Treatment
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Introduction: Physical activity improves general health and provides better quality of life. It there is a relation between physical activity and decrease of free radicals. Consequently, body works better due to the decrease of oxidative stress with greater protection against disease. Cancer patients can have a gradual buildup of free radicals because of treatment, which is one of the factors that can lead to a hearing loss. **Objective:** To compare otoacoustic emissions in cancer patients physically active and insufficiently active. **Method:** Transversal cohort study carried out an Oncology Ward in a public hospital of Aracaju-SE approved under protocol #33665014.7.0000.5546. Otoacoustic emission was performed in 31 cancer survivors, divided in two groups: G1 (Insufficiently active) and G2 (Physically active). G2 was subdivided in moderately active and strenuous active. Group's classification were based on Goldin-Shephard Leisure-time physical activity questionnaire. Procedures, for both groups, were performed in three sections: anamnesis, transient (TOAE) and distortion production otoacoustic emission (DPOAE). **Results:** All participants were female, average age was 45,40 ($\pm 8,59$) years and 75% were at final stage of cancer treatment. Physical activity questionnaire revealed 32,1 % of them were insufficiently active, 14,3% moderately and 53,6% strenuous. TOAE showed a normal amplitude for all patients; G2 had a greater amplitude than G1 ($p=0,0499$). DPOAE revealed that 3 kHz frequency in moderately active was greater than strenuous active ($p=0,025$). **Conclusion:** The group physically active showed higher amplitude for otoacoustic emission.

Keywords: physical activity, hearing loss, cancer.

8136. Comparison of the Sound Pressure Levels Produced by Personal Stereo Obtained Through Educational Manikin and Real-Ear Microphone
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Introduction: The increased hearing loss caused by personal stereos use has been a concern. Trying to minimize this problem, awareness programs have been developed, such as "Dangerous Decibels". One of the tools proposed is the use of "Jolene" manikin to measure the personal stereo sound pressure levels (SPL), with low cost and manual available for its construction. However, the gold standard for this type of measurement are the KEMAR manikin and/or the real-ear probe microphone, available only at research centers. Therefore, it is important verify the accuracy and validating the measurements made with by "Jolene" manikin. **Objective:** To measure the SPL produced by personal stereos of young people through "Jolene" manikin and real-ear microphone, comparing them for accuracy. **Methods:** SPL measurements were performed in 50 individuals with a Microphone-in-Real-Ear Dosimeter considering the volume indicated by user as being used in daily life. Measurement lasted for one song, selected by researcher. Then, in the same conditions, the SPL was measured in Jolene. ANOVA test was applied. **Results:** Considering the comparisons among the SPL Minimum (mean≈54dBA; $p=1$), Maximum (mean≈93dBA, $p=0,18$) and Leq (mean≈88dBA; $p=0,18$), no statistical differences between the two measurements

were found; there was difference only for the frequency bands of 4kHz ($p=0.09$) and 8kHz ($p=0.032$). **Conclusion:** Differences between the measurements made by the two devices were not significant, suggesting that the "Jolene" can be used in programs that aim hearing health, providing measurements close to those obtained by standardized equipment.

Keywords: hearing loss, noise, young adults.

8137. Speech Intelligibility in Noise of Normal Hearing Workers with Hearing Protection Devices

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Introduction: Few studies have examined the effects of hearing protection devices (HPD) on speech intelligibility of workers, who often complain of difficulties in communicating with HPD in the noisy environment. **Objectives:** Compare speech intelligibility with and without HPD in workers exposed and not exposed to occupational noise. **Methods:** Participated fifteen workers exposed to occupational noise (Research Group - RG) and fifteen workers non-exposed to noise (Control Group - CG), all presenting hearing thresholds within normal limits. Speech intelligibility was verified in free field, with monosyllable and sentences lists at 70 dB SPL, with and without HPD, at signal-to-noise ratio (SNR) of 0, -5, -10 and -15, with pink noise. **Results:** Percentages of correct answers were higher without the HPD for both groups, in most situations. For the sentences lists, significant differences were observed in RG (SNR -5, p -value=0.022) and in CG (SNR -10, p -value=0.004). Regarding comparison between groups, RG presented percentages of smaller hits than the CG, in all situations. There were significant differences for monosyllable evaluations (SNR 0, p -value=0.028) and for sentences evaluations (SNR -5, p -value=0.027). **Conclusion:** HPD compromised speech intelligibility in noise in most situations, most evident in the RG. Thus, assessments of communication impairment should be part of hearing conservation programs to ensure adequate protection and safety. Another observation is the minor hits percentage of RG, which may indicate a compromise of the auditory system of these workers exposed to noise, even in absence alterations of hearing thresholds.

Keywords: speech intelligibility; noise; ear protective devices; workers.

8165. Speech-Language Pathology Practice In Lafora Disease - A Case Report

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Introduction: Lafora Disease is a rare manifestation that affects cortical and subcortical structures, causing damages to the cognition, movement coordination and behavior, causing impacts in organic functions. **Objective:** To describe the main speech therapeutic manifestations of a patient who has a diagnostic of Lafora Disease, treated at an institution which is reference in diagnosis and rehabilitation of neurological diseases, in Salvador, Bahia. **Resumed report:** Patient, 18-year-old, started the follow-up in 2017. The Speech Therapy evaluation consisted of a semi-structured interview, in which was related an increase in anticonvulsant medication dosages, due to the higher frequency of epileptic seizures; application of the Dysphagia Risk Evaluation Protocol (PARD), observing alterations in the pasty consistency, suggesting neurogenic oropharyngeal dysphagia (level III); and appli-

cation of the neuropsychological battery of the Consortium to Establish a Registry for Alzheimer's Disease (CERAD), containing tests that evaluate higher mental functions, for which the patient failed with a result below the cut-off scores in eight of the nine tests, passing only the Boston Naming Test. **Conclusion:** Lafora disease causes alterations in swallowing dynamic and language abilities as it progresses, as evidenced by the clinical evaluation. It is necessary to carry out more studies in the area to understand the real impacts of this condition, also considering psychosocial aspects.

Keywords: Lafora disease, dementia disease, epilepsy, speech therapy.

8169. Correlation of Speech Intelligibility of Children in Early Childhood with the Performance in Social and Pragmatic Skills

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Introduction: Speech intelligibility is essential for a complete participation in society. The Intelligibility in Context Scale (ICS) and the Focus On Communication Under Six (FOCUS) are tools that evaluate the speech and language impact on the child's communication ability and their interaction in the community, considering different contexts based in the International Classification of Functionality. **Objectives:** to correlate the performance of subjects with Language Disorders in the ICS and FOCUS scales. **Methods:** (CEP1.681.979/2016) ICS and FOCUS inventories were analyzed of subjects aged 1-6 years and with speech/language complaint. The ICS has 07 items; parents are asked to think about the intelligibility of their children's speech and to identify the degree of understanding of seven communication partners on a 5-point scale. FOCUS provides 50 questions related to children's socialization and pragmatics, as well as their behaviors and their independence. Pearson correlation coefficient and Student's t-test were used. **Results:** 78% of the 50 subjects were male, with a mean age of 3.46 years. An average of 3.16 points (maximum 07) was obtained in the ICS; parents were the ones who best understood the children, while strangers were the ones who least understood them. Average score in FOCUS was 190.42 (maximum 350). A significant positive correlation was recorded between both scales, indicating that the higher the ICS value, the higher the FOCUS values. **Conclusion:** It was observed that subjects who presented greater speech unintelligibility were more likely to present social/pragmatic difficulties and require greater environmental assistance in the execution of the tasks.

8176. Baby-led Weaning: A Preliminary Study of Occlusion and Mastication in Preschoolers

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Introduction: Based on developmental readiness signs, one of the Baby-led Weaning assumptions is that baby can self-feed and masticate finger foods even before teething. It is well-known that children that have not been exposed to food that require clear masticatory action can show modifications in maxillary growth and development, and the mechanics of chewing will not develop efficiently. It is unclear if a baby-led approach could lead to better results in infancy. **Objective:** To describe static and functional occlusion and masticatory pattern of children aged 3-5 years old, that have been weaned using a baby-led approach. **Methods:** 5 children were eligible and were given a raw baby carrot for chewing. Clinical assess-

ment and surface electromyography of both masseter muscles were carried out by 2 experienced speech therapists. Static and functional occlusion were recorded and analyzed by a dentist. Other important variables were considered. **Results:** 60% bit the food using anterior incision. Grinding with posterior teeth occurred in 80%. Alternating masticatory pattern was found in 60%. Electromyographic evaluation exhibited 60% symmetrical means. 80% presented adequate maxillomandibular relation in static occlusion, without overbite, and class 1 canines relation. All children presented high functional masticatory Planas angles and lack of diastemas. **Conclusion:** On this preliminary study, most of the sample presented a chewing pattern and static occlusion compatible with developmental age. High functional masticatory Planas angles associated to the lack of diastemas characterizes an atrophy of 1st degree, the mildest of functional malocclusions. Further investigation with a larger cohort is necessary.

8183. Interdisciplinary Approach in Cleft Lip and Palate Treatment

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Introduction: The interdisciplinary between speech therapy and physical therapy in Cleft Lip and Palate brings meaningful results by the contribution of techniques used for them. **Objectives:** Describing results obtained through interdisciplinary approach in cases of cleft lip and palate. **Reduced report:** Cases study approved by Research Ethics Committee 1.900.382. Eight patients were attended in interdisciplinary activity. In this case, physical therapy evaluations showed, through postural evaluation, postural deviations, anterior head and cervical hyperlordosis, leaving the upper trapeziun muscles, pectoral larger and smaller, sternocleidomastoid, masseter, zygomatic, buccinator and temporal muscles tensioned, compromising the realization of orofacial functions of chewing, speech, swallowing and breathing. It was performed releasing myofascial technique, once a week for two months, in the region of face and cervical, from two years of age, thus favoring the speech therapy. Through this technique, a decrease in soft tissue tensions was observed, in addition to the improvement in body consciousness and the articulation of speech. It was not observed improvement in the children's body posture, since the changes are postural addictions. **Conclusion:** The integration between the two areas seems to be beneficial for communication and it is beneficial for that population, because when the muscles tensions of face and cervical were decreased, the child gets a corporal conscience improvement and better orofacial functions. It is clear the possibility of integration between these two areas and it shows the necessity of a better exploration of this therapeutic approach.

Keywords: speech, language and hearing sciences; physical therapy specialty; cleft lip; cleft palate.

8185. Clinical Aspects in Tracheomalacia and Therapeutics with the Use of the Flow-Oriented Incentive Spirometer

RespiroN®: Case Report

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Introduction: Tracheomalacia is defined as extreme collapse of the trachea during expiration. Treatment is based

on respiratory care. Sometimes, it is necessary to use tracheostomy, which leads to loss of strength and resistance of the respiratory muscles. **Objective:** To explore the clinical aspects on a case with previous diagnosis of tracheomalacia and therapeutics using flow-oriented incentive spirometer. **Case report:** Boy, six years old, by approved study in the Research Ethics Committee number 1.900.382, with previous medical diagnosis of mild tracheomalacia using tracheostomy up to 3 years and 8 months old. Referred to speech-therapy evaluation by oral breathing, snoring and sleep apnea, which data indicated alterations in: respiratory pattern, orofacial posture, muscle tone, speech and anterior open bite due to pacifier use. The speech-therapy diagnosis was orofacial myofunctional disorder. After 12 months of speech therapy, it was observed an improvement in the automation of tongue stance at rest, tonus, speech, and reduction of anterior open bite from 8 to 7 mm, with abandonment of adverse habit. In the last six sessions the RespiroN Kids® inspiratory stimulator has been used to increase airflow capacity and direction. **Conclusion:** There were gains with the orofacial myofunctional treatment, however, no effective improvement was observed using the inspiratory stimulator, due to the difficulty in maintaining the respiratory flow by the increasing resistance of the airflow and to the decrease of its previous diameter. It is suggested more studies about the use of incentive spirometer in cases of tracheomalacia.

Keywords: tracheomalacia; respiration; mouth breathing; tracheostomy.

8186. Holoprosencephaly and Colpocephaly: Speech-Language Clinical Findings

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Introduction: Holoprosencephaly is a structural anomaly cerebral resulting from failure to divide into hemispheres and it is associated to neurologic impairment. Colpocephaly is described as persistence of the fetal configuration of lateral ventricles, associated with normal frontal horns. These malformations can cause diverse anatomical alterations with variable prognosis. **Objective:** Reporting the clinical findings in holoprosencephaly and Colpocephaly. **Reduced report:** This case was approved by Research Ethics Committee 1.900.382 of a girl, aged nine by medical diagnosis of Holoprosencephaly and Colpocephaly, with clinical history of swallowing disorder, gastroesophageal reflux disease and recurrent bronchopneumonia. She is using gastrostomy since 2012. Speech and hearing assessment revealed: presence of sialostasis and sialorrhea; worn teeth and bruxism; hypoactive cheeks, open oral cavity with anterior projection of tongue, tense, stiffened and tapered. The speech-language therapy (SLT) diagnosis was of severe grade oropharyngeal dysphagia with impossibility of oral feeding with a high risk of presumed aspiration associated to the overall neuropsychological development delay and a body spasticity; Gross Motor Function Classification System Level V – Self-mobility is severely limited even with the use of assistive technology. **Conclusion:** After 30 SLT care, her clinical condition remains the same. There is a better response of tension in temporomandibular joint after Botox application, with reduction of bruxism. Reasonably response to myofunctional relaxation, with improved coordination of the oral functions of breathing and swallowing in a punctual way. The clinical objective becomes to maintain and comfort to the body posture and orofacial relaxation.

Keywords: deglutition disorders; microcephaly; feeding and eating disorders.

8187. Speech-Language Therapy Findings in Oculo-Auriculo-Vertebral Spectrum: Case Report
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Introduction: Oculo-auriculo-vertebral spectrum is a rare symptomatic complex characterized by ocular, auricular and vertebral alterations. Some cases might be associated with other congenital visceral or facial malformations involving structures derived in the 1st and 2nd branchial arches. **Objectives:** To describe the speech-language therapy (SLT) clinical symptoms from a case of oculo-auriculo-vertebral spectrum. **Resumed report:** Approved case study by the Research Ethics Committee (1.900.382). A.S.K, speech therapy started in May 2017, two years and five months old, due to complaints of language delay. Grade four on Medical diagnosis for microtia on the right side, right hemifacial microsomia, large nasal bridge and presence of oculo-auriculo-vertebral spectrum. In the test of Brainstem Auditory Evoked Potentials, he presented hearing loss of the mixed type with cochlear component in the right ear. In the speech-language evaluations, the boy presented oronasal breathing, mesocephalic, facial asymmetry, unilateral micrognathia (right side), convex face, incisors teeth midline turned to the right, short and anterior frenulum, hyper nasal voice resonance and presence of sialo stasis on the buccal floor. In addition, when requested to blow, the air was directed to the nasal area. At the beginning of the SLT care, the patient presented language delay. Currently, he is in the process of phonological acquisition and with phonetic distortions for the phonemes [s, z, ſ, ʒ]. He was referred to the otorhinolaryngologist for verification of submucosal cleft in palate possibility. **Conclusion:** Individuals with oculo-auricular-vertebral spectrum may present dysfunctions that requires a speech-language care.

Keywords: Goldenhar syndrome, hearing loss, congenital microtia.

8188. The Use of the Flow-Oriented Incentive Spirometer Respiron® in a Pediatric Mouth Breather Case
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Introduction: Mouth breathing during the facial growth phase can cause major changes in craniofacial development, as inadequate pattern can lead changes in tissues, bone and muscle, in addition to reduction in saliva production. As of the postural changes developed in oral breathers, they have reduction of ventilatory muscle strength, intensification of posterior nasal resistance and, as a result, a decrease in respiratory volumes can occur, because nasal obstruction is a contributing factor for a respiratory failure. **Objective:** To verify the efficiency of the flow-oriented incentive spirometer for nasal breathing automatization. **Resumed report:** Case study approved by the Research Ethics Committee (1.900.382) by the analysis of the medical records data, of a child with 11 years and 7 months-old, male, with speech-language therapy diagnosis of mouth breathing and after 11 speech-language therapy sessions he started to breathe through the mouth-nasal tubes. To automatize the nasal respiratory mode, the flow-oriented incentive spirometer Respiron-Kids® was used to increase respiratory training, with exercises of two sets of 30 repetitions, twice a day, in four degrees of difficulty, in a period of 4 weeks. The initial respiratory capacity was 267 l / min and the volume 2.08 l and final respiratory capacity of 304 l / min and 2.48 l, measured by peak-flow monitor. **Conclusion:** Training with the flow-oriented incentive

spirometer allowed a rise in vital capacity, air flow and volume, contributing in quality and respiratory pattern so that the patient automatized his nasal breathing.

Keywords: respiration; mouth breathing; speech, language and hearing sciences.

8189. Prevalence of Hearing Loss in Children Exposed to the Use of Ototoxic: Systematic Review
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Introduction: The use of ototoxic drugs is one of the main risk factors for hearing loss. These can cause permanent sensorineural hearing loss by damaging the cochlea and / or vestibule. **Objectives:** To verify the prevalence of hearing loss through the use of ototoxic drugs and possible interventions that would avoid this consequence in children through a review of scientific studies. **Data Synthesis:** The study was conducted following the items of the Preferred Reporting Items for Systematic Reviews and Meta-Analyzes, under registration number CRD42018088079 from the International Prospective Register of Systematic Reviews. The databases used were: LiLACS, PubMed / Medline, Scielo and Science Direct. For the search, the descriptors were combined through the use of Boolean operators in publications from 2008 to 2018. The methodological quality of the included studies were evaluated according to each criterion of the review. **Conclusion:** In the infant population, the newborns were among the subjects most vulnerable to such exposure and with a higher prevalence of hearing loss. As for medication, amikacin was the most used in the child population (PTNB <37 weeks for children aged 13 years). Among the studies included only one study evaluated the effect of the cytoprotectant (amifostine) in patients treated with cisplatin, finding evidence in favor, which would be an intervention.

Keywords: ototoxic; children; hearing loss.

8192. Cervical Auscultation in Swallowing: Auditory Training
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Introduction: Cervical auscultation (CA) is a complementary clinical evaluation of swallowing, which allows the analysis of sounds of the pharyngeal phase, through a sound amplifier, non-invasive and low cost. For evaluation of the received signal are considered: the integrity of the airway protection mechanism, the presence of swallowing clicks, base noise and sound signals of aspiration or penetration. There is no consensus about the quality of the instrument of sound amplification, the need for training and the experience of the professional in the realization of the evaluation. **Objective:** To produce a Compact Disc – CD for the realization of auditory training of speech therapy professionals and students in the realization of CA. **Methods:** Study approved by the Research Ethics Committee number 1.333.079, by analysis of swallowing noise database and selecting audios. The selected archives were captured through electronic stethoscope, the swallowing noises were transferred to a computing unit and they were analyzed through the Deglutisom® software as to the number of swallows, average time in seconds, average peak frequency of swallowing in hertz (Hz) and average record intensity in decibels (dB). **Results:** 20 swallowing noises were selected and it was produced an auditory training CD, with information on the food consistency, swallowing time, fre-

quency and noise intensity, as well as the establishment of the noise if child or adult. **Conclusion:** The CD was produced for the recognition of swallowing noise, it was arranged in 20 tracks and prepared the informative booklet to accompany the auditory training.

Keyword: auscultation; swallowing; dysphagia.

8203. Association Between Cochlear-Eyelid Reflex and Sound Localization with Verbal Language in Preschoolers From Embu das Artes (SP)

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Introduction: Language impairment is associated with auditory processing disorders. Cochlear-eyelid reflex/CER is an important characteristic to detect auditory disorders. Furthermore, sound localization is related to auditory processing. Nevertheless, there is no study demonstrating direct association between CER, sound localization and verbal language in preschoolers. **Objectives:** To evaluate, in pre-schoolers ages 4-5 years old, associations between auditory processing (cochlear-eyelid reflex; sound localization) and verbal language. **Methods:** Data were obtained via direct assessment of 885 pre-schoolers from Embu das Artes(SP) as part of large epidemiological study. All students went through a Language Development Assessment and by simplified auditory processing tasks: CER (present; absent) and sound localization (0-5 points). Statistical tests (Chi-Square; Linear General Models and the complex samples module) were used for all analyzes that incorporate sample plan information. **Results:** The sample had the following characteristics: 4;0 years old (50.4%) and 5;11 years old (49.6%); 51.3% male; 46.7% mixed races; 62.4% socioeconomical class C; and 54.9% of the mothers had not finished high school. In brief, 12.4% children had deficits in language; 7.5% children had alterations in CER; 13.5% had deficits in sound localization (0-3 points). We found significant associations between: CER and sound localization ($p<0.001$); CER, sound localization and Language Development ($p<0.001$). Children with normal language had a lower percentage of altered CER (6.5%) and a higher score of 4-5 points in sound localization (above 87.0%). **Conclusion:** Sound localization and the cochlear-eyelid reflex were related to verbal language development of pre-schoolers in this sample.

Keywords: auditory diseases, central; child language; preschool.

8212. Association between Altered Lingual Frenulum and Articulatory Disorders

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Introduction: The lingual frenulum restricts the movements and functions performed by the tongue. When altered, it can be classified as: Anterior position; Short; Short and Anterior; or Ankyloglossia. In the literature, one can find that food and speech are the functions that can suffer greater influence of the alteration of the frenulum. The biggest divergences are found regarding the speech problems. For some authors these problems are difficult to categorize and ensure that the cause is of the frenulum, while others point out that the occurrence of Speech distortions occur in 50% of cases. Articulatory disorders consist of failures in positioning, time, direction, pressure, programming and integration of movements, resulting in the absence or inadequacy of speech sounds. **Objectives:**

Relating articulatory disorders associated with altered lingual frenulum. **Summarized report:** Case report approved by the Research Ethics Committee 1.900.382, of a boy with 4-year-old and 4 months of age, presenting speech therapy diagnosis of phonetic/phonological language disorder associated with short and anterior lingual frenulum. The frequent phonological processes in his speech are: plosivization; posteriorization, soundproofing; Erasing of phonemes and syllables. Phonetics relate to tongue-alveolar phonemes with reduced tongue elevation. **Conclusion:** Alterations in frenulum may trigger divergences in articulatory disorders, as seen in the alterations of the frenulum found in this case, which triggered the phonetic disorders and may have influenced the acquisition Phonological process, revealing a phonological disorder, specific difficulty for language learning, affecting speech production in the absence of other etiological factors.

Keywords: lingual frenum; articulation disorders; speech disorders.

8213. Cleft Lip and Palate: Actions Of University Extension

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Introduction: Cleft lip and cleft palate (CLP) affect the mouth and attached structures, resulting from failures in the anatomical fusion of facial processes, in gestational period, whose etiology is multifactored. **Objectives:** Promoting integral health for patients with CLP and social integration.

Methodology: report of the extension project cleft lip-palate that directs to the reception and multiprofessional clinical attendance to children with CLP and actions are performed in a Brazilian Health System ambulatory of specialties. Eighteen patients are assisted in management or clinical care, aiming at speech, orofacial functions, language development and improvement of phonological awareness. The actions are the guidance on the process of food, auditory health and oral hygiene. Patients are referred to otorhinolaryngologist and auditory evaluation due to the possibility of otitis media and of disturbance of the auditory processing and, for dentist and orthodontics services for the monitoring of facial growth and dentist's corrections. **Results:** The project counts with a database of 48 patients. Booklets and brochures are used for the orientation of FLP, oral hygiene and children's stories. Combining the integrality of teaching and research, classes are presented annually in theoretical classes and summaries in scientific events and extension activities. **Conclusion:** The clinical follow-up of individuals with CLP for changes in the process of feeding and communication is essential, in addition to the social repercussions. Rehabilitation is provided by the National Council of Health secretaries for the promotion of integral health, assuring them of multiprofessional attendance.

Keywords: cleft lip; cleft palate; speech, language and hearing sciences.

8218. Cerebellar Signs Research in Workers of Gas Stations in Rio de Janeiro City

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Introduction: Gas stations are hazardous environments that expose workers daily to the innumerable chemical substances found in gasoline such as benzene, toluene, etilbenzene

and xylene. Workers exposed to high concentrations of benzene may show neurological or chronic signs and symptoms, or several clinical signs and symptoms, being that mid or long-term complications might occur. In the acute stage of intoxication by benzene this substance is retained in the central nervous system and cerebellum, possibly leading to toxic effects that may cause alterations in perception, memory, motor ability, visual-spatial, logical reasoning, language and mood. **Objective:** Carry out a cerebellar signs research according to the "orientation guide: Professional performance of the speech language pathologist in assessment and rehabilitation of the body balance" of the Federal Council of Speech Language Pathology issued in 2018, in gas station workers in Rio de Janeiro city. **Methodology:** 38 workers were submitted to diadochokinesis, dysmetria and outstretched arms tests, all of them of non-instrumentalised assessment, which allowed the accomplishment of these tests in their own workplace in an enclosed room. This research has been approved by the Research Ethics Committee under the protocol number CAAE 89195018.7.0000.5279. **Results:** 39 % of the workers showed disorders in the diadochokinesis test, 5 % showed disorders in the dysmetria test and there were no alterations in outstretched arms test. **Conclusion:** The gas station workers assessed for this research showed disorders in the cerebellar signs research which can indicate the neurotoxic action of the benzene found in gasoline.

8219. Lasertherapy and Regeneration in Facial Paralysis:

Case Report

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Introduction: Low-intensity laser therapy (LBI) is effective in repairing muscle and nerve. Farivar et al. (2014) comments that the light is absorbed by the cytochrome c-oxidase protein in the mitochondria and the energy increases the production of ATP, modulates reactive oxygen species and regenerates fibroblasts. **Objective:** clinical case with photographic record and application of the House Brackman scale and record of the evolution by the indicator of changes in the facial paralysis (Costa, 2017; Ordahan and Karahan 2017; Oliveira et al 2015). Facial disability was calibrated using the IIF scale (Medeiros, 2016). **Resume Report:** F., 59 years old, Bell's paralysys, Grade V (severe dysfunction) and motor inability for smile and eyelid. We performed laser sessions with neurofunctional exercises associated with verbal command for corresponding target tissue at the time of application. DMC Therapy Ec laser, 100mw, in doses and points: 2J / infrared in 4 points in the course of the 4 branches in the facial nerve injured (left) and 1J / red in 20 motor points of the face bilaterally; extracorporeal application in six cranial quadrants. After 3 daily sessions, the patient's social welfare scores Grade I (normal-HB) and reestablishment of a harmonic pattern of immediate response to the command were observed. Biweekly follow-up to verify staging. Satisfied with the result, she resumed social activities. **Conclusion:** The case agrees with the findings on efficiency of nerve fiber regeneration and muscle activity involved in peripheral injury (Ordahan and Karahan, 2017).

8223. Acoustic Immittance Measurement in Gas Station

Workers in Rio de Janeiro City

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Introduction: The health of workers is a constitutional right and it's found in the Law 8.080/90, which de-

scribes worker's health as "a set of activities that is dedicated, thought epidemiological surveillance actions and sanitary surveillance, to promoting and protecting the worker's health". Gas station workers are exposed daily to a group of chemical substances found in gasoline and since such substances are solvent and volatile, they evaporate under room temperature and are absorbed by the skin, through breathing and ingestion, which may cause damage to the hearing and respiratory systems. According to the Law 776/2004, the application of other audiological tests such as immittanciometry are important to complement the information about the topodiagnosis of the hearing damage. **Objective:** Carry out an acoustic immittance measurement in gas station workers through tympanometry testing and ipsilateral stapedial reflex research to investigate possible disorders. **Methods:** 26 gas station workers were submitted to the tympanometry testing and ipsilateral stapedial reflex research, using the equipment whose brand is Interacoustic, model MT-10. The assessment was carried out in the own workplace in a enclosed room. **Results:** 75% of the workers showed tympanogram type A, 5% tympanogram type C and 20% tympanogram type Ad. The ipsilateral stapedial reflex showed alterations in 26% of the workers. **Conclusion:** The workers assessed in this research showed, in their majority, type of tympanometric curve A, followed by tympanometric curve C and the ipsilateral stapedial reflex research showed absences in 26% of the workers.

8224. Comparison of Mismatch Negativity in Children with and without Hearing Loss Pre and Post-Therapy

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Introduction: Mismatch Negativity (MMN) occurs in response to the change of an acoustic stimulus (rare), among a sequence of repeated stimuli (frequent), cogitating the competence to discriminate the sound, for the stimuli are memorized. It arises passively and automatically, with no need for attention to the stimuli. This cortical potential is used to evaluate patients with communication difficulties, with inconsistent responses in behavioral assessment, non-collaborative or with doubtful auditory discrimination. **Objective:** To compare the latency and amplitude values and area of MMN among children with normal hearing thresholds and hearing loss, pre and post- speech therapy. **Methods:** The study was approved by the Research Ethics Committee of the Federal University of Santa Maria under the number 25933514.1.0000.5346. Parents/guardians signed the Informed Consent, authorizing the participation of the children in the research. Fifteen children aged six to twelve years were evaluated, eleven with normal auditory thresholds and four with moderate to severe sensorineural hearing loss. All the children underwent basic audiological evaluation and the MMN with verbal stimuli (da/ta). **Results:** As for latency, the values were decreased post-therapy, but the latency of subjects with hearing loss was higher. Concerning the amplitude, the values are close in all children, pre and post-therapy, however decreased post-therapy. The area presented the same characteristics of the amplitude, since they are related; however these results did not demonstrate statistical significance. **Conclusion:** There was no significant difference in MMN among children with and without hearing loss pre and post-speech therapy.

8225. Vocal Auditory Perceptual Characteristics of Dysfunctional Teachers with and without Laryngeal Affectation: Partial Results

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Introduction: Teachers are voice professionals very affected by vocal disorders. **Objective:** To verify the vocal auditory perceptual characteristics of teachers with vocal complaints with and without laryngeal affections. **Method:** Retrospective research approved by the Research Ethics Committee with Human Beings (23081.016945/2010-76). Selection criteria of the database records: being a teacher; presence of vocal complaints; laryngological examination; without hearing loss and/or changes in the stomatognathic system; non-smokers or alcoholics; without history of neurological, endocrinological, psychiatric, gastric or respiratory diseases. The records were divided into: group without laryngeal affection ($n = 19$) and group with laryngeal affection ($n = 13$). The sustained emission of the vowel /a/ in usual pitch and loudness was collected, in maximum phonation time, with a professional digital recorder. Three speech therapists judges received the voices without identification, met face-to-face five times and formulated a single consensus assessment. The GRBASI scale was used: grade (G), roughness (R), breathiness (B), asthenia (A), strain (S), instability (I), with 0 for normality, 1 for discrete deviation or doubt of the presence of the alteration, 2 for moderate deviation and 3 for extreme vocal deviations. **Results:** Averages for the group without laryngeal affection: R0,63 A0,05 S0,87 A0,05 T0 I0,22; for the group with laryngeal affection: R0,8 A0,07 S1,04 A0 T0,24 I0,23. **Conclusion:** Both groups presented similar vocal auditory perceptual results, but the teachers with laryngeal affection presented all the increased scores with the exception of Asthenia. This may have been due to the presence of laryngeal affection that worsened the vocal auditory perceptual aspects.

8230. Biofeedback Therapy in Orofacial Pain

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Introduction: Electromyographic biofeedback is a technique that allows the measurement of altered physiological activity that is not noticeable by the patient. It is a feedback therapy that shows inappropriate physiological muscle events through an electronic device in order to promote learning. It is a visual feature that allows the patient to consciously monitor the tightening of the teeth on the computer screen. **Objective:** to describe biofeedback training in orofacial pain. **Methods:** The equipment used in biofeedback therapy is the New MiotoolFace Miotec®. A surface electrode is placed on the left masseter muscle. Basal rest is recorded during collection of electrical activity of the masseter muscle for five seconds. With basal set value the patient monitors the muscles on the computer screen and the line referring to the masseter muscle must remain within the established protocol during Biofeedback training. The training is performed by five consecutive acquisitions of 30 seconds each. **Results:** At the beginning of the training the patient obtained an average of 6.09 μ V during 30 seconds of basal rest. After five consecutive biofeedback acquisitions the average lowered to 3.77 μ V during 30 seconds of basal rest, meaning that the final average value decreased 38% from the initial average value. **Conclusion:** The decrease in post-biofeedback electromyographic activity demonstrates that the patient monitored the contraction of the masseter muscle and acquired the new resting motor pattern, that is,

without constant tightening of the teeth, minimizing masseter muscular tension and orofacial pain.

Keywords: biofeedback, speech therapy, orofacial pain, masseter muscle.

8234. Central Auditory Processing: A study of References and Comparisons in Normal Hearing Adults

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Introduction: The behavioral tests normally reveal functional deficits of the central auditory processing and are a reference when regarding diagnosis and rehabilitation in this area. However, it is difficult to describe which tests to apply, which normality to consider or even how many are necessary for a precise diagnosis. **Objective:** To generate reference values for different behavioral tests of central auditory processing in normal hearing adults and to compare the results between typical development (TD) and central auditory processing disorder (CAPD). **Method:** The casuist was composed for 94 normal hearing adults, with at least 11 years of education, divided into two groups according to the performance in the Dichotic Sentences Test (DSI), Masking Level Difference (MLD), Randon Gap Detection Test (RGDT), Adapted Compressed Speech (ACS) and Standard of Duration and Frequency Tests of Auditec (SDT/SFT). The 64 subjects who presented normality in all tests formed the group TD and the 30 subjects who presented alteration in at least one originated the group CAPD. **Results:** Reference value for the DSI in the right ear: 94.4% and left ear: 93.4%; MLD: 13.8 dB; RGDT: 4.9 ms; ACS in the right ear: 91.4% and left ear: 93.8%; STD: 91.3%; SFT: 97.1%. When comparing both groups, a statistically significant difference in the totality of the applied tests was found. **Conclusion:** It was possible to generate reference values for different behavioral tests of central auditory processing in normal hearing adults, as well as, to verify a better performance for the group TD in the tests.

8235. Assessment of the Otoacoustic Emission and by Transient and Distortion Product in Gas Station Workers in Rio de Janeiro City

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Introduction: According to the last 2010 census, there are approximately 770.212 workers exposed to benzene. Among the occupational groups, gas station workers are in the 2nd position in the ranking of exposed workers, reaching a total of 129.313, which corresponds to 16,8% of the working population. The effects of the long-term exposure to benzene can cause damages to the auditory system can cause both peripheral and central disorders. Sensorineural hearing loss, dizziness and auditory processing difficulties can also be observed. According to the Law 776/2004 the use of other audiological tests such as otoacoustic emission are important to complement the information about the topodiagnosis of the injury. **Objective:** Carry out hearing assessment in gas station workers in Rio de Janeiro city thought the otoacoustic emission by transient and distortion product stimulus in order to verify the cochlear integrity of these workers. **Methods:** 37 workers were submitted to an otoacoustic emissions exam by transient and distortion product in loco in an appropriate room. This research has been approved by the Research Ethics Committee under the protocol 89195018.7.0000.5279. **Results:** 16% of the workers showed absence of the transient emissions bilaterally, 13% absence of the

emissions by distortion product, 18% with absence of the transient emissions unilaterally and 21% with absence of the emissions by distortion product unilaterally. **Conclusion:** The otoacoustic emission by transient and distortion product was absent in 35% of the workers, which suggest cochlear hearing disorder, being this exam an important instrument to complement information about topodiagnosis of the injury.

8236. Speech Pathology Intervention During Radiotherapeutic Treatment in Head and Neck Cancer - Case Report

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Introduction: According to the National Cancer Institute, squamous cell carcinoma accounts for 30% of pharyngeal tumors, the hypopharynx region being relatively rare¹. Radiotherapy in the head and neck region triggers acute or late effects, such as mucositis, xerostomia, ulcerations and bleeding of the mucosa, difficulties in chewing, changes in sensory and motor control of foods, as well as reduction of the amplitude of the movements and strength of the tongue, pharynx and larynx, resulting in dysphagia². **Objective:** To describe the speech therapy program developed during the treatment of exclusive radiotherapy in patients with hypopharynx. **Case report:** Male patient, 65 years old, medical diagnosis of squamous cell carcinoma in the hypopharynx, not indicated surgical treatment due to invasion of the pre-vertebral fascia, being indicated exclusive treatment with radiotherapy. The general objective of the proposed therapeutic program was to rehabilitate the swallowing function, with the specific objectives of airway protection, maximizing the laryngeal excursion and tongue base muscle tone, through the use of the airway protection (supraglottic) maneuver, maneuver of pharyngeal recess (Massako, multiple and strained swallowing) and exercise of hyperacute emission. After 10 visits, the patient evolved from severe dysphagia to functional swallowing, according to the result scale and severity of dysphagia³ maintaining oral feeding exclusively. **Conclusion:** The speech therapy intervention proposed in the case of oropharyngeal dysphagia during radiotherapy presented positive effects, since it was possible to reintroduce food orally after therapy, in addition to contributing to the establishment of a therapeutic program in oropharyngeal dysphagia and radiotherapy.

8246. Audiological Findings in One Case of Kartagener's Syndrome

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Introduction: Kartagener Syndrome, or primary ciliary dyskinesia, is a rare autosomal recessive disease and is manifested by chronic pansinusitis, bronchiectasis, and situs inversus with dextrocardia. It presents functional or structural alterations of the cilia, provoking deficiency in the mucociliary transport. This is because ciliary dynein, a protein responsible for the movement of cilia, is deficient in these patients, leading to chronic disease in the upper and lower respiratory tract. **Objective:** To report the audiological findings of a teenager with Kartagener Syndrome. **Case report:** A 16-year-old teenager diagnosed with Kartagener's Syndrome, undergoing audiological follow-up since 2011. He presents a history of recurrent respiratory infections associated with Kartagener's Syndrome, with reports of ototoxic medication use since childhood. He has performed seven audiometries since 2011, which demonstrated hearing loss restricted to the frequencies of 0.25 kHz, 6 kHz and 8 kHz, with worsening of these thresholds in

the last year. Regarding immittanceometry, the current exam showed tympanometric curves type A (Jerger) in the right ear and Ar (Jerger) in the left ear, as well as ipsilateral acoustic reflexes absent bilaterally. However, in the last seven years, type B (Jerger) and type C (Jerger) tympanometric curves have been demonstrated in some exams accompanied by conductive hearing loss. **Conclusion:** The analysis of the audiological results showed a hearing loss restricted to the frequencies of 0.25 kHz, 6 kHz and 8 kHz with progressive character.

Keywords: Kartagener syndrome, audiology, hearing loss.

8254. Profile of the Infants Assisted within the Newborn Hearing Screening Program Neonatal Screening, who have undergone the Automated Auditory Brainstem Response Test

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Introduction: The Newborn Hearing Screening Program is aimed at identifying hearing loss and the methods used for that purpose are: otoacoustic emissions, which assess the motor function of the external ciliated cells of the cochlea, and the Automated Auditory Brainstem Response Test. The first one is used universally, while the second one is a high-sensitivity method that identifies retrocochlear hearing loss and is prescribed for newborns with risk indicators of hearing loss. **Objective:** Analyze the profile of the infants assisted at the Electrophysiology Sector, within the Newborn Hearing Screening Program – a medium-complexity care. **Methods:** Participating in the screening were infants who underwent the Automated Auditory Brainstem Response Test in 2017. The database of such institution was consulted for indicators analysis. **Results:** During the period of analysis 420 people were assisted, of whom 382 showed one or more indicators of risk for hearing loss. The major indicator of recurrence was in premature infants. 38 infants were referred for treatment for showing altered results in the otoacoustic emissions; 20 patients were referred for audiology diagnosis; 22 were referred to see an otorhinolaryngology and/or to undergo again the Automated Auditory Neonatal Screening Brainstem Response Test, and 32 were released. 346 children were sent for auditory monitoring. **Conclusion:** This type of analysis is crucial to get familiar with the services provided by the Public Health Services and thus enhance effectiveness and do the proper planning for those within the Newborn Hearing Screening Program.

Keywords: neonatal screening; newborn; hearing loss.

8264. Vestibular Rehabilitation In Children: A Systematic Review

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Introduction: Vestibular rehabilitation is a set of tests, assessments and exercises that aim to habituate people to disorders that affect the vestibular system. It might be a valid option for treatment of childhood vestibular disorders. **Objectives:** To conduct a systematic review to verify the applicability of vestibular rehabilitation in children. **Data Synthesis:** A search was performed using the descriptors "child" AND "rehabilitation" AND "vestibule, labyrinth" in the databases of the BVS Portal (MEDLINE, IBECS and LILACS) and SciELO. The selection was composed by 8 original articles, written in English and published until August 2017, which described vestibular rehabilitation in children. The studies demonstrated a variety of pro-

ocols, in which 1 article used 10 days of treatment, 2 articles used 4 weeks, 1 article used 12 weeks and 4 articles didn't relate treatment time. Besides, was investigated specific pathologies of the childhood: children with Down syndrome, cerebral palsy, developmental delay, attention deficit disorder with hyperactivity, multiple handicapped, hearing impairment, autistic spectrum disorder and birth injuries. **Conclusion:** Positive results were found using vestibular rehabilitation in children, mainly regarding aspects of oral language, improvement of motor skills and quality of life. Therefore, we can conclude there are a large applicability in children, despite the great variability of methods and protocols. Further studies are needed to demonstrate better the efficacy in children and for standardization of protocols used to make the clinical practice more objective.

Keywords: rehabilitation; child; vestibule, labyrinth; review.

8266. Analysis of Alcohol and Caffeine Consumption by patients with Chronic Tinnitus

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Introduction: Chronic tinnitus may be related to alcohol and caffeine consumption. **Objectives:** To analyze the consumption of alcohol and caffeine by patients with chronic tinnitus. **Methods:** Cross-sectional and observational study. During the consultation, patients with chronic tinnitus, attended at a specialized clinic were questioned about aspects related to tinnitus and alcohol and caffeine consumption. **Results:** A total of 487 individuals were included in the study, of which 311 (63.9%) were female and 176 (36.1%) were male. The individuals evaluated were aged between 12 and 89 years (mean of 59.3 years). The time of presence of tinnitus, reported by patients ranged from 1 to 56 years. Of the total sample, 76 (15.6%) had tinnitus in the right ear, 110 (22.6%) in the left ear, 262 (53.8%) in both ears and 39 (8%) in the head. Regarding black coffee consumption, 289 (59.3%) individuals reported consuming daily and 109 (40.7%) never consumed. Regarding alcohol consumption, 18 (3.7%) reported drinking alcohol daily, 8 (1.6%) weekly, 129 (26.5%) eventually and 332 (68.2%) did not consume alcohol. **Conclusion:** In this study it was possible to observe that the reported consumption of caffeine was high in the evaluated group, differently from alcohol consumption.

Keywords: tinnitus; caffeine; alcohol.

8267. Non-Instrumentalised Vestibular Assessment in Workers of Gas Stations in Rio de Janeiro City

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Introduction: Gas stations are environments that expose their workers daily to many chemical substances found in gasoline, among them the benzene, a substance with nephrotoxic, neurotoxic and ototoxic potential. Gas station workers are in 2nd place in the scale of the biggest group of workers exposed to the chemical substances that can affect, among other functions, the balance. **Objective:** Carry out a non-instrumentalised vestibular assessment in gas station workers in order to verify the effects of benzene in the executive functions of balance. **Methodology:** 38 gas station workers whose age ranges from 22 to 61 years old were assessed by the static and dynamic balance tests

with open and closed eyes, Head Impulse Test, Head Shaking, hyperventilation manoeuvres, vertebral artery test and spontaneous nystagmus and semi-spontaneous test, all of them preceded by anamnesis about symptoms and current health problems. This research has been approved by the Research Ethics Committee under the protocol number 89195018.7.0000.5279. **Results:** 81% of the assessed workers showed balance disorders, being 15% of the alterations in the march with closed eyes test, 34% in the Unterberg test, 13% with presence of the semi-spontaneous nystagmus, 31% with alterations in the Head Impulse Test, 28% with alterations in Head Shaking, 8% in the hyperventilation manoeuvres and vertebral artery test. **Conclusion:** The workers assessed thought the non-instrumentalised vestibular assessment presented disorders that can be a result of the exposure to benzene, what can compromise the professional performance of this group of workers.

8269. Chikungunya Fever: Swallowing Videofluoroscopy Analysis

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Introduction: Chikungunya fever is an acute infection transmitted by the Aedes Aegypti mosquito, which can be manifested by exanthema, fever, arthritis, conjunctivitis, meningoencephalitis, lymphopenia, thrombocytopenia and hypotonia. Symptoms can occur at any stage of the disease, acute or chronic, and may cause oropharyngeal dysphagia and compromise the individual's diet. **Objectives:** To describe the findings of swallowing videofluoroscopy of a patient diagnosed with chikungunya in the acute phase. **Resumed report:** A 40-year-old male patient during anamnesis reported swallowing difficulties, feeling as the food was stuck in the throat, reduction of muscle strength and loss of 7 kg. The swallowing videofluoroscopic evaluation presented in the oral phase: increased oral transit time for solids, inefficient chewing and multiple swallowing. In the pharyngeal phase: it was observed reduction of laryngeal elevation, increased pharyngeal transit time, stasis in the vallecula, posterior wall of the pharynx and piriform recesses, for the consistencies of nectar, honey and pudding. Whitting occurred with the intercalated fluid swallowing. It was not observed laryngotracheal penetration or aspiration. **Conclusion:** Chikungunya fever can cause dysphagia due to the reduction of muscle mass and strength, and may be present at any stage of the disease. Further studies will be needed to better understand the causes of dysphagia in arboviruses.

Keywords: chikungunya fever; swallowing; swallowing disorders.

8270. Results of Neonatal Hearing Screening of Pregnant Women with Diabetes Mellitus and / or Hypertension: Systematic Review

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Introduction: Diabetes mellitus (DM) and hypertension (AH) are prevalent in high-risk pregnancies and have an impact on fetal development. **Objectives:** To verify the results of the Neonatal Hearing Screening (NHS) of newborns whose mothers presented AH and/or DM during pregnancy, through a systematic review of the literature. **Data Synthesis:** Search conducted in electronic databases MEDLINE (via PUBMED), LILACS (BVS), SCOPUS, WEB OF SCIENCE and EMBASE, employing the descriptors "neonatal screening AND hearing AND (hypertension OR diabetes mellitus)". There weren't restrictions

on language and publication period (From January/1975 to November/2015). The methodological recommendations of the PRISMA protocol were adopted for conducting the study. Sixty-four records were found, of which five were selected for analysis, according to the inclusion criteria. The analyzed articles presented a retrospective (transversal, n = 1, case-control, n = 1) or prospective design (transversal, n = 1, control case, n = 1, cohort, n = 1). Regarding the findings, they weren't conclusive: studies both found and didn't find a relationship between AH and DM during pregnancy (together or separately) and changes in the outcome of the newborns' NHS. **Conclusion:** The studies reviewed have shown contradictory results regarding the relationship between AH and/or DM during pregnancy and changes of the newborns' NHS outcomes. Prospective studies are needed to examine the relationship between these clinical conditions and the functioning of the auditory system of newborns in different contexts, in order to isolate the confounding factors for hearing loss and to minimize biases in gauging and screening.

8271. Finger Feeding Technique to Encourage Feeding Transition in Preterm Newborns

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Introduction: the oral feeding of the preterm may be influenced by innumerable factors, such as physiological and neurological immaturity, respiratory disorders, short alert period, among others. **Objective:** To compare the benefits of using the finger feeding technique with non-nutritive sucking in the transition of preterm, with the follow-up of the beginning of oral feeding. **Methods:** Pilot study of a randomized clinical trial, the population composed of preterms without associated comorbidities and absence of neonatal and maternal problems that contraindicated breastfeeding and hospitalized in a Neonatal Intensive Care Unit. Patients were randomized into two groups: Finger-Feeding group and Non-Nutritive Suction group, in both groups receiving intervention followed by breast-feeding for 5 consecutive days. They were evaluated for performance in breastfeeding, oral performance and transitional time until exclusive oral feeding. We used the Pearson's Chi-squared test, Spearman Correlation, "t" test, considering p <0.05. **Results:** Ten participants were evaluated, of these, 5 in each group. In the pre- and post-intervention comparison in the Breastfeeding Evaluation, the item Signs of Mother / Newborn Link, there was a significant difference. Regarding the performance of oral feeding, a shorter time was observed between the transition from the tube to the full oral feeding in the finger technique group, with a significant difference, being a shorter time in the finger feeding technique group. **Conclusion:** The finger feeding technique provided a shorter transitional time from the tube to the full oral route and improved breastfeeding performance in the item Mother /Newborn Signals.

Keywords: preterm; suction; oral feeding.

8275. Evaluation of Breastfeeding of Preterm Infants: the Influence of Guidance To Mothers

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Introduction: The prematurity is a condition of great risk, because the anatomical-physiological immaturity offers a succession of difficulties for adaptation and postnatal evolution. The premature newborns present clinical instability and immaturity and incoordination between sucking, swallowing

and breathing, which are very important for the breastfeeding. **Objective:** Compare the evaluation of pre and post breastfeeding guidance in attending to newborn preterm **Method:** Twelve premature newborns without associated comorbidities were included. It took five days of orientation with speech therapist about position, correct grasp the mother's breast, ways to maintain milk production and management of the newborn. In the first and fifth day of guidelines was conducted assessment of breastfeeding. **Results:** It was possible to identify in items the rooting reflex of the newborn (p= .046), signs of bonding mother and newborn (p= .017) and the conditions to grasp the mother's breast (p= .017) were significant when comparing the first evaluation for the second, demonstrating an improvement of these aspects after five days of orientation. Compared the total scores of the two evaluations, significant results were observed (p=.008). **Conclusion:** This study despite having a small sample showed progress in the aspects of rooting reflex, link signals, able to handle the breast and total evaluation score, reinforcing the importance of guidance for the evolution of breastfeeding, which favors trust mothers.

Keywords: breastfeeding; premature ; suction.

8277. Motivational Stages for Voice Therapy in the Therapeutic Process of Patients Attended by the Brazilian Health System

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Introduction: Adherence to speech therapy is of great importance in the therapeutic process. One of the factors to evaluate is the motivational stage for behavior change. The URICA-VOICE scale allows one to understand the motivation that the patient has in relation to therapy in voice and is characterized as a clinical tool in the understanding the patient's adherence to speech therapy. **Objective:** Analyze the motivational stage using the URICA-VOICE scale in two different moments for the same participants of a therapeutic program of 12 consecutive weeks of care. **Methods:** The sample consisted of 26 participants attended by the Unified Health System, with behavioral Dysphonia, 18 women and 8 men, with an average age of 56.27 years. The URICA-VOICE scale was applied at the first moment and after 10 sessions of a therapeutic program. **Results:** There was statistical significance (p-value=0.001) in the values of the motivational stage, which were higher after the intervention compared to the first application of the scale. The highest concentration of participants in the first application was in the pre-contemplation stage and afterwards, in the action stage. Six questions of the URICA-VOICE scale presented a significant difference in the post-speech therapy moment. **Conclusion:** The participants of this study improved the motivational stage of adherence to speech therapy. Being motivated is important to adhere to vocal behavior changes and this study demonstrates that using this scale for clinical practice is critical for measuring the patient's enjoyment as well as the ideal moment for ending therapy.

Keywords: adherence, voice, URICA-VOICE.

8284. Evaluation of Dysphagia in Palliative Care Patients: The Approach Of Speech Therapy

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Introduction: Hospital speech therapy has the highest demand of patients with dysphagia. That's what happens

to patients in palliative care. **Objective:** To identify the evaluation procedures performed by the palliative speech therapy team in a hospital of Belém/PA. **Methodology:** Quantitative-retrospective study with analysis of 100 medical records of palliative patients attended by speech therapists. Study approved on the Ethics and Research Committee under number 1,223,739. **Results:** The most accomplished evaluation was the assisted oral route with 55%, followed by orofacial motor, with 40%, swallowing with 37% and voice with 15%. It was observed that the clinical evaluation was supplemented with respiratory frequency in 19% cases, blood saturation in 16% cases, Cervical auscultation in 12% cases, heart rate in 8% cases and Blue Dye Test in only 1% case. Standardized scales were used to outline the prognosis of the patient, being used the Functional Oral scale intake scale in 6% of the charts, followed by the scale Dysphagia Outcome Severity scale in 3% of the charts, scale Performance Status of Karnofsky in 2% of the records, numerical pain scale in 2% of the records, and Mallampati scale in 1% of the records. The patients treated corresponded to 44 types of neoplasms, being common ones of uterine cervix diagnosed at 11%, breast at 11% and stomach by 10%. **Conclusion:** There is absence of standardization of the evaluation. However, the therapy intervention was present and the multiprofessional assistance was well qualified.

Keywords: palliative care, speech therapy, speech therapy evaluation.

8286. Correlation of the Clinical Evaluation of Swallowing with Expanded Scale of the Kurtzke Disability State in Patients With Multiple Sclerosis

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Introduction: Multiple Sclerosis is a chronic, demyelinating, and autoimmune inflammatory disease; affects young adults and is clinically characterized by an extremely variable combination of signs and symptoms. Oropharyngeal dysphagia is a frequent symptom in this population, presenting varying degrees of severity. **Objectives:** To correlate the data from the clinical evaluation of swallowing with the Expanded Scale of the Kurtzke Disability State, with the results of the Eating Assessment Tool – EAT10- and the duration of disease in patients using second- and third-line drug. **Methods:** A prospective cross-sectional study was carried out based on the collection of clinical and demographic data from a database and the direct evaluation of swallowing through the Gugging Swallowing Screen and the EAT-10 application. **Results:** Twenty-two patients were evaluated, with a prevalence of females, aged between 22 and 59 years old. The presence of oropharyngeal dysphagia was identified in 95.45% of the sample. A correlation was found between EAT 10 and evaluation swallowing ($CC = -0.472$), Scale of the Kurtzke and evaluation swallowing ($CC = -0.639$) and Scale of the Kurtzke and EAT 10 ($CC = 0.240$). Scale of the Kurtzke scores ≥ 7 were correlated with longer disease times. **Conclusion:** The study identified a high frequency of mild oropharyngeal dysphagia in patients with multiple sclerosis using second and third line treatment drugs. Swallowing changes were correlated with elevated scores in the Scale of the Kurtzke, with difficulties reported by patients through EAT-10, current treatment and disease time.

Keywords: deglution disorders, multiple sclerosis, neurology.

8290. Analisys of Otoacoustic Emissions in C with History of Otitis Media Undergone To Miringotomy

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The otoacoustic emissions test evaluates the functional status of the cochlea, more specifically the outer hair cells. However, it may be influenced by the external and / or middle ear functional conditions. Repeat otitis media can cause changes in the peripheral structures of the auditory system. The aim of this study was to analyze the results of the evaluation of transient otoacoustic emissions and distortion product otoacoustic emissions in individuals with a history of otitis media who undergone surgery to insert a ventilation tube bilaterally. Participants aged from 8 to 16 years were divided into two groups: control group composed of 50 subjects who did not present a history of otological disease and an experimental group with 50 subjects with a history of childhood otitis recurrence who underwent ventilation tube placement bilaterally. All children underwent basic audiological assessment and the otoacoustic emission test. It was found presence of responses in the otoacoustic emissions of all control group subjects. Regarding experimental group, there were no answers in 17 ears in transient otoacoustic emissions and in 9 ears in distortion product otoacoustic emissions. Response amplitudes were lower at all frequencies for the experimental group. They also presented a statistically lower performance when compared to the control group in the otoacoustic emissions tests. The emission level and the noise ratio had a statistically significant difference between the studied groups. The recurrence history of otitis media interfered in the results of transient otoacoustic emissions and distortion product otoacoustic emissions.

Keywords: otoacoustic emissions, otitis media, hearing.

8293. Auditory Monitoring in Children with Microcephaly due to Congenital Zika Virus: Case Reports

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Introduction: Microcephaly is a change in the child's head circumference with two standard deviations below the mean for age and sex. **Objective:** To describe the audiological monitoring of two children, one with seven months and another with nine months of age, with microcephaly due to congenital Zika virus syndrome. **Resumed report:** The research was approved by the ethics committee (55350316.0.0000.5546) of the Federal University of Sergipe. The initial audiological evaluation consisted of meatoscopy, immittanceometry, auditory brainstem evoked potential, transient otoacoustic emissions, auditory behavior observation, audiometry with visual reinforcement and the DENVER II screening test. After six months the children returned for audiological monitoring. Both presented auditory brainstem evoked potential with a minimum level of responses in 20 dBnNA bilaterally, imitaciometria and transient otoacoustic emissions within normality bilaterally. In the observation of auditory behavior, they showed attention to the instruments of medium and low intensity. Both clinical cases were not conditioned to the performance of visual reinforcement audiometry. After six months they returned to audiological monitoring. Clinical case 1 presented consistent responses in audiometry with free field visual reinforcement in the frequencies of 500Hz, 1kHz, 2kHz, 3kHz and 4kHz with a threshold

of 20dBnNA. Clinical case 2 presented consistent responses in audiometry with visual enhancement with insertion earphones at frequencies of 500Hz, 1kHz, 2kHz, 3kHz and 4kHz with a threshold of 20dBnNA. Exacerbated irritability and delayed neuromotor development were observed in both children. **Conclusion:** The children monitored did not present conductive or sensory-neural auditory changes.

8296. Phonological Awareness Skills Profile of Children with Phonological Disorder

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Introduction: Phonological awareness is a conscious ability to segment words into smaller units, such as syllables and phonemes. **Objective:** To characterize the phonological awareness skills profile of children with Phonological Disorder. **Methods:** A study with secondary data (VALDEF - CEP 995344) on the results of syllabic and phonemic awareness skills, assessed through the CONFIAS Instrument (Moojen et al., 2003). The sample was composed of 130 children with phonological disorder, aged between 4 to 10 years old. The studied variables were: age, sex, writing hypothesis, syllabic and phonemic awareness activities scores. **Results:** From the 130 children's data analyzed, 27 children were excluded due to lack of information about all the variables studied. Therefore, the research analyzed data from 103 children, which 74.34% were boys and 25.66% were girls. The data were analyzed dividing the subjects in relation to the writing hypothesis, being composed by 4 levels: pre-syllabic, with 29 children with altered results and 36 normal; syllabic, with 7 participants with altered results and 13 with normal; syllabic-alphabetical with 2 altered results and 2 normal; and alphabetical, with 3 children with altered results and 11 with normal. **Conclusion:** It should be noted that a higher percentage of subjects with below-expected performance indicators are in the pre-syllabic phase, where the child is still developing metalinguistic abilities, it is in the literacy process, and the relations between writing and speech may suffer influence of oral language phonological changes.

Keywords: language, speech sound disorder, child language.

8299. Therapeutic Ultrasound, Laryngeal Movement and Dysphagia in Children with Microcephaly

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Introduction: Therapeutic ultrasound interacts with tissues through vibration, which produce thermal and non-thermal effects. These, in practice, occur simultaneously and are indicated for pain reduction, increased perfusion and extensibility of collagen, healing and, what interests us in this study, the reduction of joint stiffness improving mobility (Itakura et al., 2017). Swallowing in the oropharyngeal phase occurs through 3 mechanisms: pharyngeal contraction, synchronous relaxation of the pharyngoesophageal sphincter muscles and concomitant elevation and anteriorization of the hyoid and laryngeal bones. That is, the physiological mechanism of protection of the upper airway depends on the elevation of the efficient larynx. **Objective:** to evaluate the facilitation of laryngeal movement with the use of the resource in dysphagic children. **Methods:** Ten children aged 1 to 3 years with microcephaly and dysphagic symptoms participated in the study and participated in multidisciplinary care in Reci-

fe-PE. Six speech therapy sessions were performed with the associated resource, in an initial of 0.5 W / cm³ at a continuous 1MHz frequency for 5 minutes in circular movements in the larynx. The mobility results were evaluated using a protocol proposed by Bretan, O (1998), which records the excursion of the larynx and its impacts on swallowing and protection of the upper airways. **Results and Conclusion:** the results showed improvement of the laryngeal sensitivity, joint stiffness, gain in the excursion with regard mainly to elevation. These first findings allow us to consider ultrasound as an impact resource for dysphagia therapy in severe cases.

8313. Audiological Findings of Children at School Age who Were Born Small For Gestational Age

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Federal University Of Bahia

Introduction: At term newborns, small for gestational age, for being born with low birth weight, are more likely to present intercurrences in neurodevelopment, such as hearing loss. Auditory integrity is an important condition for auditory processing skills and language development. **Objective:** To compare the audiological profile of school-age children born at term, small and appropriate for gestational age. **Methods:** A prospective analytical cross-sectional study analyzed 26 children followed by the follow up clinic of a federal public university between 2010 and 2012. A behavioral hearing evaluation was performed through pure tone audiometry, logaudiometry, and electroacoustic evaluation, using acoustic immittance measures. The data were analyzed through Statistical Package for Social Sciences (SPSS), version 20, using the Mann-Whitney test. **Results:** There was no significant difference in tonal thresholds between the studied groups. A statistical difference was found for the contralateral acoustic reflex thresholds at the 2 kHz frequency on the left ($p = 0.01$). The mean age in the study group was 6.2 (standard deviation = 0.676) and 6.31 in the control group (standard deviation = 0.704). **Conclusion:** The children in the study group presented increased contralateral acoustic reflex thresholds at a specific frequency. Changes in acoustic reflex are an important indication of possible alterations in auditory processing, with a consequent impact on oral language development.

Keywords: speech, language and hearing sciences, hearing, infant, small-for-gestational age.

8316. Speech-Language Pathology Intervention In Obstructive Sleep Apnea Syndrome: Case Report

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Neurology And Neurosurgery Foundation

Introduction: The Obstructive Sleep Apnea Syndrome (OSAS) is a condition characterized by obstruction of the airway during sleep. By causing structural and functional changes, OSAS entails damages to individual's quality of life. **Objective:** To describe Speech-language pathology intervention in a moderate clinical presentation of OSAS at an institution in Salvador, Bahia. **Resumed report:** A 59-year-old female patient started speech-language therapy follow-up showing polysomnography results with 89 apneas and hypopneas over a 4-hour period, indicating a moderate case of OSAS. In the structural assessment the patient was diagnosed with myofunctional orofacial disturb characterized by changes in strength, mobility and sensitivity of the phonoarticular organs around the perioral musculature and velopharyngeal sphincter. Speech-language pathology intervention had as a general

objective to adequate the phonoarticular organs promoting an increase in strength, tonus and mobility through isotonic and isometric exercises. New polysomnography, performed in October/2017, presented, without CPAP, a total of 7 apneas and 14 hypopneas, in a period of 2.2 hours, with 9.3 per hour (3.1 apneas and 6.2 hypopneas per hour). Therefore, there was a reduction of snoring and improvement of the OSAS' degree from moderate to mild. **Conclusion:** Speech-language pathology intervention has a positive impact on the reversion of the damages caused by Obstructive Sleep Apnea Syndrome.

Keywords: obstructive sleep apnea syndrome, speech therapy.

8322. Associative Analysis of Auditory Evoked Responses of Brainstem and Autonomic Nervous System

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Introduction: It is known that the autonomic nervous system and auditory processing are regulated by the central nervous system, few studies have investigated the relationship between auditory stimuli and autonomic modulation, since no studies have been found so far to relate auditory evoked responses with the neural regulation of the autonomic nervous system. **Objective:** To verify if there is an association between auditory evoked responses and autonomic regulation of heart rate. **Methods:** The study was conducted in 46 healthy female subjects, aged between 18 and 30 years. Initially, general data were collected, such as age, weight, height and an audiology anamnesis. After the notes were taken, the participants were submitted to tonal audiometry, after which the systolic and diastolic blood pressure were measured. The participants were instructed to remain at rest for 10 minutes, during which time the heart rate was monitored by means of the Polar RS800CX heart rate monitor (Polar Electro, Finland). After 10 minutes, the brainstem auditory evoked potential examination began. We evaluated the latencies of I, III and V waves. To evaluate the association we applied the Pearson correlation test for parametric distributions and the Spearman correlation test for non-parametric distributions. **Conclusion:** There was association between autonomic regulation and auditory processing at the level of the distal portion of the auditory nerve.

Keywords: hearing, auditory evoked brain stem potential, autonomic nervous system.

8325. Vocal and Videoendoscopic Characteristics in Women Obesos

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Introduction: Obesity is a public health problem and is related to numerous comorbidities. The fat deposit in the organism also occurs along the airways altering the resonator channel. In addition, the vocal folds of the obese are structurally larger making the voice with lower pitch. **Objective:** To characterize the voice of obese women in relation to their self-evaluation, perceptual-auditory, acoustic and videolaryngoscopic evaluations. **Method:** Twenty-eight obese women (26- 59 years), candidates for bariatric surgery were selected. All were submitted to the following evaluations: Vocal Disadvantage Index (VLI) and Quality of Life and Voice (QVV); Auditory perceptual voice evaluation (GRBASI scale) and acoustic (MDVP program); calculation of maximum phonation times (MPT); . All them underwent videolaryngoscopy examinations. **Results:** Vocal symptoms were not reported by obese women. The perceptual-auditory evaluations indicated alterations in the parameters G (general degree of dysphonia), B (breathiness) and I (instability) as well as the acoustic analyzes as a decrease of F0 and Shimmer%, APQ and SPI increased. The values of the maximum phonation time were normal. Videolaryngoscopy revealed benign laryngeal lesions such as posterior pachydermia (n=9), edema (n=3), asymmetry (n=1) and vocal sulcus (n=1). The altered vocal parameters maintained a statistically significant relationship with the measures of BMI (body mass index), CA (abdominal circumference) and CP (neck circumference). **Conclusion:** Although obese women do not present vocal symptoms, auditory perceptual and acoustic voice assessments recorded changes characterizing their voices with low pitch, breathiness and instability.

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8327. Vertigo and Dizziness in Patients with Chronic Tinnitus

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Introduction: Tinnitus, dizziness and vertigo are frequent symptoms. **Objectives:** To evaluate the prevalence of vertigo and dizziness in patients with chronic tinnitus and the influence of the sex variable. **Methodology:** The complaint of dizziness and vertigo in patients with chronic tinnitus was analyzed. During the otorhinolaryngological and audiological evaluation, dizziness and vertigo were questioned. **Results:** 658 patients, aged between 9 and 88 years, were evaluated; predominantly women (62.2%). Vertigo was reported by 164 (24.9%) subjects, and 69 (42.1%) reported duration of seconds, 57 (34.8%) minutes, 22 (13.4%) hours and 16 (9 , 8%) of days. Regarding the frequency, 44 (27.3%) reported having a daily disorder, 44 (27.3%) weekly, 20 (12.4%) monthly, 50 (31.1%) eventually and 3 (1.9%) they did not know the frequency. Regarding dizziness, 300 (45.6%) presented such complaint. Of these, 170 (56.7%) reported duration of seconds, 87 (29%) minutes, 29 (9.7%) hours and 14 (4.7%) days. Still with regard to dizziness, the patients used numerals from 0 to 10 to classify the impact of the same. It was verified that 34 (11.3%) reported zero, nine (3%) reported one, 19 (6.3%) two, 23 (7.7%) three, 29 (9.7%) four, 48 (16%), five, 24 (8%) six, 16 (5.3%) seven, 33 (11%) eight, 16 (5.3%) nine and 49 (16.3%) ten. It was found the association between female gender, vertigo ($p=0.025$) and dizziness ($p=0.029$). **Conclusion:** It was verified that the prevalence of dizziness was more prevalent in the sample (45.6%). There was an association of vertigo, dizziness and female gender.

Keywords: vertigo, dizziness, tinnitus.

8328. Effectiveness of Musical Auditory Training In Elderly Hearing Aids Users

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Introduction: The hearing loss in the elderly can be minimized by the adaptation of the Hearing Aids (HA) together with a formal or informal auditory training program, such as Musical Auditory Training (MAT). To monitor the benefit of HA, auditory handicap and auditory training effectiveness, self-assessment protocols such as the Hearing Handicap Inventory for the Elderly (HHIE) can be used, and P3 considered a long-latency auditory evoked potential. **Objective:** To verify the effective-

ness of Musical Auditory Training (MAT) in the improvement of auditory abilities of elderly hearing aids users. **Methods:** A total of 9 elderly people, 67 to 89 years old, participated in the study, 6 of them were male and 3 were female. Participants had mild to moderately severe bilateral sensorineural hearing loss and were fitted with HA in the minimum period of six months prior to training. They answered the HHIE self-assessment questionnaire and were submitted to the P3 exam, before and after performing seven weekly and individual TAM sessions in acoustically treated booths. **Results:** There was a statistically significant difference between the P3 latency and P3 amplitude values before and after MAT and a decrease in the overall HHIE score and its emotional and social subscales, but this was not statistically significant. **Conclusion:** TAM is effective for improving hearing abilities and diminishing auditory handicap perception in elderly hearing aids users.

Keywords: hearing loss; rehabilitation of hearing impairment; P3 evoked potential; elderly.

8330. Vocal and Laryngeal Modifications in Obese Women Submitted To Bariatric Surgery

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Introduction: Bariatric surgery culminates with drastic weight reduction in obese patients. However, there is some doubt about the rapid and intense weight loss on the vocal pattern. **Objective:** To analyze the vocal and videolaryngoscopic characteristics of obese women before and after bariatric surgery. **Method:** Twenty-eight women (26 and 59 years) who were candidates for bariatric surgery were selected. Parameters evaluated: Vocal Disadvantage Index (VDI) and Quality of Life and Voice (VLQ); Perceptual-auditory vocal evaluation (GRBASI), calculation of maximum phonation times; Acoustic vocal evaluation (MDVP program) and videolaryngoscopy. The research protocol was applied two days before bariatric surgery and after six months. **Results:** The mean weight reduction was 27.13%. The self-assessment questionnaires did not show statistical differences in pre and post surgery, maintaining discrete symptoms. The pre-auditory perceptual evaluations indicated slight alterations of G, B and I, with normalization in the post surgery only of the G parameter. In the preoperative acoustic vocal evaluation, F0 decreased and Shimmer%, APQ and SPI increased ($p < 0.05$). In the postoperative there was only significant improvement of the SPI parameter ($p=0.03$). Preoperative and postoperative videolaryngoscopies were slightly different, with a greater number of vocal folds bowing in the postoperative. **Conclusion:** vocal symptoms in obese women are discrete. The vocal changes identified in the perceptual-auditory and acoustic evaluations are discrete and maintained after six months of bariatric surgery. The videolaryngoscopic findings also do not differ in the pre and postoperative, however, there is a higher number of glottic bowing in the post bariatric surgery.

8333. Vital Capacity and Maximum Phonation Time in Elderly Patients Diagnosed with Presbylarynx

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Introduction: In the specific literature on the subject, the standardization of vital capacity (VC) and maximum phonation time (MPT) in elderly patients diagnosed with presbyphonias was not observed. These parameters are used for the

diagnosis and follow-up of the voice therapy. **Objectives:** to characterize VC and MPT exact values in the elderly with presbylarynx diagnosis. **Method:** 13 elderly people, with a medium age of 70.92 years, with presbylarynx diagnosis participated. Through the Phonatory Aerodynamic System (PAS) Model 6600 (KayPENTAX®) it was collected three parameters of the VC measurements: expiratory airflow duration (EAD), peak expiratory airflow (PEA) and expiratory volume (EV) and MPT. Descriptive statistics were used for analysis. **Results:** for the VC, parameter EAD the average was 5.53 seconds, the PEA the average was 1.32 liters/seconds and the EV the average was 1.92 liters. The average of MPT was 12.46 seconds. **Conclusion:** It was verified that the values of the evaluated parameters are reduced, although adequate for the age group.

Keywords: aged, presbylarynx, vital capacity, maximum phonation time.

8340. COPD and Dysphagia: Clinical Association

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Introduction: Chronic obstructive pulmonary disease (COPD) is a preventable, treatable and progressive disease characterized by airflow limitation and associated with an increased inflammatory response of the airways and lungs to noxious particles or gases. Studies show that swallowing disorders corroborate the occurrence of an acute clinical event - exacerbation of COPD, leading to important complications for the patient's clinical condition. **Objective:** To gather studies relating COPD to dysphagia. **Methods:** Systematic review approved by the Research Ethics Committee number 1.541.638, carried out in a scientific database: Medline, Bireme / Lilacs and Index Psychology - Technical-scientific journals; using the **Keywords:** DPOC and Distúrbio de deglutição ou Disfagia, in the Portuguese language; as well as their variants in the English language: COPD, Swallowing Disorder and/or Dysphagia. The last 10 years of publication were considered, that is, from January 2008 to May 2018. **Results:** We found 35 titles from the objective of association between swallowing disorders or dysphagia and COPD. Of these, 21 were eliminated by: 11 for treating comorbidities associated with one or another keyword; 7 classified as incomplete, as they appeared only the titles or titles and abstracts without article in full and 3 with original in a language different from the one searched. **Conclusion:** The initial search shows us the possibility of association between the terms, very related to the coordination of the breathing function, important for both. The lack of publications brings the need for further studies on the subject.

Keywords: deglutition disorders; pulmonary disease, chronic obstructive; review.

8342. Auditory Processing Profile of Children with Phonological Disorder

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Introduction: Auditory processing is a set of abilities responsible for receiving, detecting, recognizing, associating and integrating acoustic stimuli and programming a response. The assessment of these abilities is realized through behavioral tests, which classify the performance as normal or altered. **Objective:** To investigate the auditory processing profile of children with Phonological Disorder. **Methodology:** It was analyzed secondary auditory processing data of 87

children with phonological disorder, aged between 5 to 10 years old, from the database VALDEF (CEP995.344). The tests results analyzed were from PSI, SSW, PPS, RGDT and MLD. We extracted information on deficits found from the tests findings. **Results:** The results showed altered results in: decoding, present in 69 individuals, 78.40% of the sample, followed by the association: 57.95%, prosody: 19.31%, integration: 12.5%, outgoing organization: 7.95% and sequential memory for nonverbal sounds: 1.13%. It was also observed that most children usually combined decoding and association deficits. **Conclusion:** It was possible to identify that decoding was the most observed alteration. The presence of decoding deficits generates difficulties to discriminate sounds and to listen in noisy environments, as well as results in restricted vocabulary and substitutions of graphemes in writing. Therefore, it is suggested that new studies be done to verify if these difficulties are found in subjects with phonological disorders and if its impact on the phonological system is similar among children with the same profile, as this could suggest future clinical studies with auditory training in this population.

Keywords: language; child; speech sound disorder.

8344. Vocal Parameters in Individuals with Spinal Cord

Injury Traumatic: Review of Literature

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Introduction: Traumatic spinal cord injury results in a critical clinical condition, with great physical and psychological impact. In the area of Speech-Language Pathology, dysphagia, reduction of respiratory capacity, vocal changes, speech disorders and quality of life are highlighted. **Objective:** to evaluate the literature qualitatively and characterize the vocal parameters of patients with traumatic spinal cord injury. **Method:** the location and selection of the studies were carried out by means of a survey of the texts published on the subject, without specific periods using pre-established descriptors: "lesão da medula espinal", "fala", "fona\$", "fonoaud\$", and "voz". All steps of the study were independently conducted by the researchers, and when there was disagreement between them, the final position was consensual. The articles selected were critically and qualitatively evaluated by two instruments regarding their objectives; number, gender and age of participants; criteria and methods of evaluation and treatment, results and conclusions. **Results:** A total of 57 scientific articles were identified, of which 09 were considered valid, based on the inclusion criteria. These articles dealt with the description of morbidities of speech - language and speech - language pathology for the population. **Conclusion:** the functions of breathing, swallowing, speech and voice in individuals with spinal cord injury are compromised and require speech therapy. The articles presented low methodological quality, which makes more studies necessary in the area in order to standardize and raise the quality of care, both in evaluation and in rehabilitation.

Keywords: spinal cord injury; breath; voice; speech therapy; evaluation.

8345. Imitaciometric Profile of Children with Phonological Disorder

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Introduction: Acoustic imittance measures provide effective results on the functioning of the middle ear, detect-

ing changes that can cause conductive hearing loss. Hearing is essential for language development, therefore it is important to investigate it in children with Phonological Disorder.

Objective: To outline the imittaciometry results of children with Phonological Disorder. **Methods:** It was analyzed tympanometric curves, presence/absence of acoustic reflexes and degree of speech severity data from 108 children. The analyzed data is from the database VALDEF (CEP 995.344).

Results: In this study, 80% of the subjects presented tympanometric curves type A, which indicates normal results in imittaciometry. The number of subjects with A, B, C and As curves, in the right ear, were 90, 4, 10 and 4, respectively, and in the left ear were 93, 3, 7 and 5. Acoustic reflexes are expected when hearing is normal. In the right ear it was observed a total absence of contralateral reflexes in 15 subjects and ipsilateral reflexes in 8 subjects. It was found partial absence of contralateral reflexes in 36 children and ipsilateral in 27. In the left ear 14 subjects did not present contralateral reflexes and 7 ipsilateral. Partial absence of contralateral reflexes was observed in 25 subjects and ipsilateral in 30 subjects. **Conclusion:** Most subjects presented normal results. Those who obtained altered results may be related to biological and/or environmental aspects. There is a need to correlate the imittaciometry results with the audiometry of these subjects for better diagnosis.

Keywords: audiology; child language; language.

8346. Preliminary Analysis of the Voice In Young Women Before and After The Continuous Speech Test of 60 and 90 Minutes

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Introduction: The female predisposition to the lack of resistance of the vocal tract associated with prolonged use of voice presents vocal fatigue¹. Symptoms include roughness, breathiness, loss of voice, frequency breakdown, increased speech effort, tension, and laryngeal fatigue². **Objective:** To compare acoustic and self-perceptive measures of voice before, during and after the task of continuous speech in women. **Methods:** 31 women aged between 18 and 25 years old participated, without change vocal, laryngeal and without professional use of voice. Voice recording, self-evaluation of auditory perception and analysis of voice acoustic measurements were performed before, during and after the continuous speech task. The continuous speech test was performed by reading a standard text, lasting 60 minutes, 90 minutes and 15 minutes rest. **Results:** The F0, Fhi and Flo measurements were increased after continuous speech task and even after vocal rest, all were maintained higher than in the pre-task time. The reduction of the HNR, VTR, ARTI and APQ measurements occurred after a continuous speech task. However, PPQ, Fatr and HNR measures were higher during the continuous speech task compared to vocal rest. Auditory perceptual symptoms increased after 90 minutes of continuous speech and decreased after rest. **Conclusion:** The acoustic measurements F0, Fhi and Flo increased and the HNR, VTR, ARTI and APQ measures decreased after continuous speech task. The usual vocal instability and intensity increased after 90 minutes of continuous speech, as well as aerodynamic measures and auditory perceptual symptoms.

8347. Unilateral Hearing Loss: the Prevalence of a Universal Neonatal Hearing Screening at a High-Risk Maternity Hospital in a Country Town of São Paulo State
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Introduction: Unilateral Hearing Loss is characterized by partial or total impairment of one ear and a normal hearing in the contralateral ear. **Objective:** to determine the prevalence of Unilateral Hearing Loss in a high-risk maternity in a country town of São Paulo state. **Method:** A review study about 5,224 infants tested from 2015-2017 with Transient Otoacoustic Emission, followed by Automatic Auditory Brainstem Response, if they failed in Transient Otoacoustic Emission or presented any risk factors. Babies who failed at least in one ear in Automatic Auditory Brainstem Response screening were scheduled for a rescreening and then audiological assessment if they still failed. An audiologic assessment was done with Transient Otoacoustic Emission, Auditory Brainstem Response click and tone burst stimulus and tympanometry, if necessary. The audiological findings of infants who attended all evaluations were described in the patient report. **Results:** 5,224 infants were screened at a high-risk maternity, 16 of those failed in just one ear at retest screening and they were referred for audiological assessment. Among them, 10 had at least one risk factors and six did not. Five infants (0.10%) confirmed unilateral sensorineural hearing loss (one mild and four severe/profound hearing impairment) and one had no risk factors. **Conclusion:** Unilateral Hearing Loss can be present in infants with and without risk factors, showing the importance of Universal Hearing Screening to do an early diagnosis and intervention, reducing the negative impact of this impairment.

Keywords: neonatal screening, risk factors, unilateral hearing loss.

8353. Long-Latency Auditory Evoked Potentials In Children Who Stutter
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Introduction: Children with fluency disorders may present alterations in the operation of the Central Auditory System. Therefore, the analysis of the Long-Latency Auditory Evoked Potentials (LLAEP) in individuals who stutter can provide important information regarding their Central Auditory Processing. **Objectives:** To analyze latency and amplitude values obtained in the record of the exogenous component of the LLAEP in normal hearing children with stuttering, in comparison with the findings of children with adequate speech fluency and no learning complaint. **Methods:** It's a cross-sectional study, in which 50 normal hearing children without diagnosis of otologic pathologies or other diseases were included. 15 of them, with stuttering, were in the study group (SG) and 35 children were in the control group (CG). Tonal and Vocal Audiometry, Immittanceometry and Central Auditory Evaluation, with exogenous LLAEP, were carried out, as well as a fluency evaluation. **Results:** The statistical analysis of the LLAEP's waves showed a significant difference between SG and CG ($p < 0.001$). **Conclusion:** We found smaller amplitudes and delay in the LLAEP's latencies in children who stutter, when compared its performance with individuals in the CG. It's suggested to carry out studies using LLAEP procedures as an objectively evaluate in

order to monitor the interventions and therapeutic evolutions in stuttering.

Keywords: auditory evoked potentials; electrophysiology; hearing; child; stuttering.

8354. Visual Analogue Scale: A Resource for Self-Evaluation of Chronic Tinnitus Subjects in a Phono Audiological Counseling Group

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Federal University Of Santa Maria

Introduction: Tinnitus became prevalent in the population, requiring greater preparation of phonoaudiologists of different levels of health care. Thus, the Visual Analogue Scale became an ally of this professional in the monitoring and measurement of the symptom, being a simple and low cost resource. **Objectives:** To describe the effectiveness of the Visual Analogue Scale in the chronic tinnitus measurement in a phono audiological counseling group. **Methods:** Cross-sectional study, approved by the Research Ethics Committee. Participated in the study ten subjects (maximum number of subjects per group), with mean age of 61.3 years, belonging to the phono audiological counseling group of an University Hospital. The Visual Analogue Scale was applied before and after five sessions of phono audiological counseling group and the subjects quantified, from zero to ten, the bothersome with the symptom. **Results:** Before the phono audiological counseling, 40% of the subjects gave a grade of ten, 10% gave a grade nine, 20% reported eight, and 30% reported seven. After treatment 20% reported six, 30% gave a grade four, 20% gave a grade two, and 30% reported zero. The measurement of the discomfort with the symptom was performed quickly and simply, reflecting objectively and quantitatively the improvement of the bothersome with the tinnitus. **Conclusion:** The Visual Analogue Scale is an effective way to measure the annoyance with tinnitus, since it characterizes it quantitatively and helps to guide the continuity of the treatment, and can be used by the phonoaudiologist from Basic Attention to High Complexity, providing a rapid, effective and low cost intervention for the health system.

Keywords: tinnitus; visual analogue scale; counseling.

8356. Behavioral Aspects, Symptomatological and Health Conditions In Subjects with Chronic Tinnitus After a Single Session of Cranial Osteopathy

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Introduction: Cranial osteopathy aims by means of cranial manipulations, to modify the functioning of a corporeal system. It is believed that this technique can act on some etiological aspects of tinnitus and diminish the perception of it. **Objective:** To analyze behavioral, symptomatological and health conditions in subjects with chronic tinnitus after a single session of cranial osteopathy. **Methods:** Experimental, cross-sectional, quantitative study, composed of convenience. Participated in the study 28 subjects, with a mean of 51.67 years, 14 males and 14 females, presenting normal hearing thresholds or sensorineural hearing loss until moderate degree by tritonal average or in isolated frequency (up to 55 dB). The etiological aspects were collected through a semi structured interview in the first session and the degree of discomfort was measured by the Visual Analogue Scale (pre and post session). The osteopathic manipulations were performed by a specialist physiotherapist. **Results:** Considering the behavioral aspects, the majority of the subjects who presented poor eating habits and fear did not ob-

tain improvement. Of the emotional aspects, the majority presented depression, dizziness and anxiety and there was no improvement. Concerning the health conditions, most of the subjects reported cervical and thoracic pain, hypercholesterolemia and continuous medication use, and there was also no improvement in tinnitus. **Conclusion:** The subjects in this study did not present improvement with a single session of cranial osteopathy, and it is necessary, studies with a therapeutic program, in order to better understand the relation of this form of treatment in the relief of chronic tinnitus.

Keywords: tinnitus; adult; osteopathic manipulation.

8360. Analysis of Tinnitus Time and Symptom Discomfort

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Introduction: Tinnitus can cause anxiety, insomnia and poor performance at work, altering their quality of life. **Objective:** To verify the relation between the time of tinnitus in years and the discomfort caused by the symptom. **Methodology:** Patients with tinnitus and discomfort were evaluated. Initially the individuals answered the anamnesis in the sequence to the Tinnitus Handicap Inventory, being included in the research only those that had at least 18 points (mild annoyance). **Results:** The study included 19 patients with mean age of 63.7 ± 10.5 years. Among the participants 11 (57.89%) presented unilateral tinnitus and 8 (42.11%) bilateral tinnitus. It was found that seven (36.84%) presented tinnitus between one and five years, five (26.32%) between 6 and 10 years and seven (36.84%) between 10 and 15 years. As for the Tinnitus Handicap Inventory, four (21.05%) presented mild discomfort (18 to 36 points), six (31.57%) moderate discomfort (38 to 56 points), seven (36.84%) discomfort severe (58 to 76 points) and two (10.52%) catastrophic discomfort (78 to 100 points). There was no relationship between the time of tinnitus and the discomfort caused by tinnitus ($p = 0.24$). **Conclusion:** It was observed that the time of tinnitus did not influence the discomfort caused by it, for the individuals evaluated.

Keywords: tinnitus; annoying; quality of life.

8368. PhoneNet: A Neural Network with Deep Learning for Real Time Phoneme Recognition in Digital Games

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Fofuuu e Cev

Introduction: Artificial intelligence with deep learning are gaining importance. When used for speech recognition it may help communication disorders assessment and treatment. **Objectives:** Create a Neural Network that recognizes Brazilian speech sounds for instant feedback in lower-end mobile devices. **Methods:** Over 30.000 speech samples of brazilian phonemes from different speakers, male and female with no voice or speech disorders, were analyzed. The audio files were transformed into a 40-bin mel spectrogram representing human discernible features of the sound wave. These features were then embedded in a 2D-tensor and input in a ResNet classification model, which yields state-of-the-art performance for image-recognition, and was customized for this particular phoneme-recognition situation. The model outputs a vector containing 21 probabilities, one for each phoneme plus silence and unrecognized. The phoneme with the highest probability in the resulting vector is considered the phoneme

recognized by the system. The model was trained using supervised learning with one-hot encoded vectors and a gradient descent linear regression that adjusted the model weights to approximate it to the solution. The collected data was divided in 3 datasets: training, testing and validation; training occurred for 22k epochs until a local maxima was achieved. **Results:** The model achieved an accuracy of 91.54%. The best recognition was achieved for "ch"; the lowest for "v". **Conclusion:** It is possible to use image-recognition techniques to recognize sounds with good accuracy. PhoneNet is a benefiting tool to communication disorders assessment and treatment.

Keywords: speech acoustics; speech recognition software; artificial intelligence.

8371. Development of Speech-Language Pathology's Standard Operating Procedure In Infirmary Cancer Care

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Introduction: The standard operating procedure (SOP) is an instrument used to guarantee, through standardization, expected results for each executed task with the aid of a script. Speech-language pathology, when inserted in the hospital's multidisciplinary team, is responsible for management of dysphagia, evaluation/intervention in speech and communication, contributing to the overall prognosis, reducing the length of hospital stay, and the re-hospitalization rate for aspiration pneumonia. **Objective:** To describe and standardize the speech-language pathology's operating procedure in an infirmary cancer care. **Methods:** The actions performed in the infirmary were: 1)Screening of inpatients, medical history taking, assessing their global state, complaints, signs and symptoms of respiration, voice/speech, hearing, chewing, and/or swallowing; 2)Application of the adapted Preliminary Speech-language pathology evaluation protocol and the Dysphagia risk protocol for the cases identified through the screening; 3)Support and guidance were given to the patients, their families or caregivers and when necessary, speech-language pathology therapy was also performed; 4)Case discussion along with the multidisciplinary team was also performed in various cases. **Results:** Through March to June of 2018, 87 patients were screened, of which 21 were evaluated. Sixty of the 87 screened patients received general guidance over oral hygiene, posture and volume during meals, and xerostomic care. **Conclusion:** The use of SOP increased the interaction of the Speech-language Pathologist and the multidisciplinary team, influencing the care decision regarding feeding possibilities and comfort measures. Standardization of operating procedures in speech-language pathology in infirmary cancer care is essential to the optimization and the quality of the care given.

Keywords: speech-language pathology; oncology; standard operating procedure; infirmary cancer care.

8372. Improving the Impact of Tinnitus on Quality of Life: A Longitudinal Study Considering Different Variables

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Introduction: The impact of tinnitus can be influenced by several situations. **Objective:** to evaluate the improvement in the discomfort caused by chronic tinnitus. **Methods:** the sample consisted of patients with chronic tinnitus, who responded the Tinnitus Handicap Inventory and performed otorhinolaryngological and audiological evaluation. The initial evaluation oc-

curred on the first visit and the second on the last time the patient attended. In the interval between evaluations, patients received individualized treatment. **Results:** The sample consisted of 185 patients, the majority being female (61.6%). Age ranged from 23 to 82 years (mean of 57.9 ± 11.9 years). The time interval between evaluations ranged from 19 to 97 months (median of 55 months). It was found that the median score in the Tinnitus Handicap Inventory in the first evaluation was 42 points and 32 points in the second one ($p=0.001$). In the analysis of the variables, it was verified that there was no relation between the difference in the scores and the time variables between the evaluations ($p=0.057$), age ($p=0.366$), gender ($p=0.057$) degree of hearing loss ($p=0.574$ in the right ear, $p=0.504$ in the left ear), type of hearing loss ($p=0.235$ right ear, $p=0.813$ left ear), tinnitus laterality ($p=0.330$), pitch ($p=0.596$ in the right ear, $p=0.953$ in the left ear) and loudness ($p=0.828$ in the right ear, $p=0.949$ in the left ear) of tinnitus and diagnostic hypothesis ($p=0.468$). **Conclusion:** there was improvement in the annoyance caused by tinnitus, and none of the studied variables related to such improvement were found.

Keywords: tinnitus; handicap.

8376. Effects of Mechanical Vibration Stimulation of the larynx in Voice Production

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Introduction: Combining mechanical vibration stimulation with resistance training for improving neuromuscular performance is a method that has gained popularity in the field of sports science. Purpose: To evaluate the immediate and long-term effects of mechanical vibration stimulation (G-Life NL3000) on the larynx associated with vocal exercises. **Method:** 14 professional voice users divided into: Experimental Group – 7 participants who performed a 20 minutes exercise protocol with nasal sound (humming) applying the mechanical vibration stimulation (G-Life NL3000) located in the larynx once a day for 30 days; Control Group – 7 participants who performed only the 20 minutes exercise protocol with nasal sound (humming). For comparing effects, evaluation were held pre-stimulation, immediately post stimulation and 30 days post stimulation. **Results:** Experimental Group presented a statistically significant progress in the post-immediate and in the post-treatment for the maximum phonation time ($*p = < 0.001$), Jitter ($*p = 0.008$), Shimmer ($*p = 0.005$), noise-to-harmonics ratio ($*p = 0.005$). In the GRBASI scale, Experimental Group has presented significant results in the post-treatment evaluation for Grade ($*p = 0.005$), Roughness ($*p = 0.008$), Breathiness ($*p = 0.018$) and Instability ($*p = 0.018$). Self-perceived voice questionnaire showed better voice quality ($*p = 0.031$) and easier phonation ($*p = 0.005$) for the Experimental Group. **Conclusion:** The mechanical vibration stimulation located in the larynx associated to vocal exercises brings positive changes in vocal pattern and improves significantly the vocal quality short and long-term for the participants from this study.

Keywords: mechanical vibration, larynx, vocal conditioning.

8394. Children with Down Syndrome: Mismatch Negativity Analysis

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Introduction: People with Down syndrome may have several deficits, including hearing loss and changes in the Cen-

tral Nervous System. However, there are just a few studies about hearing central functioning of these individuals. Therefore, studies that evaluate the functioning of the central auditory pathway in children with Down syndrome are warranted. **Objective:** To describe and analyze the responses obtained through the evaluation of Mismatch Negativity in children with Down syndrome, verifying possible associations between the audiological findings and age, sex and ear. **Methods:** A cross-sectional study was carried out with 31 children aged 7 to 11 years old with Down syndrome diagnosis. All of them made medical evaluation, peripheral and central auditory evaluation through Mismatch Negativity. **Results:** The sample presented increased latency values in the Mismatch Negativity survey. There was no statistically significant difference between ears ($p = 0.347$), or difference between sexes ($p = 0.429$). There was a negative correlation between age and latency of Mismatch Negativity ($p = 0.001$). **Conclusion:** In this study, it was observed that children with Down syndrome presented increased latency in Mismatch Negativity, suggesting deficits in auditory abilities of sound discrimination, auditory memory and involuntary attention. Therefore, it is important that children are stimulated and monitored to have an adequate development and better quality of life. The applicability of Mismatch Negativity in clinical practice is also highlighted, in order to contribute to the early diagnosis of auditory alterations.

Keywords: auditory evoked potentials; electrophysiology; hearing; children; down syndrome.

8395. Deviant voices and listeners' Attitudes: The Social Impact Of Dysphonia

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Introduction: deviated voices can be judged negative and cause problems in social and professional activities. **Objective:** verify the association between the presence, overall severity and type of vocal deviation and the listener's attitudes. **Methods:** were used 44 samples of CAPE-V phrases, recorded by individuals with different degrees and types of vocal deviation. The samples were randomly presented to 152 listeners, who performed the judgment of attitudes. Wilcoxon's test and the logistic regression model were used. **Results** **Conclusion:** There was an association between the presence, overall severity and type of vocal deviation and the judgment of attitudes. More deviant and breathiness voices were evaluated more negatively. Increasing of the overall severity and the degree of breathiness reduced the chance of positive evaluation. For female voices, increasing the degree of breathiness and strain reduced the chance of a positive judgment. The increase in the degree of roughness in male voices increased the chance of a positive judgment, while the greater overall severity reduced the chance of positive evaluation. In general, the overall severity and the degree of breathiness are predictors of negative attitudes. The degree of breathiness and strain are predictors of negative attitudes toward female voices. The overall severity is a predictor of negative attitudes for male voices, while the degree of roughness increases the chance of a positive judgment.

Keywords: attitude; voice; vocal quality.

8399. Pleasantness of Dysphonic and Non-Dysphonic Voices

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The presence of vocal quality deviation can impact interpersonal communication, generating negative impres-

sions in the listener. Pleasure refers to a positive impression generated in the listener, from a vocal identity based on the acoustic properties of the voice and its emotional, cognitive and cultural development. **Objective:** To verify the relationship between the pleasantness and the auditory-perceptual and acoustic parameters in healthy and deviant voices. **Methods:** were used 44 samples of CAPE-V phrases, recorded by individuals with different degrees and types of vocal deviation. The samples were randomly presented to 152 listeners, who performed the pleasantness judgment on a seven-point Likert scale. Subsequently, the mean and the standard deviation (DP) measurements of the fundamental frequency (F0), jitter, shimmer, glottal to noise excitation (GNE) were extracted. **Conclusion:** There was a moderate negative correlation between the pleasantness and severity of vocal deviation, the degree of roughness, the degree of strain, the jitter, the shimmer and the standard deviation of F0, that is, between the pleasantness judgment and auditory-perceptual and acoustic parameters.

Keywords: attitude, voice, vocal quality, acoustic.

8401. Attitude Associated with Dysphonic and Non-Dysphonic Voices

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Introduction: Vocal deviation can cause negative impressions and compromise the effectiveness of oral communication. **Objective:** To verify the association between the presence, overall severity and type of vocal deviation and the attributes related to dysphonic and non-dysphonic voices. **Methods:** Were used 44 samples of CAPE-V phrases, recorded by individuals with and without dysphonia. Samples were randomly presented to 152 listeners, who used a Likert scale to judge the following attributes: "pleasant/unpleasant", "powerful/weak", "sympathetic/unfriendly", "strong/weak", "resistant/fragile", "Extrovert/introvert", "healthy/ill", "authoritarian/submissive", "calm/agitated", "safe/unsafe", "competent/incompetent" and "independent/dependent". **Conclusion:** Individuals with vocal deviation were judged negatively in 11 of the 12 attributes, excluding only "calm/agitated". Patients with mild vocal deviation were judged to be more "unpleasant," "unfriendly," "introverted," "unsafe," "incompetent," and "dependent" toward healthy individuals. Patients with mild to moderate deviation were judged negatively on 11 attributes, excluding "calm/agitated", compared to patients with mild deviation. Individuals with intense vocal deviation were judged as more "unpleasant," "weak," "fragile," "ill," and "dependent," as compared to individuals with mild to moderate vocal deviation. There is an association between the presence and overall severity, and the attributes associated with dysphonic and non-dysphonic voices. Individuals with different degrees of vocal deviation receive different judgments of the attitude of the listeners.

Keywords: linguistic attitude, voice, vocal quality.

8408. Mismatch Negativity in Children with Phonological Disorder

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Introduction: The phonological disorder is a difficulty in speech, characterized by inappropriate use of sounds. To obtain an adequate development of the language and the phonological system it is necessary that there is a integrity and functioning central auditory system. Mismatch Negativ-

ity is a potential clinical instrument for assessing the central auditory nervous system of children, whose auditory discrimination ability is under investigation. **Objectives:** To analyze the latency values of Mismatch Negativity in children with phonological disorder, without auditory complaints and with auditory thresholds within the normal, comparing to the findings of a control group. **Methods:** A cross-sectional study involving 52 children of both sexes, 17 children with phonological disorders and 35 without phonological disorders, between 7 and 8 years of age, without diagnosis of otological pathology or other diseases. All children had a peripheral audiological evaluation (Meatoscopy, Tonal Audiometry, Vocal Audiometry and Acoustic Imittance Measures) and a central audiological evaluation (Mismatch Negativity). **Results:** There was a significant difference in the difference latencies of Mismatch Negativity between groups ($p = 0.001$), there was no difference between ears and genders. In addition, changes in the morphology of Mismatch Negativity waves in children with phonological disorders are observed. **Conclusion:** There was a significant delay in the latencies of Mismatch Negativity in children with phonological disorder when compared to children in the control group.

Keywords: auditory, electrophysiology, evoked potentials, children.

8411. Correlation between Medical Diagnoses and Penetration or Aspiration In Infants

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Introduction: Survival rates improvement of children with histories of prematurity and complex medical conditions might explain the recent increase of pediatric dysphagia leading to problems such as nutritional disorders, delayed development, and complications in the respiratory system. **Objectives:** To investigate the correlation between medical diagnoses and penetration or aspiration in infants referred for videofluoroscopy swallow study. **Methods:** The medical records and studies of 51 infants who attended a videofluoroscopy swallow study for dysphagia at a University Hospital, between January 2017 and March 2018 were reviewed retrospectively. The medical diagnoses, penetration and aspiration were analyzed. These infants were classified in two groups: penetration and aspiration. In each group, medical diagnoses were divided according to six categories: Structural Abnormalities, Neurological Conditions, Behavioral Issues, Cardiorespiratory Problems, Metabolic Dysfunction and Prematurity. **Results:** 51 infants were included with an average age of 9.12 months, 31 infants (60.78%) presented pharyngeal disorders. Silent aspiration was observed in 16 infants (51.61%). The medical diagnosis that most presented aspiration was Cardiorespiratory problems (43.75%), followed by Structural Abnormalities (25%), Neurological conditions (12.5%) and Prematurity (12.5%). The medical diagnosis that most presented penetration was Prematurity (33.33%) and Cardiorespiratory problems (33.33%), followed by Neurological conditions (20%) and Structural Abnormalities (6.67%). **Conclusion:** Silent aspiration was identified in infants with cardiorespiratory problems. Caregivers and clinicians should be aware that absence of cough and choke does not eliminate the possibility of aspiration. Videofluoroscopy swallow study can guide feeding therapy and minimize the consequences of aspiration in this fragile population.

Keywords: dysphagia, aspiration, infants.

8418. Sequential Memory and Phonological Awareness: the relations among verbal sounds and Central Auditory Processing

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Introduction: The Central Auditory Processing integrity is important to distinction the phonemes. This latter, about phonological awareness, has relation with the capacity to reflect about sounds of language, your use and with writing learning. **Objectives:** To relate data of Central Auditory Processing screening and performance in Phonological Awareness of children with Phonological Disorder. **Methods:** Were used secondary data of database VALDEF (CEP 995.344), composed with evaluation of 130 children with phonological disorder, both gender, aged at 5-10 years old. Compared results of sequence memory of verbal sounds of Central Auditory Processing screening with performance of syllabic transposition of phonological awareness. Were included the data of subjects with a minimum of one error in the sequential memory test for verbal sounds and with complete evaluation of the instrument CONFIAS. The sample of this study consists of 51 subjects data. **Results:** It was verified that 60,78% (31 subjects) presents phonological awareness abilities appropriate. In transposition test, 64,70%(33) obtained under 50% of successes e 17,66%(9) obtained 50%. In relation to sequential memory to verbal sounds, 31,37%(16) had mistakes in three sequentials, 35,29%(18) in two and 33,34%(17) in one. The results shows transposition performance are insufficient, although the majority have appropriate indicators at CONFIAS. **Conclusion:** Most subjects have appropriate standards of phonological awareness, but a considerable number of them, have performance beyond in transposition, revealing the important of the Central Auditory Processing and sequential memory skills to phonological awareness development.

Keywords: central auditory processing; phonological awareness; acquisition of language; sequential memory.

8421. Development of Speech-Language Pathology's Standard Operating Procedure in Ambulatory Of Cancer Care

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Introduction: Standard operating procedures are detailed instructions, described to achieve uniformity in the implementation of services. These procedures are important to the care of the cancer patients, who are assisted by professionals that seek to minimize the disease manifestations, optimize treatment and promote quality of life. **Objective:** To describe the operating procedures of a team of speech-language pathologists in a high-complexity assistance in oncology. **Methods:** The actions carried out in the sector were: 1) History taking conducted through interview with the patient and/or caregiver, patient's complaints, global state, signs and symptoms of breathing, voice/speech, hearing, chewing and/or swallowing; 2) Clinical evaluation of Orofacial Motricity (Protocol of Orofacial Myofunctional Evaluation with Scores), voice (perceptive-listening analysis), speech (Phonology test protocol), chewing and swallowing (Functional evaluation of swallowing protocol); 3) Individual therapy and follow-ups were divided by weekly, biweekly and monthly frequency. **Results:** During the months of March to June of 2018, 17 patients were treated. Of this total, 70% had the medical diagnosis of head and neck neoplasms. Eleven of these patients

reported speech/voice complaints, 10 referred swallowing complaints and 6 of them reported both impairments. **Conclusion:** The use of standard operating procedures increased interaction of the speech-language pathologists with the multidisciplinary team, which led to the increase of requests for evaluation/follow-up of cancer patients. Standard operating procedures are essential to the proper functioning of the service, facilitating the characterization of the target population and communication between professionals.

Keywords: speech-language pathology; oncology; standard operating procedure.

8422. Research of the Auditory Thresholds of High Frequencies and Blood Pressure In Maritime Workers

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Introduction: Studies indicate an association between lowering of the auditory thresholds of high frequencies and hypertension in several groups of workers. In the naval area there are few studies on this association. **Objectives:** To analyze the association between auditory thresholds of high frequencies and blood pressure in offshore workers. **Methods:** Retrospective analysis of medical records of maritime workers, males, who underwent occupational exams between 2014 and 2016. Analyzed variables: age; average of the auditory thresholds of high frequencies (3kHz, 4kHz and 6kHz) of both ears; systolic and diastolic arterial pressure. Pearson's chi-square test was used to analyze the data. Committee for Ethics in Research: 62731416.5.0000.5257. **Results:** medical records of 162 workers were evaluated. The age ranged between 21-60 years, median 37 and mean 37.9 (± 10.1) years. 24.1% presented alterations in the auditory thresholds of high frequencies in the right ear, and 23.5% in the left ear. 47.5% presented alteration of systolic pressure and 8.0% of diastolic pressure. A statistically significant association was observed ($p=0.044$) between the lowering of the auditory thresholds of high frequencies of the right ear and alteration of systolic blood pressure. **Conclusion:** The results of this study indicate a possible association between blood pressure alterations with auditory thresholds of high frequencies in maritime workers.

Keywords: auditory thresholds; high frequencies; blood pressure; hypertension; maritime workers.

8424. Unilateral Chronic Otitis Media: Auditory Sensitivity and Restriction to Auditory Participation

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Introduction: Hearing impairment resulting from chronic otitis media (COM) can lead to negative implications for auditory perception, even when the involvement is unilateral. **Objective:** The objective of this study was to assess auditory sensitivity, perceived hearing difficulty (PHD), and restriction to auditory participation (RAP) among adults with a longstanding unilateral COM. **Methods:** Twenty-six adults aged 18-54 years with unilateral COM, whose symptoms started until the age of 18, were evaluated with interview, puretone thresholds, and the Hearing Handicap Inventory for Adults. **Results:** Fourteen participants (54%) had the symptoms of COM initiated until 6 years of age. Participants had on average symptoms of COM for 33 years, and 9 (35%) had undergone at least one surgery. In 18

(69%) the ear with COM presented involvement of the inner ear, and in 25 reduction in the auditory sensitivity (mean = 46dB). Fifteen (58%) presented some level of RAP, and for 18 (69%) the PHD was classified as medium or large. Both, participants with a mean auditory sensibility threshold between 21 and 40dB, and participants with an average threshold between 41 and 69dB, presented levels of RAP of absent to severe. Correlation analysis using Kendal tau showed that PHD correlated with HHIA score ($\tau = 0.34$, $p < 0.05$). Results also showed that HHIA score cannot be explained based solely on auditory sensitivity. **Conclusion:** Adults with unilateral COM may present a long time of hearing deprivation, even though they have undergone otologic surgery, and each individual perceives differently the reduction in auditory sensitivity.

8425. Immediate Effect of Vocal Exercise on the Vocal Tract Configuration of Healthy Women and with Vocal Nodules
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Introduction: Patients with voice disorders may implement supraglottic adjustments as a compensatory mechanism for laryngeal alterations. In this way, it is important to understand the impact of vocal exercises on such adjustments. **Objective:** To verify the immediate effect of the execution time and the type of vocal exercise in the configuration of the vocal tract of healthy women and with vocal nodules. **Methodology:** 24 women (12 - control group and 12 - experimental group) were submitted to the recording of vehicle phrases (containing the vowels /a/, /i/ and /u/), to extract the fundamental frequency (F0) and the 3 first formants (F1, F2 and F3); and to the realization of 5 minutes of tongue vibration, high-resistance straw and overarticulation. **Resultse Conclusion:** Women with vocal nodules presented lower values of F0 and F1 in relation to vocally healthy women from the first minute of exercise with high-resistance straw. Five minutes of tongue vibration causes reduction of F1 of the vowel /u/ in women with vocal nodules, indicating less pharyngeal constriction and greater elevation of tongue position in vowel production in relation to vocally healthy women. Vocally healthy women present greater difference between vowel formants before and after vocal exercise, with greater vowel distinctiveness. The over-articulation exercise did not present a significant difference in the comparison. Five minutes of voice tongue vibration exercise and high-resistance straw elevate the linguomandibular subsystem and release pharyngeal space of women with vocal nodules.

Keywords: formants; vocal exercise; vocal disorders.

8431. Awareness of Preschool Children About Mouth Breathing
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Introduction: Mouth breathing is a frequent alteration in childhood which main causes are the adenoids and tonsillar hypertrophy. As this respiratory pattern compromises craniofacial growth and the orofacial musculature, early diagnosis and to aware the population about and general information and preventions procedures are important. **Objectives:** to verify the level of information of preschool children about mouth breathing and to evaluate the effectiveness of information programs about mouth breathing directed to this public. **Methods:** 159 preschool children (mean age 5.5 years old) participated in a survey. The study was divided into three stages: (1) Application of pre-orientation questionnaire in order to verify the children's prior knowledge about the

subject. (2) Realization of playful workshop, as a play in a theater talking about the following themes: a) causes and consequences of moth breathing, (b) impact on child development, (c) school performance and (d) importance of early care. (3) Reapplication of the questionnaire in order to verify the program effectiveness. The collected data was analyzed using McNemar statistics test. **Results:** There was a significant difference between the results of questionnaires applied before and after information program ($p < 0.01$) for all subjected addressed. **Conclusion:** the information program was effective to aware preschool children about the causes and consequences of mouth breath, as well as about prevention and treatment procedures of this pathology.

Keywords: mouth breathing; childhood; prevention.

8433. Profile of the Phonological Acquisition of Children with Phonological Disorder
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Introduction: The typical acquisition of the phonological system begins when the child pronounces his first referenced words, around 12 months. By age 4, the child should acquire the entire phonological system of their language, considering 80% of correct productions to characterize phoneme stabilization. **Objectives:** To describe the profile of the phonemic acquisition of children with phonological disorder, revealing acquired targets, partially acquired and absent in the phonological system of the same. **Methods:** The phonological system of 111 children, age 4 to 10 years old, was evaluated from the secondary data analysis of the VALDEF Bank (CEP995344). **Results:** Was observed that, among the phonemes of the phonological system, the one with the lowest percentage of acquisition was /r/, with only 25.2% of stabilization, followed by /ʒ/, with 37.83% and /χ/, with 47.74%. Concerning the phonemic classes, the stops presented an average acquisition of 80.17%, the fricatives 65.88%, the nasals 92.78% and the liquids 55.4%. **Conclusion:** It was noticed a greater difficulty in the acquisition of liquids, especially the /r/, absent for 65 individuals surveyed. These data corroborate the fact that the liquids are more complex and more marked segments in the typical acquisition, evidenced in the data of children with phonological disorder. The phonemic intervention, as well as the stimulus activities for the development of language, must take into account the complexity of this class of sounds and prioritize them as objectives of therapeutic and preventive actions.

Keywords: child language, language development, language disorders.

8434. Perceptual-Auditory Analysis of Teacher's Voice in Public and Private Education
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Introduction: Teaching, requires a great demand from teacher's voice, being verified a serial of voice problems among those who exercise. Few of those professionals have vocal preparation, having superficial knowledge in regards of voice care and the lack of worries in relation on vocal symptoms. **Objectives:** Investigate the vocal quality of teachers in private and public school. **Methods:** In this study has participated 53 primary teachers from the city of João Pessoa/PB. Speech samples were collected for the perceptual-auditory evaluation of the voice, analyzed through the GRBASI scale. The data were tab-

ulated and analyzed. Descriptive statistics of mean and standard deviation for all variables. **Results:** It was verified 100% of the teachers from private school present prevalence is voice disturbance, while the teachers from public school present 89,2%. In both teaching school, 75% of private school and 64,9% of public school presented a moderate degree of vocal change. Those teachers from private school present, significantly, more risk of acquiring roughness in their work environment. **Conclusion:** The data indicate that most public school teachers, and all of private school teachers, presented prevalence of voice disorder. It was verified that the moderate degree of vocal alteration predominated in both school, and the teachers of private school present a degree of roughness greater than those of the public school. Therefore, it requires strategies intervention from speech-language in the work environments of these professionals, promoting vocal health.

Keywords: voice; teachers, vocal quality.

8436. Profile of the Speech Disorders with emphasis on the phonetic nature alterations of children in a public school in Porto Alegre

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Introduction: Speech sounds disorders are different by your nature. The phonetics ones occur by impairment in the articulation of speech sounds, either due to changes in the orofacial structure, mobility, positioning and tone of the muscles. Phonological disorders occur due to the cognitive inadequacy of the speech sounds system. **Objective:** To describe the profile of the speech alterations of municipal public school students, with emphasis on phonetic difficulties. **Methods:** Cross-sectional study, with secondary data from the DATAFON Bank (CEP1,584,201). Were analyzed data from the speech screening of 205 children, aged between 5 and 11 years. The speech screening was performed through the Phonological Assessment Instrument with elicitation of 125 words. All speech disorders were observed, identifying phonetic distortions, described in percentages and analyzed in relation to the different types of speech disorders. **Results:** The result of the analysis indicated that 64.8% of the children did not present any speech alteration. The rest of the sample showed different types of speech alterations, as like: 29.75% phonological, 4.39% phonetic, and 0.97% phonological and phonetic alterations. In relation to phonetic disorders, the following types were observed: anterior lisp (55%); distortions due to dental absence (27%); lateral lisp (9%) and liquid dorsalisation (9%). **Conclusions:** The present study, the anterior lisp was the most frequent type of phonetic distortion. The findings show that speech-therapy acting is primordial in the prevention of these clinical conditions, through guidelines, identification and early interventions in the early years of language development.

Keywords: phonetics, speech sound disorder, child language.

8439. Hearing and Non-Hearing Complaints in Gas Station Workers in Rio de Janeiro

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Introduction: Gas station workers are daily exposed to the innumerable chemical substances found in gasoline, such as benzene, which it has toxic effects and can affect the

central nervous system as well as the hearing and balance systems as years go by. Besides the chemical substances, the workers are exposed to automobile's engines noise, horns, vacuum cleaners and car washing machines, which can generate and intensify occupational complaints. **Objective:** Apply questionnaires with straightforward questions related to hearing and non-hearing complaints in gas station workers in Rio de Janeiro city. **Methods:** 39 workers were invited to answer a questionnaire concerning personal and labor information, questions about presence or absence of diabetes, triglycerides, cholesterol, anaemia, thyroid problems, arterial hypertension, heart diseases, joint pains, cervical spine pains, dizziness, tinnitus, decreased hearing, auricular plenitude sensation, use of antidepressant and use of anxiolytic. **Results:** Among the hearing complaints, 15% reported dizziness, 20% tinnitus, 23% decreased hearing, 15% auricular plenitude sensation. Among the non-hearing complaints, 2% reported diabetes, 5% cholesterol, 20% arterial hypertension, 10% heart diseases, 20% joint pains, 10% cervical spine pains, 2% use of antidepressant and 2% use of anxiolytic. None of the workers reported anaemia, thyroid problems and triglycerides. **Conclusion:** Gas station workers reported few hearing complaints regarding the occupational exposure to the chemical substances and to the noise in their workplace, being clear that the ototoxic signs cannot be obvious according to the testimony of the workers, therefore deserving an investigation with further complementary exams.

8451. Conflict Reduction in Communication with Individuals with Chronic Otitis Media: Family Involvement in the Rehabilitation Process

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Introduction: Individuals with chronic otitis media (COM) are potentially subject to hearing difficulties, with interruptions in conversational flow. Participation of family members in rehabilitation process can provide better quality in communication situations. **Objectives:** Make significant others aware of hearing loss difficulties in individuals with COM in order to reduce conflicts in communication situations. **Method:** Three individuals (C, J, L) with unilateral moderate conductive hearing loss caused by COM, accompanied by at least one family member (companion), participated in five group meetings in a psychoeducational approach. Companion reports were collected through home activities. **Results:** C (woman, age 49) participated in the study with a daughter and a sister, J (male, age 51) with a daughter and his wife, and L (female, age 18) with a cousin. Companions of C and L: 1) observed irritation, embarrassment, annoyance or sadness in COM relatives in communication situations; 2) reported hearing difficulties in a hearing loss simulation activity; 3) used communication strategies worked out in the meetings. J's companions did not record their observations. All companions reported being able to identify hearing difficulties of COM relatives, observed positive changes in COM relatives in situations of hearing demand, and in feelings related to listening difficulty. COM individuals reported that they had obtained more support from these companions at home, perceived less irritation of them, and greater use of communication strategies that helped to reduce conversation stress. **Conclusion:** Participation of family members in rehabilitation process of COM individuals presented potential for reducing conflicts in communication situations.

8452. Auditory Findings and Electrophysiologics in Individuals with Dominant Optic Atrophy Plus Syndrome
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Introduction: The optic neuropathy of Kjer, first described by Kjer in 1959(1), is an autosomal dominant optic atrophy due to a change in the OPA1 gene and chromosome 3q28. Syndromic optic atrophy, associated with other symptoms such as hearing loss, ophthalmoplegia, myopathy, ataxia is called Dominant Optic Atrophy Plus Syndrome (ADOA plus). **Objective:** To describe the auditory findings and electrophysiologics in individuals with ADOA plus evaluated in the Cochlear Implant Section of HRAC-USP. **Results:** Case 1: V.E.B, male patient, 11 years old, the audiometry presented progressive sensorineural hearing loss profound right and severe left degree, acoustic immittance measures with type A curve and contralateral and ipsilateral reflexes absent bilaterally. The BAEP presented absence neural response in 95 dBHL, with presence of bilaterally cochlear microphonism, confirmed in ET-Ecoch. The OAE were absent bilaterally and by DPOAE, in the right ear was present in all frequencies, except in 1 Khz and in the left ear was present in all frequencies. Case 2: V.C.C, male patient, 20 years old, presented progressive sensorineural hearing loss profound bilateral degree, acoustic immittance measures with type A curve and contralateral and ipsilateral reflexes, OAE and DPOAE bilaterally absent. The BAEP presented absence neural response in 95 dBNA and cochlear microphonism confirmed in ET-Ecoch. **Conclusion:** Hearing loss is a manifestation of ADOA plus and should be investigated and treated early. After analysis of the interdisciplinary evaluations, the two cases were indicated for cochlear implant surgery.

Keywords: optic atrophy plus syndrome; hearing; cochlear implant.

8453. Preliminary Analysis of the Methods of Voice in Adult And Elderly Healthy Women
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The objective of the study was to establish the regulations of the aerodynamic and fontative parameters for the female population of Ribeirão Preto and region. 30 adults women and 30 elderly participated and were submitted to the vocal intensity test, body mass index registry, and measures of the fonatory air system, employing the protocols: pulmonary vital capacity, maximum timed phonation and vocal efficiency, by the aerodynamic system model 6600 maintenance (kappentax®). Regarding the body mass index, both groups presented overweight. In the comparison between adult and elderly women, no significant difference in minimum and maximum vocal intensity was observed. In the vital capacity of protocol duration variables presented similar results, except in the expiratory volume, where adults presented higher results, while the fonatory maximum time protocol presented differences in the fundamental frequency, maximum sound pressure and vocal sound pressure. In the protocol of vocal efficiency, they presented differences in parameters of fundamental frequency, air pressure, aerodynamic energy and vocal air flow. The groups did not present correlation between the fonatory time values obtained in the protocol of the maximum timed phonation and the variables

of expiratory air flux and expiratory volume of the protocol of pulmonary vital capacity, and vocal air flow and duration of the expiratory air flow of the protocol of vocal efficiency. There were no difference between the groups in the most of evaluated parameters, except habitual vocal intensity, expiratory volume, fundamental frequency, maximum and average phoning pressure, air pressure, aerodynamic energy and vocal air flow.

8454. Chewing Time and Chewing Strokes In Healthy Elderly
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Introduction: Aging brings several changes in the human body. Considering the stomatognathic functions, chewing is injured by aging, since many times the elderly presents loss of natural teeth and reduced muscle tone. **Objective:** To compare chewing time and the total chewing strokes between healthy elderly and young adults. **Methods:** This is an observational, cross-sectional and analytical study. The chewing time and chewing strokes were evaluated in older adults (mean age 67 years) and young adults (mean age 21 years) through the habitual chewing of a cookie. The chewing time was set using a digital chronometer, starting when the food was placed in the mouth and finishing after the last swallowing. The total chewing strokes were counted by considering the opening and closing mandibule movements. In the end, chewing time and chewing strokes were compared between both groups using Mann-Whitney test. **Results:** When compared total chewing strokes between both groups it was observed a significant difference. Older people realized more chewing strokes than young people ($p<0.01$). The chewing time also presented significant differences between groups ($p<0.01$). Elderly group presented higher chewing time than young people group. **Conclusion:** Elderly people presented higher chewing strokes and time compared to young adults.

Keywords: aging; mastication; chewing; stomatognathic system.

8465. Prenatal Care Guidance and Breastfeeding Difficulties: Reality of a Maternity in Porto Alegre
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Introduction: Breastfeeding presents several benefits to the baby on nutritional, immunological, emotional and orofacial development aspects, besides the maternal benefits. Guidelines about this subject can encourage mothers to breastfeed and contribute to prevent possible difficulties. **Objective:** To verify if mothers that received breastfeeding guidance during prenatal care presented nursing difficulties during the first days at maternity. **Methods:** Mothers and their newborns were approached at a maternity ward from a hospital in Porto Alegre. A questionnaire was applied in order to establish a breastfeeding profile of the mothers and to describe difficulties presented by them. **Results:** This cross-sectional study followed 40 mothers at a maternity ward. Were included in the study only women with data about prenatal care guidance. The data reveal that 11 mothers were primiparous and 27,5% (11) reported breastfeeding difficulties, as nipple fissure (54,5%); delay in colostrum descent (9,1%); type and size of nipple (27,3%) and wrong latch (9,1%). **Conclusion:** This research revealed that the majority of mothers oriented on prenatal care didn't show difficulties breastfeed-

ing in postpartum first days. It can be inferred that the guidelines affected positively reducing doubts and straits. Health care professionals must be capable to inform, embrace, encourage and follow these mothers in this important moment for consolidation of breastfeeding.

Keywords: newborn; breastfeeding; health promotion; prenatal care.

8468. Relation between Practical Experience and Breastfeeding Difficulties

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Introduction: Breastfeeding brings uncountable benefits to mother-baby dyad. However, nursing requires the mother to know how to handle a newborn and his needs, besides to deal with her own emotions. In this regard, previous breastfeeding experiences can interfere with the nursing of a new child. **Objective:** To analyze the absence of breastfeeding difficulties with mothers that already had such experience. **Methods:** This is a cross-sectional study which a questionnaire was applied to collect data about postpartum women breastfeeding at a maternity ward from a hospital in Porto Alegre. In total, data from 92 women were collected. Although, were included only the women that had previous experience in nursing and were breastfeeding when the questionnaire was applied, resulting a total of 59 participants. **Results:** Of the 59 mothers who had other children and nursed them, we found an average of 11 months of breastfeeding duration. Among these mothers, 96,6% (57) were nursing her babies when the questionnaire was applied and 74,6% (44) didn't report difficulties. **Conclusion:** The data confirm that nursing mothers who had breastfeed previously presented low rate of difficulties handling the current breastfeeding, besides being breastfeeding in the moment of the visit. Therefore, it's visible that previous nursing experience can influence positively the mothers who are breastfeeding a second or third child.

Keywords: breastfeeding; prenatal care; postpartum period.

8475. Audiological Evaluations in an Infant with Apert Syndrome

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Introduction: The Apert syndrome is a rare congenital pathology that can affect the overall development. The main otorhinolaryngological manifestations are auditory deficiency, consecutive middle ear infections and sinusitis. **Objective:** To report the audiological evaluation of an infant diagnosed with Apert Syndrome. **Resumed report:** Study type case report, qualitative and longitudinal. Participated in the study a seven-month infant, female, carrier of Apert syndrome, born at 34 weeks, presenting the following risk indicators for Hearing disorder: permanency in the Intensive Care Unit (28 days), ototoxic medication, assisted ventilation and perinatal anoxia. In addition, presented cleft palate, dysphagia and malformation of the Central Nervous System. She performed a Neonatal Hearing Screening with one month, with the Brainstem Auditory Evoked Potential-Automatic and obtained as a result "passed" in both ears. At seven months, appeared to audiological monitoring and it was found that the infant searches the sound source and lateral lateralization with instrumental stimulus of low intensity (bell). In Vi-

sual Reinforcement Audiometry no answers were obtained. And, the tympanometric curve was type "Ar" in the right ear and "C" in the left ear. **Conclusion:** Based on the audiological findings, it is concluded that the infant presents hearing development partially adequate for the age, as it was expected to obtain Minimum Levels of Response in Visual Reinforcement Audiometry. This case reports the importance of audiological monitoring. Moreover, the infant was referred to the otorhinolaringologist and it was requested a return to the outpatient clinic after consultation.

Keywords: hearing; infant behavior; acrocephalosyn-dactylyia.

8478. Adaptation of Phonatory Valve in a Child with Asphyxiated Thoracic Dystrophy - Case Report

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Introduction: Asphyxiant Chorioric Dystrophy (Jeune Syndrome) is a genetic disease characterized by small, narrow, elongated rib cage with abnormal rib development resulting in pulmonary hypoplasia. **Objectives:** To describe the process of adaptation of the phonatory valve in children with asphyxiant thoracic dystrophy. **Resumed report:** Patient with asphyxiant chest and prolonged intubation followed by tracheostomy. Four thoracoplasties were performed. At 15 months, the phonatory valve was adapted by the Speech Therapy team in conjunction with Physical Therapy during hospitalization at an intensive care unit in a hospital in southern Brazil. During the first adaptation, the mechanical ventilation parameters were adjusted and the phonatory valve (Passy-Muir) was placed in three moments of about 3 minutes, with an interval of 2 minutes, without saturation change. Fourteen attempts were made to adapt, where the patient remained with equipment for up to 25 minutes. Subsequent to stabilization, after thoracoplasty, 35 attempts were made to tolerate up to 1h and 30 minutes, demonstrating an increase in vocalizations, but at the end of them was observed crying, decreased saturation, increased intercostal drawing and respiratory rate. **Conclusion:** Speech therapy relies on the rehabilitation of tracheostomized patients, restoring upper digestive tract function, assisting in decannulation and also maximizing laryngeal function during swallowing, with the aid of the voice valve, airflow is redirected allowing better communication and increased infraglottic pressure for swallowing, so it was noticed, that in relation to the first attempts, the patient extended his vocalizations and salivary swallows.

Keywords: respiratory insufficiency; speech, language and hearing sciences; tracheostomy.

8483. Perception of Changes in Feeding in Healthy Elderly

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Introduction: Eating is a complex process and involves several structures of the stomatognathic system. Due to reduction of coordination and muscle tone in elderly there are difficulties in this process. **Objective:** To check the perception of feeding changes caused by aging reported by elderly and compared to young adults. **Methods:** This is an observational, cross-sectional and descriptive study. A semi structured questionnaire containing questions about chewing, swallowing and food consistencies was applied in a control group (mean age 21 years) and in an experimental group (mean age of 67 years). **Results:** Participated 25 people in control group and

25 in experimental group. Among elderly, 24% reported perceptions of changes in taste, while 4% of youth reported this change. About food consistency, 24% of elderly referred preference for soft foods and 100% of youth reported having no restrictions. Chewing difficulties were presented in 24% of elderly and 44% declared take longer than the usual to chew; in the control group nobody reported chewing difficulties and 4% perceived take longer to chew. About swallowing, 12% of elderly reported difficulties while 8% in the control group reported this. Regarding gagging, 20% of elderly reported occurrence, while in control group it was not reported. **Conclusion:** As reported by healthy elderly, during the aging process, there is preference for soft foods, decreased of tasting and perception of changes related to chewing and swallowing.

Keywords: feeding; mastication; deglutition.

8486. Verification of the Effects of Low Intensity Laser Therapy in the Voice: Heating And Muscular Conditioning
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Silva et al. (2017) affirm that low intensity laser therapy stimulates blood circulation and promotes the nutritional elements in superficial and / or deep tissues. Campagnaro (2016) clarifies that the cell is stimulated without overheating. Physical activity and exertion should be preceded by warm-up to prepare muscles and reduce subsequent injuries. The corner should also include heating and conditioning (Barra 2016). **Objective:** To demonstrate the possible effects of laser therapy in vocal treatments (we will specifically evaluate 2J / red at the motor points of the larynx). **Method:** Twenty speech therapists, in pairs, participated in a training course to use the DMC laser equipment, Therapy EC, 110mw promoted by Fonolaser. Based on the experience of the instructors, it was requested to verify the maximum phonation time of the "a" of the professionals who received the application before and after the application of the laser. The double technique also performed auditory perceptual analysis to verify the immediate result in vocal quality. **Results:** muscle activity facilitation results (improvement in vocal times and quality, 80%), cleansing sensation and relief reported by 95% of pairs agree with expected physiological effects at low energy, stimulation, red wave. **Conclusion:** Laser therapy proves to be an effective coadjuvant technique for heating and vocal conditioning by promoting local microcirculation and balance between energy expenditure and energy supply for vocal activity, avoiding fatigue.

8491. Speech-language Findings in a Case of Posterior Fossa Tumor with Total Resection
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Introduction: The ependymal is composed of the neuroepithelial layer that covers the inner portion of the brain ventricles and the medullary canal. Ependymomas are tumors arising from these cells, 70% being located in the posterior fossa. Representing 10 to 15% of brain tumors in childhood. The literature describes a high occurrence of swallowing changes in children with central nervous system tumors. **Objective:** To report speech-language findings in a case of posterior fossa tumor with total resection. **Resumed report:** Eight-month patient received in intensive care unit for otorhinolaryngological / oncological evaluation for stridor and neoplasia in posterior fossa (ependymoma). Subglottic stenosis with fibrin was observed in nasofibrotraqueoscopy, de-

creasing light by about 70-80%. Full tumor resection was performed and two anchorage points were seen near the right and deep right peduncle. Injury to the lower cranial nerves on the right. Speech-language pathology was initiated on the fifth postoperative day, where the patient presented oral Moniliase under treatment. In structural evaluation, we observed occluded lips with tongue in the buccal floor. Non-nutritive sucking with pacifiers showed strong, arrhythmic sucking and spontaneous pauses. Cervical auscultation without changes. With gustatory stimulus (fruit potato), coughing was observed in two moments suggesting signs of penetration / aspiration. After seven visits, the swallowing conditions improved. **Conclusion:** Initially, patient presented signs of penetration / aspiration and after speech therapy, showed improvement of the oral intake conditions. However, with the progression of the disease, discontinuation of the surgical procedure was interrupted.

Keywords: ependymoma; deglutition disorders, speech, language and hearing sciences.

8494. Speech-Language Intervention in a Case of Extensive Retroperitoneal Tumor Resection - Case Report
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Introduction: Retroperitoneum has a heterogeneous content, containing organs, arteries, veins, nerves, muscles and primitive remnants of the urogenital tract, that is, tumors originate from these structures. An alternative treatment is nephrectomy aiming at complete removal of the neoplasia. **Objective:** To report speech - language intervention in a case of extensive retroperitoneal tumor resection. **Resumed report:** Female patient, 1m 28 days, received in the intensive care unit for perioral cyanosis and bradycardia after receiving intravenous pancuronium as sedation for paracentesis. Resection of an extensive retroperitoneal tumor with left nephrectomy was performed. Started speech therapy with 5 months, due to low oral acceptance. Structural evaluation showed open lips with tongue in buccal floor, salivary stasis with extraoral leak. Cervical auscultation with few clicks of deglutition. In non-nutritive sucking with pacifiers, he presented long groups of weak sucks with delayed pauses. In the clinical evaluation of swallowing with pacifier offering with gustatory stimulus (nutritional formula) and bottle Avent Pétala. For both, patient presented anterior GAG reflex, not performing suction groups. 22 speech-language sessions were performed, where the patient presented better conditions for the stimuli tested. During hospitalization, it was suggested to increase oral volume with a petal beak and to introduce pasteurized foods for oral training. **Conclusion:** The pathology, followed by tumor removal, initially had repercussions in the absence of clinical conditions for food acceptance. In this perspective the speech-language therapy facilitated the return to safe oral feeding.

Keywords: retroperitoneal neoplasms; feeding and eating disorders, speech, language and hearing sciences.

8496. Speech-Language Pathology Findings in an Infant with Pierre Robin's Sequence - Case Report
Laura Fabiana Burkhard, Camila Lucia Etges, Dandara Tailuma Weiler Piloti, Lisiâne de Rosa Barbosa, Lisiani Moraes Alves
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Introduction: Robin's sequence is a rare congenital anomaly characterized by the occurrence of micrognathia and glossoptosis, with or without cleft palate. The incidence

in the general population is 1/8500 to 1/14000 live births. In this pathology speech therapy assists in the development of language and swallowing. **Objective:** To report speech-language pathology findings in an infant with a Pierre Robin sequence. **Resumed report:** Patient 1 month and 8 days, diagnosed with Robin's Sequence. Speech-language evaluation revealed mouth breathing, papilla language (sometimes interposed) during rest, cleft lip and palate, and micrognathia. Reflex presence of bite and anterior GAG. In non-nutritive sucking presented incoordination, difficulty in lip closure, interposed tongue and extraoral salivary escape. Cervical auscultation with significant respiratory noise and no swallowing clicks. In Fibrobronchoscopy, it was found base of tongue retroprojecada, edema of vocal folds, trachea with hyaline secretion in distal third. After 26 visits, videofluoroscopy of swallowing was performed with thin liquid in a syringe, followed by a breastfeed and 2 Dr Brown bottle, showing ineffective suction with extraoral leakage, difficulty in tongue movement with posterior leakage, reflux of nasopharyngeal fluid with two events laryngeal penetration during examination. Patient was discharged with an indication of exclusive feeding by alternative route and indication of speech-language pathology. **Conclusion:** Due to the characteristics of the Pierre Robin Syndrome and the results of the clinical evaluation and objective examination, it was reported insecurity to start oral, and it is necessary to follow speech-language pathology.

Keywords: Pierre Robin syndrome; deglutition disorders, speech, language and hearing sciences.

8497. Speech Therapy Attendance after Neurosurgery in a Pediatric Case of Central Nervous System Tumor

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Introduction: Ependymomas are tumors placed on the category of gliomas, corresponding to 10% of pediatric brain tumors. They develop from ependymal cells, which are responsible for ventricular and spinal cord linings. In children, 90% are located in the brain, and of these, 60% in the posterior fossa, what may cause dysphagia, because the structures of this region are involved in swallowing. **Objective:** To report speech-language acting in a child diagnosed with grade II ependymoma after neurosurgical procedure. **Case report:** Patient, male, 3 years, diagnosis of Ependymoma of Grade II in Posterior Fossa, presenting recurrence at 2 years and 8 months. Speech-language evaluation requested at hospitalization, after neurosurgery. Due to the lowered sensory and impossibility of oral feeding, gastrostomy was suggested. Patient presented improvement in the state of consciousness, and clinical evaluation of swallowing was performed, indicating: reduced mouth opening, slow oral transit, multiple swallowing and weak coughing in liquid and fine pasty consistency, stating severe grade oropharyngeal dysphagia. Direct swallowing therapy started with intraoral thermal and gustatory stimulation. Initially aversive patient, however, it evolved positively regarding food acceptance and swallowing condition. Up to 18 attendances were performed until hospital discharge. **Conclusion:** At the end of the attendances, he presented a change in the degree of dysphagia to moderate, evolving with improved oral readiness and mobility. Speech therapy is essential in these cases, providing food satisfaction and pulmonary safety. Forwarded for post-speech therapy.

Keywords: ependymoma, deglutition disorders, gastrostomy.

8507. Speech-Language Rehabilitation in an Initial Diagnosis of Autoimmune Encephalitis - Case Report

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Introduction: Autoimmune encephalitis is part of a group of syndromes whose clinical characteristics include subacute cognitive alterations such as amnesia and mental confusion, movement disorders and epileptic seizures. **Objective:** To report speech-language rehabilitation in a case with an initial diagnosis of autoimmune encephalitis. **Resumed report:** A six-year-old patient received in the pediatric emergency with generalized tonic-clonic seizures, progressing to mechanical ventilation for 22 days. Observed improvement after treatment with immunoglobulin and corticosteroids, with probable diagnosis of autoimmune encephalitis. After 48 hours of extubation, there was no response to simple controls, salivary stasis in the oral cavity, previous GAG reflexes and absence of visual contact. Indirect stimulation was initiated for deglutition rehabilitation.. In the 11 th speech-language service, the food was presented as a paste in a spoon, where the patient had difficulties to coaptate the food in the utensil, increased oral transit, and presented multiple swallowing. In the 15th service, patient presented better coaptation of food, decreased oral transit time, sometimes chewing food, presenting multiple swallows, at this time released a regularly slurred pasty diet. At the end of the 24 speech therapist sessions, the patient was discharged from the hospital with partial recovery of the language and indication of full oral feeding with restriction to liquidized pasty diet and thin liquids. **Conclusion:** After swallowing training, there was an improvement in the clinical picture compared to the first visits, presenting oral diet release conditions.

Keywords: encephalitis; deglutition disorders, speech, language and hearing sciences.

8509. Speech Therapy Intervention in a Patient Diagnosed with Pineal Gland Germinoma

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Introduction: Germ cell tumors are those that affect the tissues that origin all other cells of the human body and are usually gonadotrophic tumors. In rare cases, this type of carcinoma may appear in the brain, located in the pineal gland or epiphysis. Pineal germinomas are responsible for 1% of brain tumors, they do not present specific etiology and are reported, mostly, in adolescents. **Objective:** To report the speech-language intervention in a patient with a diagnosis of Germinoma in the pineal gland. **Case report:** A 15-year-old male, tracheostomized, hospitalized in a southern hospital for treatment of pineal gland germinoma with extension to the third and fourth ventricles, with history of orotracheal intubation and mechanical ventilation for two months. About 20 days after hospitalization, speech-language evaluation was started. A clinical evaluation of swallowing was performed, with diagnosis of severe oropharyngeal dysphagia. The therapeutic plan involved respiratory exercises and indirect swallowing therapy was developed, as well as the use of a phonatory valve, with the purpose of stimulate talking and swallowing, aiming at the weaning of the tracheostomy. **Conclusion:** After 52 speech therapy sessions, it was possible to observe an improvement in the swallowing after maneuvers. After one month, safe and efficient swallowing of saliva indicating to subsequent oral diet progression. In addition, training with a speech valve and tracheostomy occlusion were also effective.

Keywords: germinoma, deglutition disorders, tracheostomy.

8510. Speech-Language Monitoring in a Case of Acute Viral Bronchiolitis
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Introduction: Acute viral bronchiolitis is the most frequent respiratory condition associated with the pediatric public, presenting higher incidence in infants. One of the pathogens found as the etiological agent of this disease is Respiratory Syncytial Virus (RSV), which manifests itself as an airway infection and may or may not be associated with bronchospasm. **Objective:** To report speech-language monitoring in a case of bronchiolitis. **Case report:** Female patient, 10 months, history of hospitalization for 12 days in Intensive Care Unit for RSV bronchiolitis associated with bronchospasm and sepsis, requiring intubation. Nasofibrolaryngoscopy was performed, indicating severe laryngomalacia, retroprojected tongue and obstruction of glottic light. In the first speech-language evaluation, disorganized suction pattern and inspiratory noise was observed. Videofluoroscopy of swallowing revealed premature posterior spillage and laryngotracheal aspiration, making oral feeding impossible. In a new hospitalization for low weight gain and gastrostomy views, a speech-language reevaluation was performed, observing strong, arrhythmic sucking and interspersed with bites. When offering nutritional formula, she presented oral readiness for baby bottle, normal cervical auscultation, requiring a rhythm control maneuver. In a new videofluoroscopy, 7 months later, it indicated absence of laryngotracheal penetration using Avent bottle, flow 1. Patient was discharged from the hospital with an indication of alternative maintenance and oral initiation. **Conclusion:** After 22 visits, the swallowing pattern was adequate, evidenced by clinical evaluation and by objective examination, discarding the need for gastrostomy and indicating speech-language pathology for weight gain after hospital discharge.

Keywords: bronchiolitis, deglutition disorders, speech, language and hearing sciences.

8520. Auditory Skills in Children of Deaf Parents
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Introduction: Hearing children of deaf parents usually do not have auditory stimulation in the same way of children born from hearing parents, since they receive little exposure to oral language in early infancy. **Objectives:** The purpose of the study was to compare the results of auditory processing behavioral tests between children of deaf parents and children of hearing parents. **Methods:** A total of 60 right-handed children aged 5-10 years, with normal auditory thresholds, without history of systemic or neurological diseases that might affect the central nervous system, and without previous musical or second spoken language training were included in this study. Two groups similar in age and sex were established: Study Group comprised 30 children of deaf signer parents, and Control Group comprised 30 children of hearing parents. They performed the following tests: Pediatric Speech Intelligibility, Dichotic Digits, Frequency Pattern, Gaps-in-Noise, and verbal and non-verbal sounds memory. **Results:** Study group showed significantly worse performance in all applied tests. Moreover, comparison of groups' performances per age range showed that the difference was greater in younger children (5- and 6-year olds). **Conclusion:** Less exposure to the auditory stimuli associated with spoken

language in infancy contributes to poorer performance in auditory processing tests, suggesting that environmental auditory stimuli, particularly spoken language sounds, are important to the auditory system maturational process.

Keywords: auditory perception, deafness, acoustic stimulation, sensory deprivation.

8521. Cognitive Performance of Individuals with Chronic Tinnitus
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Introduction: Chronic tinnitus can affect attention, memory, influencing the individual's cognitive. **Objective:** To verify the impact of chronic tinnitus on the cognition. **Methods:** were included in the case group individuals with uni or bilateral chronic tinnitus treated in a clinic specializing in chronic tinnitus. The control group consisted of individuals without tinnitus. For the evaluation of cognition, the Mini Mental State Exam and the Semantic and Phonological Verbal Fluency Tests were used. Individuals with tinnitus also responded to the Tinnitus Handicap Inventory. **Results:** A total of 46 individuals were evaluated, of which 23 were in each group, of both sexes matched by age and schooling. Regarding tinnitus, individuals were found to be between 2 and 30 years old (mean 10 ± 8.01 years), being predominantly bilateral (60.9%) and continuous (73.9%). In the Tinnitus Handicap Inventory, the majority presented moderate (39.2%), severe (26.1%) or mild (21.7%). In the Mini Mental State Examination the score of the individuals in the case group was 24.74 ± 2.50 points. In the control group it was 27.43 ± 2.71 points, with difference between groups ($p=0.001$). In the Verbal Phonological Fluency test the scores of the individuals in the case group were 21.83 ± 9.95 points and the control group was 29.96 ± 12.14 points, again with difference between groups ($p=0.019$). In the Semantic Verbal Fluency test, the score in the case group was 12.65 ± 5.26 and in the control group it was 15.91 ± 4.76 points, and the difference between the groups ($p=0.003$). **Conclusion:** In the sample evaluated, tinnitus had a negative impact on cognition.

Keywords: tinnitus; cognition, memory.

8523. Effect of a Voice Therapy Program based on the Taxonomy of Vocal Therapy in Behavioral Dysphonia
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Introduction: Behavioral dysphonia is a voice change with an etiology related to voice misuse. Recently, a new approach called Taxonomy of Voice Therapy emerged as a proposal for description and classification of vocal interventions. No rehabilitation program for behavioral dysphonia based on the Taxonomy of Vocal Therapy has been found in the literature. **Objectives:** To propose and to analyze the effect of a Voice Therapy Program (VTP) in women with behavioral dysphonia. **Methods:** This is quasi-experimental study (Ethic's Committee 1.235.463). Twenty-two adult women (average age of 29.5 years) with behavioral dysphonia were divided into two groups: Group-1 (G1) - 11 participants who received the VTP - vocal rehabilitation program based on Taxonomy of Vocal Therapy composed of 8 sessions, 30 minutes each, twice a week; Group-2 (G2) - 11 participants who did not receive any

intervention. Before and after six weeks, the outcomes evaluated were auditory-perceptual evaluation, acoustic analysis, voice-related quality of life (VRQL), vocal symptoms, and musculoskeletal pain. The statistical analysis used Wilcoxon, Chi-square, and Mann-Whitney tests ($p<0.05$). **Results:** Was observed a significantly higher improvement in the general degree of vocal deviation ($p=0.012$), reduced of fundamental frequency ($p=0.035$) and "fatigue while talking" symptom ($p=0.043$) in G1. Both groups showed improvement in socioemotional domain of VRQL (G1- $p=0.043$; G2- $p=0.049$). G1 presented significantly greater reduction in fundamental frequency ($p=0.025$) and the "voice loss" symptom ($p=0.042$) than G2. **Conclusion:** The VTP, based on the Taxonomy of Vocal Therapy, seems to have promoted a phonatory balance and muscle relaxation in women with behavioral dysphonias.

8524. Definition of Conduct in an Individual with Patau Syndrome

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Congenital malformations associated with chromosome 13 trisomy were described in 1960 by Patau et al. It's a genetic disease characterized by malformations involving systems such as central nervous, cardiovascular, urogenital, middle and inner ear, flatness of the horizontal channel crest, absence or opening of the endolymphatic utricular valve; obtuse angulation of the geniculate area for the facial nerve, cleft lip and palate, ocular and lower limb and upper limb abnormalities. Case 1: ACFB, 8 months, female, evaluated in the Cochlear Implant Section of HRAC-USP. Born at term, apgar 7-9, jaundice, respiratory distress, diagnosis of Patau Syndrome, visual impairment due to retinal displacement, polydactyly in the feet, calcifications in the kidneys and failure in neonatal hearing screening. In the audiological evaluation was observed bilateral absence in OAES, BAEP and ASSR, and bilateral profound degree sensorineural hearing loss. In the CT of the right: partial veiling of the antrum and mastoid cells; discrete mucosal contents in the epitympanum, ossicular chain, spur and lateral wall of the preserved attic. In the left mastoid: total veining of the tympanic cavity of the antrum and mastoid cells; ossicular chain, spur and lateral wall of the preserved attic. In the MR was verified bilateral dilatation of the vestibular aqueduct, dilation of the vestibules, associated with hypoplasia of the right semicircular canal and aplasia of the left lateral semicircular canal and bilateral hypoplasia of the cochlear nerve. The patient did not present benefits with hearing aid. Due to the possible limited results and the surgical risks associated with the malformations, this case was discussed with the family to define conduct and despite the limitations, cochlear implant surgery was indicated.

8526. The Use of Data Mining Technology to Analyze High-Speed Videolaryngoscopy Images

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Introduction: The use of technology in healthcare contributes for more precise diagnosis of laryngeal images. A cutting-edge technology that can facilitate the process of analysis through data exploration is known as data mining. Al-

though its potential, research on data mining to identify patterns in laryngeal images is still little unexplored. **Objective:** To investigate the use of data mining techniques to obtain a set of criteria that help to automatically classify laryngeal images with and without unilateral vocal folds paralysis. **Methods:** A high-speed videolaryngoscopy captured laryngeal images from individuals. Then, we transformed these images into high-speed kymography. Next, we used these data as input for a data mining tool to categorize images according to a set of criteria that were automatically discovered. **Results:** The main criteria extracted from data that categorized high-speed kymography of healthy individuals is related to vibratory pattern of vocal folds. Such criteria allow to automatically separate data of individuals from different gender. Unexpectedly, the main criteria that categorized data from individuals with unilateral vocal fold paralysis is related to contrast of colors of the laryngeal mucosa. This result helps us identify that both color and incidence of light in the mucosa are key elements to better understand such individuals and will need further investigation. **Conclusion:** To the best of our knowledge this is one of the first initiatives to use data mining techniques to analyze high-speed kymography data. Our novel results have shown that such techniques are effective to improve and automatize the categorization of laryngeal images.

8527. Percentage Index of Speech Recognition and Phonological Awareness: A Possible Association?

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Introduction: Percentage Index of Speech Recognition is evaluated in auditory examination, it being that the understanding of speech is one of the most important measurable aspects of human auditory function. While the Phonological Awareness is the skill that allows people to recognize and work with the spoken sounds of language. **Objective:** Analyze the Percentage Index of Speech Recognition and to observe the Phonological Awareness from secondary data. **Methods:** The database presents evaluations of children with Phonological Disorder. This is a quantitative descriptive study with analysis of secondary data (approved 995.344). It was verified in 84 children through the Chi-Square Test: Phonological Awareness of phonemes and syllables; Percentage Index of Speech Recognition of right ear (and left ear) and Phonological Awareness of phonemes (and syllables). Besides that statistical analysis with ANOVA test for this joint analysis. **Results:** The results of the Phonological Awareness of phonemes and syllables ($p\text{-value}=0,646$), Percentage Index of Speech Recognition of right ear with Phonological Awareness of phonemes ($p\text{-value}=0,329$), Percentage Index of Speech Recognition of right ear with Phonological Awareness of syllables ($p\text{-value}=0,374$), Percentage Index of Speech Recognition of left ear with Phonological Awareness of phonemes ($p\text{-value}=0,734$), Percentage Index of Speech Recognition of left ear with Phonological Awareness of syllables ($p\text{-value}=0,263$) were without statistical significance. To Percentage Index of Speech Recognition of right ear and groups of Phonological Awareness of phonemes ($p\text{-value}=0,110$) and left ear ($p\text{-value}=0,179$), and Percentage Index of Speech Recognition of right ear and groups of Phonological Awareness of syllables ($p\text{-value}=0,368$) and left ear ($p\text{-value}=0,575$) were without statistical significance too. **Conclusions:** The results in this study contribute to show that there is no statistical association between Percentage Index of Speech Recognition and Phonological Awareness.

Keywords: child, percentage index of speech recognition, phonological awareness.

8535. Musical Auditory Training in Choristers: Influence of Experience, Stimulus and Training in the Performance of Central Auditory Processing Skills

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Introduction: The brains of musicians or individuals with musical experience have cortical areas with more robust neurons and nerve responses of readiness. One of the ways to improve the aspects of hearing and central auditory processing (CAP) is musical practice, which can be considered a form of auditory training. **Purpose:** To investigate the central auditory skills and the performance in the auditory tasks of the musical auditory training in a choristers and non-choristers. **Materials and Methods:** Two young choral (CA and CB) and one pair without experience and / or any musical activity (NCA and NCB) participated in the study. All participants were submitted to behavioral assessment of CAP, with a complete battery of tests, in two moments: before and after the auditory training. All participants received an acoustically controlled auditory training (ACAT), based on musical auditory training. Eight sessions were offered, lasting 50 minutes, 3 times a week. All participants received the same training. **Results:** The performance of the choral participants was superior to the behavioral evaluation of the CAP before ACAT, especially in the temporal and monotonic tests. There was no difference in the performance of the participants in the ACAT. All participants present lower scores on the temporal resolution axis. In the behavioral evaluation of CAP after ACAT all participants improved performance considerably. **Conclusion:** musical experience influenced the performance of CAP skills and the musical auditory stimulus was facilitative and effective for the proposed auditory training, which modified the skill pattern, for both choristers and non-choristers

8539. Relationship Between Tinnitus and Psychic Changes

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Introduction: The tinnitus is the perceived sound in the absence of an external sound stimulus. Studies suggest that the tinnitus would be the result of the dynamic interaction between the auditory and non-auditory centers of the Central Nervous System, including the Limbic System and the Autonomic Nervous System. This dynamic interaction between the limbic system and the autonomic nervous systems would be responsible for triggering emotional behaviors and motivational impulses. **Goal:** Discuss the impact of tinnitus with the possible psychic changes. **Data Synthesis:** systematic review of the literature analyzing data from 2010 until the current days and the correlation between tinnitus and psychic changes. **Conclusion:** Through a thorough analysis of the tinnitus research and the psychic changes it was clear the relationship between the two, since by activating the limbic system, responsible for the emotions, the individual becomes to perceive it with greater intensity, and it is because of this that when connected to psychic or emotional factors, for example, anxiety, depression, sadness, the individual becomes more uncomfortable when to tinnitus. There is a strong relation between tinnitus and psychic changes. In the same way that an individual with psychic change can develop tinnitus in the future, also, the individual who has tinnitus can develop a psychic alteration.

8545. Audiological Profile of the Elderly Above 80 Years Old

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Introduction: With the increase in life expectancy of the elderly in the last years difficulties of communication in this population are evidenced. Therefore, studies are necessary to characterize the hearing difficulties experienced by the elderly so that tools can be offered to improve their quality of life. **Objective:** To investigate the types of hearing loss existing in elderly patients over 80 years old attended at a Hearing Center of High Complexity in Hearing Health. **Methods:** The audiological medical records of 120 patients over 80 years old (on the date of the examination) attended at a Hearing Health Service in Brasilia from 2015 to 2018 were randomly selected. **Results:** Of the 120 patients, 57 were male and 63 female, mean age 83 years. All the patients evaluated presented auditory alterations in some frequencies, even in those with normal tritonalaverage. Of the 240 ears evaluated, there was predominance of sensorineural hearing loss 223 (92.9%), 88 of moderate degree (36.7%) bilaterally. Concerning the configuration of the audiological curve 86 (35.8%) presented a marked downward curve. As for logoaudiometry, 70 (29.2%) had a percentage of speech recognition between 100% and 92%. Concerning the tympanometric curve, 147 (72.1%) "Type A" tympanograms with absence of ipsilateral 175 (73%) and contralateral 159 (66.25%) acoustic reflexes. **Conclusion:** Auditory monitoring in the elderly is necessary since this work evidences the presence of hearing loss in this age group. Early intervention can be effective in improving quality of life and preventing possible associated pathologies.

8553. Performance of Hearing Skills and Language X Ecap Results

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Introduction: The composite action potential of the electrically evoked auditory nerve (ECAP) consists of electrophysiological measures that reflect the synchronized firing of the fibers of the cochlear nerve. Bilateral cochlear implants may favor increased stimulation in neurons so that the auditory nerve responds in a highly synchronized manner. **Objectives:** To correlate the performance of auditory and language skills with the ECAP of a child using a bilateral cochlear implant. **Resumed report:** Child diagnosed with bilateral profound sensorineural hearing loss at 8 months of age, with multifactorial etiology - extreme prematurity, with use of ototoxic drugs for hearing loss. He has used the hearing aid since the age of 11 months and has been doing speech therapy in the verbal auditory method since 9 months of age. At 17 months of age, she underwent simultaneous bilateral cochlear implant surgery. In speech-language therapy, it presents a constant evolution in its general development. It is in category 6 in the auditory skills classification (Geers, 1994) and in category 3 in oral language skills (Bevilacqua et al, 1996). This child presents scores beyond what is expected considering the time of IC use (Silva Comerlatto MP, 2015). In the objective evaluation with the ECAP, results are not evidenced before the electrical stimulation with the cochlear implant. **Conclusion:** Although ECAP results do not show auditory nerve responses to electrical stimulation, this child maintains systematic results of capacity, auditory and language performance in its development.

8557. Effects of Neuromuscular Electrical Stimulation Associated to Traditional Therapy in Case of Vocal Fold Thickening

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Introduction: The bilateral vocal fold thickening is a phonotraumatic lesion characterized by a superficial benign formation in the middle portion. The neuromuscular electrical stimulation (NMES) associated to traditional voice therapy have been applied to rehabilitation. **Objectives:** To describe the effects of NMES associated to traditional voice therapy in case of bilateral vocal fold thickening. **Resumed report:** Two subjects, diagnosed with bilateral vocal fold thickening, female, 47 and 64 years old, teacher and singer, submitted to 6 and 5 voice therapy respectively. The treatment was composed by NMES (TENS, 100us, 30Hz; FES, 200us, 50Hz) associated to traditional voice therapy such as semi-occluded vocal tract, mucosal vibration, glottic closure, voice modulation and phonoarticulatory coordination exercises. Registration, acoustic and perceptual evaluation of voice quality was carried out with the sustained vowel [e] before and after treatment (VoxMetria software). The perceptual analysis was performed by two voice specialists through GRBASI scale application. The variables extracted for A and B patients, before and after treatment, were: fundamental frequency (184.09Hz);(156.96Hz) and (185.58Hz);(178.52Hz), irregularity (5.86);(5.55) and (6.63);(5.95), noise (2.24dB);(1.55dB) and (1.82dB);(0.97dB), vocal intensity (80.72dbNA);(82.87dbNA) and (77.83dbNA);(84.34dbNA), Glottal Noise Excitation Proporation (0.52);(0.68) and (0.62);(0.82), maximal phonation time (4.97-seconds);(5.12-seconds) and (5.97-seconds);(7.83-seconds). Through perceptual evaluation were found before and after treatment: patient A, G1R1B1A0S2I1 and G1R0B0A0S0I1; patient B, G2R2B1A0S1I2 and G1R1B0A0S0I1. **Conclusion:** The application of NMES associated to traditional voice therapy had optimized the vocal performance by improving acoustic and perceptual parameters. Other studies with a larger sample size are needed in order to improve voice rehabilitation in these cases.

8558. Description of Submental Electromyographic Activity During Modified Shaker Exercise Associated to Chin-Tuck Maneuver

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Introduction: The modified shaker exercise, originated from traditional shaker exercise, lead to suprathyroid muscles strengthening improving the swallowing function and safety. In addition, this exercise has great impact on hyoid bone horizontal motion and upper esophageal sphincter opening during swallowing. The surface electromyography (sEMG) is an important tool to evaluate the muscle activity during the exercise. **Objective:** To describe the submental muscles electrical activity during modified shaker exercise associated to gradual cervical flexion variation. **Resumed report:** Three healthy subjects, female, 24±1 years old. The sEMG evaluation occurred through MIOTOLL 400 equipment, processed by Miograph 2.0 software (bandpass filter at 20-500Hz) and the electrodes were positioned in the submental region. The modified shaker exercise was applied with constant force and gradual force increasing associated to cervical flexion in three different neck positions (90°, 45° and 15°). All tasks were randomized and measured by the goniometer. The mean value of sEMG signal during constant force application at 90°, 45°

e 15° neck positions were, respectively: peak (μv) 31.3, 29.7 and 29.5, mean (μv) 20.9, 17.1 and 19.5 and frequency (Hz) 211.3, 216.6 and 209.3. During gradual force increasing: peak (μv) 49.5, 58.25 and 49.5; mean (μv) 28.8, 31.1 and 27 and frequency (Hz) 210.2, 210.5 and 210.8. **Conclusion:** Higher submental muscles activity was obtained during the application of the modified shaker exercise with a gradual force increasing at 15° cervical flexion, while the constant force application at three neck positions showed no difference in the results.

8561. Otolaryngological Abnormalities in Rubinstein-Taybi Syndrome: A Case Report

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Introduction: Rubinstein-Taybi syndrome is a rare genetic condition characterized, among other findings, by otolaryngological abnormalities. **Objectives:** to highlight clinical findings, especially the otolaryngological ones, that may be present in Rubisntein-Taybi syndrome. **Resumed report:** the patient was the first child of a couple of young parents, with no similar cases in the family. He had a history of an innocent heart murmur, diagnosis of gastroesophageal reflux, swallowing disorder, dacryocystitis, cryptorchidism (corrected for about 5 years), and congenital clubfeet. He had also developed with a delay in neuropsychomotor and speech developments, and had difficulty in learning. He was quite hypotonic. In his evaluation, at 13 years of age, there was presence of short stature (height of 133.5 cm), obesity, upslanting palpebral fissures, bilateral palpebral ptosis, prominent nose, high palate, contracture of the fingers, broad and deviated thumbs and hallux, spatulate fingers and multiple melanocytic nevi. Karyotypical examination was normal (46,XY). Computed tomography scan of skull disclosed elongated subarachnoid cisterns and cortical grooves. **Conclusion:** the sum of the clinical findings presented by the patient was compatible with the diagnosis of Rubinstein-Taybi syndrome. Thus, different otorhinolaryngological findings may be present, as observed in our report. Other manifestations include micrognathia, retrognathia, hearing loss, recurrent otitis, deviated nasal septum and high-arched palate.

Keywords: Rubinstein-Taybi syndrome, intellectual deficit, gastroesophageal reflux, swallowing disorder, hypotonia.

8563. Effect of Neuromuscular Electrical Stimulation on Tongue in a Patient with Cerebrovascular Accident

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Introduction: stroke is a neurological injury caused by alterations in cerebral irrigation, which results in impacts in the functions of the stomatognathic system, such as speech and swallowing. **Objectives:** to describe the immediate effect of traditional therapy associated with neuromuscular electrical stimulation (NMES) in the tongue of a patient with cerebrovascular accident. **Resumed report:** female, 49 years, stroke in internal capsule, nuclei of the base, mesencephalon and pons, on the right side, evolving to dysphagia and dysarthria as well as unilateral left paralysis. Performed traditional therapy to maximize mobility and tongue strength associated with NMES (200μs, 55Hz), applied on the back, side and tip of the tongue. Quantitative and qualitative data were collected before and

after therapy through electromyography/Biofeedback and by perceptual-auditory analysis of speech. The results found pre-therapy for tongue pressure (KPa) were 42.5 ± 13.5 ; maximum 59, minimal 15 and after therapy (KPa) 50.1 ± 9.6 ; maximum 68, minimum 35. In the perceptual-auditory analysis of speech in the pre-therapy, there were alterations in the five motor bases characterized by prosodic excess, pneumo-phono-articulatory incoordination, distortion, omission of phonemes, hoarseness and hyponasality. The association of traditional therapy with NEMS showed improvements of all the parameters. **Conclusion:** it is possible to conclude in this case that the NEMS associated with traditional therapy can benefit the patient with qualitative improvements in the motor bases of speech. In addition, the increase in quantitative values of intraoral pressure can also positively impact the swallowing and be related to the results for the speech function.

8565. Important Feeding Difficulties in a Patient with Cri-du-Chat Syndrome

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Introduction: Cri-du-Chat syndrome, also known as syndrome of the meow of the cat, is considered a rare chromosomal disease. **Objectives:** to report a patient with Cri-du-Chat syndrome presenting important feeding difficulties, including swallowing disorder and gastroesophageal reflux. **Resumed report:** the patient had a description of laryngomalacia and difficulty in suctioning. At 4 months of age, there was growth retardation, microcephaly, prominent occipital, flat forehead hemangioma, bilateral epicanthic folds, down slanting palpebral fissures, inverted V-shaped mouth, micrognathia, low-set ears, umbilical hernia, clubfeet with overlap of the toes and limb hypertonia. High resolution karyotype showed a deletion of the short arm of chromosome 5, which was compatible with the diagnosis of Cri-du-Chat syndrome. The nasofibrobronchoscopy showed the presence of a mild distal tracheomalacia. The child evolved with frequent vomiting and regurgitation, using a nasogastric tube. He presented recurrent episodes of pneumonia and wheezing, being diagnosed with an important gastroesophageal reflux, and at that time the use of cisapride was begun. Due to worsening of symptoms, he underwent fundoplication and gastrostomy surgery at 1 year and 7 months of age. No further episodes of pneumonia were reported later. **Conclusion:** within the spectrum of abnormalities observed in individuals with Cri-du-Chat syndrome, feeding abnormalities are quite frequent, which can lead to significant difficulties in their management. Thus, healthcare professionals involved in the follow-up of these patients should be aware of these changes and their possible consequences.

Keywords: Cri-du-Chat syndrome, feeding difficulties, swallowing disorder, gastroesophageal reflux, tracheomalacia.

8567. Neuromuscular Stimulation Associated with Speech-Rate Modification in Multiple Sclerosis

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Introduction: multiple sclerosis (MS) is a chronic autoimmune disease characterized by inflammation, demyelination and degeneration of the central nervous system, which presents a high incidence of dysphagia and dysarthria. **Objec-**

tives: to describe the effect of neuromuscular electrostimulation therapy (NMES) associated with the adapted use of the Delay Auditory Feedback technique (DAF) on swallowing and speech functions in a patient with MS. **Resumed report:** female, 47 years old, MS, submitted to 15 speech therapy sessions. NMES in the suprathyroid muscles ($300\mu s$, 80Hz) and tongue ($200\mu s$, 55Hz). Traditional therapy associated with DAF technique to adjust speech velocity and adequacy of articulation. The pre and post therapy measurements were performed by the analysis of the maximum phonation time (MFT), fundamental frequency (F0) and swallowing analysis (praat 4.4.2). Swallowing values for thin liquid and nectar (5 and 10 ml) were respectively pre-therapy: duration of deglutition 0.28; 0.35; 0.4; 0.79 seconds, number of swallows 1; 3; 2; 2, number of components: 3; 3; 3.5; 5.5. MFT 5.68 seconds, F0 255.26 Hz. Post therapy: duration of swallowing 0.19; 0.46; 0.35; 0.3 seconds, number of swallows 1; 2; 1; 2, number of components: 2; 2; 2; 2.5. MFT 20.72 seconds, F0 223.51 Hz. **Conclusion:** it is possible to conclude in this case that the traditional speech therapy associated with NMES and the adapted DAF provided an improvement in the speech and swallowing functions of the patient. This statement is expressed by the change in all parameters analyzed. New studies are needed to better generalize the results.

8570. Evaluation of the Fundamental Frequency: the Form of Emission can Interfere in the Results?

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Introduction: The investigation of the fundamental frequency of oral vowels is commonly performed in two forms of emission, sustained or in vehicle-phrase. As different vocal tasks can generate distinct muscular adjustments, it was hypothesized that the two forms of emission most commonly mentioned in the literature could present different results. **Objective:** To compare the measures of f0 in two forms of emission (sustained vowel and phrase-vehicle) in the seven oral vowels of Brazilian Portuguese (BP). **Methods:** Eighty individuals between 18 and 40 years of age matched by gender, without complaints of vocal disorders, with normal occlusion or Class I malocclusion of Angle, normal orofacial structures according to the AMIOFE Protocol, in addition to vocal quality without perceptual-auditory vocal disorders had the voices recorded in Praat software. The emissions were vehicle-sentences: "Speak pápa for me," in which the two vowels were issued with each of the seven oral vowels of BP and in sustained vowel in usual voice with the same vowels. **Results:** In the male gender statistical differences were found in two vowels and in the female group differences were found in five vowels between the two forms of emission. **Conclusion:** The mean values f0 in the two emission forms presented statistically different results, being more pronounced in the female gender, which shows that the emission form interferes in the results.

8574. Adaptation of Hearing Aids in Patients with Mild to Moderate Hearing Loss without Comprehension Complaints: Success Stories

Rosana Daniele de Andrade Rezende, Sandra Braga Particular

Introduction: Patients with unilateral hearing loss, with or without tinnitus, eventually seek a hearing health care Center as they do not have significant complaints of

speech comprehension. Due to the evolution of the technology it is possible to improve the quality of life of these patients and to stimulate their auditory pathway through the adaptation of hearing aids in the affected ear, so presenting significant hearing gains. **Purpose:** To demonstrate the improvement of auditory performance with the use of hearing aids in individuals with mild to moderate unilateral hearing loss. **Abstract:** This study presents three cases of patients with unilateral hearing loss, with and without tinnitus, who initiated the use of unilateral hearing aid with intermediate technology and who presented good adaptation and satisfactory results for hearing tests with hearing aid and tinnitus masking. **Conclusion:** Although apparently these patients did not bring forward complaints of speech impaired or discomfort with unilateral tinnitus, the use of hearing aids significantly improved comprehension, auditory localization, signal-to-noise ratio for understanding in noisy environments and tinnitus masking, also improving their auditory performance and quality of life.

8580. Bone-Anchored Implants: Speech Perception In Noise

Results

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Introduction: The bone-anchored implant uses an osseointegrated titanium implant, surgically implanted. It is a bone conduction hearing device that provides, through vibration, the perception of sound directly in the inner ear. Besides providing auditory perception in quiet, it can bring benefits to speech perception in noise. **Objective:** To evaluate the results of speech perception tests in noise pre and post-surgical conditions in individuals implanted with BAHA Connect or PONTO system. **Methods:** The study was developed in Hospital of Rehabilitation of Craniofacial Anomalies, University of São Paulo. Seventeen individuals with bilateral ear malformation, aged 18 to 38 years, with conductive/mixed moderate to profound hearing loss participated. They were submitted to speech perception tests in noise (sentences) in the pre-surgical condition without and with conventional bone conduction hearing aid, with the BAHA or PONTO processor coupled to the softband and after implant surgery. **Results:** The signal-to-noise ratio ranged from -5.2 to 5.4 dBHL (average 1.5dBHL) without hearing aid, from -3 to 3.5 dBHL (average of 0.8 dBHL) with bone conduction hearing aid; -6 to 2.4 dBHL (average -1.6 dBHL) with softband; and -9.34 to 1 dBHL (average of -4.4 dBHL) with monoaural BAHA or PONTO implant. **Conclusion:** It was verified that bone-anchored implants provided improvement in the speech perception in noise compared to the conventional hearing aid and to the processor coupled to the softband.

Keywords: bone-anchored; speech perception; speech in noise.

8582. The Interference of the use of Connectivity Accessories in Improving Speech Comprehension in Patients with Severe Hearing Loss and Hearing Aid Users.

Rosana Daniele de Andrade Rezende, Sandra Braga Particular

Introduction: The adaptation of hearing aids in patients with severe or profound hearing loss doesn't always favor the use of connectivity accessories, due to audiometrics configurations that, quite often, don't allow a good compreh-

hension of speech, even with hearing aids. The development of technology and accessories has demonstrated this patient profile can bring forward good performance with hearing aids and considerable SRI's improvements in noisy environments, through the correct choice of algorithms and accessories. **Purpose:** This study aims to compare two patients with the same audiological and socioeconomic profiles and with approximate SRI, looking to evaluate the benefits of advanced technology and connectivity accessories in speech comprehension. **Abstract:** In this study, two cases of AASI adaptation in adult patients, with similar profiles, were compared. One of them uses advanced technology and connectivity features, including accessories. The other one uses intermediate technology, without accessories. During the work, evaluations with and without the hearing AIDS were conducted, to figure out and value if the technology and the connectivity would positively interfere with the patients' auditory performance in the presence of silence and noise. **Conclusion:** The use of advanced technology and connectivity accessories can bring benefits to improve speech comprehension and understanding in patients with severe to profound hearing loss, provided the algorithms and accessories are suitable for the type of loss. These benefits are directly related to the personalized evaluation of the patient and the detailed phonoaudiological knowledge of the hearing aids resources by the hearing aids professional before the prosthesis itself.

8583. The Importance of the Multidisciplinary Evaluation of Oral Breathing Patients - Case Report

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Introduction: Oral breathing occurs when there is nasal or nasopharyngeal obstruction, malocclusion and/or habits that favor the passage of air through the mouth, which can cause structural and functional alterations of the stomatognathic system. In children, it is common to be due to physical obstruction, such as adenotonsillar hyperplasia. **Objectives:** Demonstrate the importance of the multidisciplinary evaluation of oral breathing patients, considering multifactorial etiologies and consequences. **Resumed report:** 6-year-and-7-months-old oral breathing patient with complaints of snoring and restless sleep, using a bottle since birth. Hypertrophic inferior turbinates and grade II palatine tonsils were identified. Nasal budesonide, desloratadine were prescribed and if symptoms persisted after treatment, fiberoptic nasopharyngoscopy was scheduled to rule out adenoid obstructive hyperplasia. He presented mixed dentition, Angle Class I, absence of diastemas between the deciduous teeth and gyroversion of 31 and 41, indication lack of space for permanent teeth; suspected dental cavity of 85 and protruding palatal roughness. The lips were parted while resting and atypical / adapted swallowing was observed. Advised to replace the bottle for a glass, confirmation of the suspicion of cavities, speech therapy and reevaluate with orthodontics around 9 years of age for corrective treatment. **Conclusion:** The multidisciplinary evaluation is essential to identify the causes and / or consequences of oral breathing, aiming for appropriate treatments in a timely manner.

Keywords: mouth breathing; patient care team, child.

8586. Resonance of the Ear Surgically Altered due to Cholesteatoma

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Introduction: Cholesteatoma is a surgical remediation pathology causing anatomical and physiological changes in the external ear cavity. Anatomically, there is change in volume, length and sound impedance with implication of the amplitude of the natural resonance of the external ear. In normal individuals the primary peak of resonance occurs around 2600Hz to 3000Hz and the measured amplitude between 14dB to 18dB. Measuring and considering anatomically altered measured values of the external ear cavity resonance is prudent and relevant in the clinical routine of the indication of the amplification device. **Objectives:** The aim of the study was to measure the amplitude of the resonance in the anatomically altered external ear cavity, due to surgery to remove cholesteatoma in hearing impaired individuals using amplification. **Methods:** This was a primary, observational, cross-sectional, prospective research with descriptive data analysis and ethical approval (number: 1111790). The applied method was the inspection of the external acoustic meatus and the objective measurement in situ of era response in 10 adult individuals with hearing loss due to cholesteatoma. **Results:** Primary peak were found in higher frequency regions were obtained and deviant from those obtained in normal adults. **Conclusion:** The sound wave dynamics incident on the tympanic membrane in surgically altered ears is deviant from anatomically normal ears justifying the use of measured values of Real Ear Unaided Response in the evaluation of the amplification device.

Keywords: cholesteatoma; external ear cavity; hearing loss.

8588. The Structural and Functional Alterations of Oral Breathing

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Introduction: Oral breathing is associated with numerous structural and functional changes related to otorhinolaryngological, craniofacial and dental aspects, phonoarticular organs, body and oral functions. **Objective:** Study the structural and functional alterations of oral breathing, illustrating through the presentation of a clinical case. **Resumed report:** A 3-year-and-8-months-old oral breather in the deciduous dentition phase was evaluated by otorhinolaryngology, orthodontics and speech-language pathology from UFCSPA, with reports of snoring and respiratory pauses, sneezing and nasal pruritus, and tonsillar hypertrophy, already having treatment with saline solutions without improvement; anterior open bite, absence of normal diastema for his age, lower third of the face increased, difficulty in lip closure, low tongue placement with interposition in speech and swallowing, and pacifier habit. Cavum X-Rays and audiometry with immittance were requested, prescribed fluticasone, saline and ketotifen. The patient was informed of the possibility of adenotonsillectomy and use of orthodontic appliance at the opportune moment. Eliminating use of pacifier as soon as possible was solicited, with the possibility of spontaneous regression of the anterior open bite, and follow-up by the 3 areas that evaluated. **Conclusion:** Several structural and functional changes related to oral breathing were verified, which

contributes to the clinical reasoning, diagnosis, planning and prognosis of this alteration, demonstrating the importance of the multidisciplinary evaluation.

Keywords: mouth breathing; stomatognathic system, child.

8591. Contributions of Electrophysiological Exams for Identification of Vestibular Changes in Subjects with Suspected Vestibular Migraine

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Introduction: According to the World Health Organization (2016), 50-75% of individuals between the ages of 18 and 65 suffer from headache, of which about 30% reported migraine. This is a chronic neurological disease, called migraine, and is a type of primary headache (Sousa, 2014). They usually happen before the age of 20, reaching women more frequently. The causes of this disease do not have all the physiopathological aspects completely clarified. Among the most probable hypotheses are the neurogenic inflammations, changes in the serotonergic system and vasodilation of the meningeal arteries. The clinical manifestations of migraine related to vestibular symptoms occur in several ways. Usually individuals present dizziness, constant imbalance, tinnitus, sensorineural, fluctuating hearing loss and atrial fullness. **Objective:** To present possible vestibular changes in subjects with suspected vestibular migraine using audiological and electrophysiological tests. **Meth-**

odology: The study is an experimental, cross-sectional, descriptive-analytical, quantitative approach. The sample is being formed by individuals with suspected vestibular migraine. The parameters used for selection were taken from the diagnostic criteria of the third edition of the international classification of headaches, 2013. Data collection is being performed at the Clinical School of Speech and Hearing Therapy at the Pontifical Catholic University of Goiás from August 2017 and will extend until June 2018. The exams are composed of audiometry, logoaudiometry, immittanciometry, vestibular evoked myogenic potential and computerized vectoelectronystagmography. **Results:** 47 questionnaires were applied, 20 were eligible for selection, among them, 13 participants had already performed the exams. **Conclusion:** The results are tabulated and analyzed.

8593. Use of Xerostomic Medications in Infant with Severe Oropharyngeal Dysphagia: Case Report

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Introduction: Sialorrhea is described as an unintentional loss of saliva and it can be classified as anterior or posterior. Posterior sialorrhea can occur in individuals with oropharyngeal dysphagia and can increase the risk of saliva aspiration. There is lack evidence about the effect of xerostomic medications in the treatment of sialorrhea in children. **Objective:** The objective of the present study was to describe the use of xerostomic medications for saliva management in an infant with severe oropharyngeal dysphagia. **Case report:** Term infant, small for gestational age, presented oral cyanosis and desaturations during oral feeding. Speech-language pathologist assessment showed normal orofacial structures, low tonus, saliva accumulation in oral cavity and altered cervical auscultation. During the swallowing evaluation with formula, it was observed episodes of choking, desaturation and change in cervical auscultation. To improve saliva control, it was initiated therapy to increase saliva swallowing frequency along with xerostomic med-

ications. The first medication used was the atropine sulfate (1 drop in the corner of mouth) however, a thickening of saliva and hyperthermia was observed. The second treatment was the topic hyoscine butylbromide, which reduced the saliva but the hyperthermia remained. The third choice was the topic propanteline, that even without evidence in newborns, this medication showed the best effect with less side effects. **Conclusion:** The present study showed the importance of the interaction between Speech-Language Pathologist and Pharmacy professionals in the care of a child with severe oropharyngeal dysphagia and difficulty in the management of saliva.

Keywords: dysphagia, infant, sialorrhea, anticholinergic drugs.

8595. Analysis of Two Incentive Respiratory Devices by the Surface Electromyography in Parkinson's Disease

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Introduction: Parkinson's disease (PD) is a degenerative condition that affects several functions. Expiratory Muscle Strengthening Training is a strategy of rehabilitation used to strengthen the suprathyroid muscles. **Objectives:** to describe and compare the characteristics of surface electromyographic signal (SEMG) during the execution of two types of respiratory devices. **Resumed report:** series of six cases, 4 males, mean age 71.75 ± 17 , mean staging of PD 2.88 ± 1.03 (Hoehn and Yahr scale). Collected suprathyroid muscle SEMG signal of 3 swallows of thin liquid (10 ml), 3 expiratory tasks in an adapted device with flexible tube (300ml of water, 3cm of the bottom) compared to Respiro (classic) charges 1 and 3. Data collected by MIOTool 400, Miograph 2.0 software (bandpass filter for the frequencies 20-500Hz). Variables of peak (μ S), mean (μ S) and average frequency (Hz) were, respectively, for swallowing: 8.8 ± 4.1 ; 7 ± 3.4 and 103 ± 51.5 ; for the device with water: 19.1 ± 9.4 ; 12.7 ± 6.3 and 90.3 ± 45.6 . Respiro charge 1: 17.3 ± 6.4 ; 13.9 ± 4.7 and 113.4 ± 40.2 and Respiro charge 3: 17.3 ± 4.8 ; 13.3 ± 4 and 124.5 ± 44.6 . **Conclusion:** Respiro charge 3 recruited more energy when compared to the other models, but it was possible to note that Respiro charge 1 resembles the effort of the musculature during swallowing itself. Further studies with specific data on the frequency and duration of each exercise model, are necessary, in order to improve the use of incentive respiratory in speech-language practice.

8601. Analysis of the Benefits of the Contralateral Routing of Signal system in Unilateral Hearing Loss: Case Report

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Introduction: Among the damages caused by unilateral hearing loss, characterized by the decline of auditory responses in only one ear, the head shadow effect is the factor that can significantly reduce the detection of sounds arriving on the affected side, which makes a challenge to understand speech in these individuals and affects their quality of life. The Contralateral Routing of Signal system, developed specifically for this population, offers benefits similar to those of normal listeners, without causing auditory discomfort. **Objective:** To describe the findings of a user of the Contralateral Routing of Signal system in relation to the measurement with probe microphone to analyze the elimination of the head shadow effect and the responses of the Auditory Handicap questionnaire before and after the adaptation of the system. **Resumed report:**

C. M., a 50 year old, male, has normal hearing in the left ear and profound sensorineural hearing loss in the right ear caused by mumps in childhood. The comparison of the responses of the Hearing Handicap Inventory for Adults questionnaire, pre and post adaptation, showed that in both social and emotional aspects, the individual obtained better results after adaptation. In the measurement with probe microphone it was possible to observe that the system causes the total elimination of the head shadow effect. **Conclusion:** Hearing loss limited the daily life of the individual and after the adaptation of the Contralateral Routing of Signal there was improvement related to the handicap and the head shadow effect.

Keywords: hearing aids; hearing loss, unilateral.

8604. The Occurrence of Risk Indicators for Hearing Impairment in Newborns and Infants Exposed to the Zika Virus During Pregnancy

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Introduction: Pregnant women's babies infected by the Zika virus may present alterations. In the first month of life we can frequently observe visual or hearing problems, imaging scans and sensorineural alterations, and findings in clinical dysmorphology (Surveillance/National Health Service 2017). The risk indicators for hearing impairment have a significant influence in the neonatal hearing screening results. **Objective:** To verify the occurrence of risk indicators for hearing impairment in babies exposed to the Zika virus. (Health Secretary/National Health Service 2013)

Methods: A retrospective, descriptive study undertaken at the Fernandes Figueira Institute, approved by the ethics committee (526756616000005269). We included 57 babies exposed to the virus. The babies were considered exposed to the virus when the laboratory analysis result was positive to the polymerase chain reaction, for either mother or baby. The babies were allocated in two groups: G1 and G2. In G1, we included babies without risk indicators. In G2, babies with risk indicators, where we studied the presence of one, two or three or more indicators. **Results:** Among the children analyzed, 78.94% did not present any risk indicators (G1). In G2, composed of 21.05% of the population, the great majority presented only one risk indicator, 66.66%. **Conclusion:** Children exposed to the Zika virus may also present risk indicators for hearing impairment. The most common situation for this population was staying in the intensive care unit for more than five days. Therefore, we recommend the investigation of risk indicators for hearing impairment in this population.

Keywords: newborn, hearing loss, zika virus.

8606. Pregnancy Trimester and Results of Neonatal Hearing Screening in Children Exposed to the Zika Virus

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Introduction: The development of the internal ear starts on the 20th day of pregnancy and finishes around the 25th intrauterine week (Taylor, 2000). Congenital infections may compromise this development, presenting different degrees of severity according to the pregnancy trimester when the infection occurs. **Objective:** To verify the correlation between the pregnancy trimester of the infection and the neonatal hearing screening result. **Methods:** A transversal descriptive study, undertaken at the Fernandes Figueira Institute, approved by the

ethics committee (526756616000005269). We included in the study 44 children exposed to the Zika virus without risk indicators for hearing impairment (Health Secretary/ National Health Service 2013). We considered it exposure when the laboratory result was positive to the polymerase chain reaction, for either mother or baby. We excluded 12 exposed children with risk indicators. We applied the Transient Evoked Otoacoustic Emissions test and the Brainstem Auditory Evoked Potentials test. The screening was considered altered when "fail" occurred in at least one of the exams, in at least one ear. The children were allocated in two groups, G1 (pass) and G2 (fail). Next, we studied the pregnancy trimester of the disease in both groups. **Results:** Among the children in group G1 (pass), 30.95% were exposed on the 1st trimester, 54.76% on the 2nd, and 14.28% on the 3rd. In group G2 (fail) 100% were exposed on the 1st trimester. **Conclusion:** The infection caused by the Zika virus on the 1st pregnancy trimester presented an impact on the screening results.

Keywords: newborn, hearing loss, zika virus.

8607. Dysphonic Patient's Compliance to Voice Therapy: A Systematic Review

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Introduction: Vocal rehabilitation requires behavioral changes and the performance of vocal exercises, being vital the active participation of the patient during speech therapy. Adherence to voice therapy is essential to an effective treatment. **Objectives:** To systematically review the dysphonic patient's compliance to voice therapy. **Data Synthesis:** It is a systematic review in the Pubmed database, using a search strategy related to the theme of the study. The selection included studies that evaluated the adherence of dysphonic patients to voice therapy through an instrument designed for the study or previously validated. Of the 548 publications, 21 were included in this review, of which 6 were excluded because they did not directly assess what was the patient compliance to therapy, resulting in a final number of 15 studies. As for the instrument used to evaluate patient compliance, 2 (13.33%) used questionnaires made for the study, 4 (26.66%) applied the URICA-VOICE scale and 9 (60%) evaluated adherence according to the abandonment or completion of therapy. Among the studies that have applied the URICA-VOICE, most obtained a result of adherence in the contemplation stage. In the other articles, there is high rate of abandonment to therapy, indicating non-adherence, in accordance with the criteria established by the studies. **Conclusion:** The low adherence is a common problem in voice therapy. Further studies are needed to assess adherence to therapy more broadly, seeking the associated factors and ways to improve the patient's readiness facing the voice therapy.

Keywords: patient compliance, dysphonia, voice, review.

8608. Proposed Screening for Identification of Children's Language Disorders

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Objectives: To determine the sensitivity and specificity of a low-cost screening test for identifying children at risk of language delay. **Setting:** Language screening of children in primary health care facilities in the municipality of São Paulo, Brazil. **Methods:** Sample comprising 1,000 children aged between zero and five years from the municipality of São Paulo, Brazil who

underwent screening to determine risk of language delay. Questionnaires containing questions about the main developmental milestones across the language domain were conducted with the children's parents/guardians during a vaccination campaign. Participants were referred for speech-language assessment. The age and sex composition of the sample was analyzed using Student's t-test, adopting a 5% significance level. Sensitivity, specificity, positive predictive value, negative predictive value and AUC values were calculated to test accuracy. **Results:** The majority of the participants were aged between four and five years (21.82%; p<0.009) and 51.6% were male (p=0.42). A large majority of the 12% of participants who failed the screening test (69.16%) were male (p<0.001). Sensitivity, specificity and AUC values were 82.5%, 98.93%, and 0.907 (p<0.0001), respectively, and the screening test showed 96% accuracy. All participants who did a language assessment also underwent an audiological evaluation and were shown to have a hearing threshold that fell within normal limits. **Conclusions:** The screening test showed high sensitivity and specificity for determining risk of language delay in children aged between zero and five years.

8609. Speech Therapy in a Case of Peripheral Facial Paralysis of Traumatic Origin

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Introduction: Peripheral facial paralysis of traumatic origin is mainly due to motorcycle accidents, resulting in asymmetry of the face at rest and in movement, interfering mainly in facial expression and in masticatory and phonoarticulatory functions. Thus, the speech therapist can intervene in the functional and aesthetic aspects of the face through myofunctional rehabilitation in order to minimize the alterations found in the stomatognathic system. **Objective:** to describe the speech-language intervention in a case of traumatic peripheral facial paralysis through orofacial myofunctional therapy. **Methodology:** This is a case report of a 52-year-old male individual, attending at the Clínica Escola de Fonoaudiologia, Federal University of Sergipe - UFS, Lagarto campus, a motorcycle accident victim. A speech-language assessment was performed using the evaluation protocol for face trauma, based on Bianchini and Parolo (2010), and the functional muscular evaluation protocol for facial paralysis, based on Chevalier (1987). Was observed that the patient presented sagging in the middle third of the face, on the right side, with loss of sensitivity in the upper lip and zygomatic region. Up to now, four sessions have been performed and significant improvement in masticatory function and reduction of facial asymmetry can be observed. The patient is still in the process of speech-language rehabilitation. **Conclusion:** Faced with this, speech therapy has been shown to be important and effective in adapting altered stomatognathic functions, contributing to improve the quality of life of the individual.

8610. Perception and Satisfaction of Parents and Speech Therapists with the Performance on Auditory and Language skills in Children with Cochlear Implants

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PUCSP

Introduction: Measuring satisfaction with language outcome in cochlear implant users is a complex task, requiring an interdisciplinary and detailed approach. Success is

achieved when the development of speech perception and language skills are equivalent to hearing peers or when family expectations are met. **Objective:** To analyze and compare parents and professionals perceptions regarding auditory and language skills and satisfaction obtained by cochlear implant users, and identify possible factors responsible for outcomes. **Methods:** Questionnaires were sent to parents of fifty children between 2 and 15 years old, cochlear implants users for at least six months; to 32 Speech and language therapists and 3 audiologists responsible for programming. File records, responses to questionnaires, auditory and language categories, IT-MAIS and MUSS were used for data analysis. **Results:** Responses were received from 50% of parents and 31% of therapists. Parents of younger children, bilateral cochlear implant users with oral communication and the ones who live in the state of São Paulo were the most responsive subjects. There was a disagreement on categories of auditory and language between therapists and audiologists but, parents and speech therapist agreed on categories and satisfaction with outcomes. **Conclusion:** Clinical benchmarks as categories of auditory and language have the potential to strengthen the partnership between parents and speech therapists, adjusting expectations and identifying variables that influence outcomes. However, the results indicate that it seems necessary to align criteria in the allocation of categories, suggesting the need for greater interaction among parties involved.

8611. Monitoring of Auditory Responses of Newborns and Infants with IRPA

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Introduction: Auditory integrity in the first years of life is fundamental for the acquisition and development of language, since it is from the attention, discrimination, location and sound detection that the child is able to recognize and understand language (ISSAC; MANFREDI, 2005). **Objective:** To identify the most prevalent risk indicators for hearing loss (RIHL) in the sample studied and to follow the Auditory Responses of Newborns with RIHL up to 6 months of life. **Methods:** The study was a prospective, experimental, cross-sectional, quantitative approach, conducted at the Clinical School of Speech and Language Pathology at PUC GO between August 2017 and May 2018. In the first evaluation, an anamnesis protocol was applied to identify the RIHL was used in the service, then Transient Evoked Otoacoustic Emissions and Product Distortion, BERA-T (30dB), Tympanometry (226 and 1000Hz) and CPR (agogô, big bell) were performed. At follow-up, the children were reassessed, adding auditory behavioral evaluation and BAEP diagnosis (observe maturation of the auditory pathway). **Results:** Sixty children were initially evaluated, 57 presented satisfactory results in the first evaluation and 3 failed. These had IRPA, Toxoplasmosis, Pierre Robin Sequence and low weight, apgar 1 in the first minute and 3 in the fifth minute and 18 days in the ICU. The most prevalent RIHL in this sample was prematurity, followed by low weight and hyperbilirubinemia. **Conclusion:** It is possible from the tests carried out to identify children who failed hearing screening and who should participate in an audiological monitoring program.

8612. A Systematic Review of the use of Telehealth in Speech, Language and Hearing Sciences

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We conducted a systematic review to investigate telehealth applications in Speech-Language and Hearing Sciences (SLHS). Most of the studies focused on hearing (32.1%), followed by speech (19.4%), language (16.5%), voice (8.7%), swallowing (5.8%), multiple areas (hearing and/or language and/or speech and/or voice: 13.6%) and others (3.9%). The majority of the studies focused on assessment (36.9%) or intervention (36.9%). The other studies focused on screening (8.7%), education (1%), various methodologies (including screening, assessment, intervention, monitoring and/or education: 11.6%) and others (4.9%). Most of the studies concluded that the telehealth offered advantages over the non-telehealth procedures (85.5%), and 13.6% reported that it was unclear whether the telehealth procedure offered advantages. Only 0.9% of the selected studies concluded that the non-telehealth alternative approach offered advantages over the telehealth. Improved access to care was the main benefit mentioned (80.6%). The use of telehealth can reduce patients' driving time, make health care more accessible for patients who live in communities with few specialists, and can promote patient-centred care. Most of the studies reviewed positively evaluated the use of telehealth in SLHS and examined cost minimization when considering the aspects related to access and quality of care. However, the studies also provide evidence of the need for additional investigations for the generalization of results. Future studies, particularly randomized controlled trials, should be conducted to provide more evidence for establishing best practices in SLHD telehealth considering procedures related to remote screening, assessment and intervention. Moreover, cost-effectiveness analyses are needed to justify telehealth applications and reimbursement.

8618. Moebius Syndrome: A Condition Associated with Involvement of the Cranial Nerves, Orofacial Anatomical Changes and Feeding Difficulties

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Introduction: Moebius syndrome is characterized by involvement of the pairs of cranial nerves, especially the facial and abducent nerves. **Objectives:** to report a patient with Moebius syndrome, highlighting their clinical findings, especially the otolaryngological ones. **Resumed report:** the patient was an 11-month-old girl. In her gestation there was an episode of vaginal bleeding in the third month. The child was born by vaginal delivery, at term, weighing 3,260 g, with Apgar score of 9 in the 5th minute. After childbirth, the child remained hospitalized for one week due to hypoglycemia due to difficulty in suckling. At age of 3 months, she was readmitted to investigate the facial paralysis observed since birth. As for her neuropsychomotor development, she sat unsupported between 9 and 10 months. At 11-month, physical examination revealed left facial paralysis; epicanthic folds; convergent strabismus; constant ajar mouth; micrognathia; left hemihipoglossia; left hand with cutaneous syndactyly of 3rd, 4th and 5th fingers; nail agenesis of the 2nd to 5th fingers, and transverse meromelia of the terminal phalanges of the 2nd, 3rd, 4th, and 5th fingers. Computed tomography scan and magnetic resonance imaging of the skull did not reveal

changes. The karyotype was also normal. **Conclusion:** Moebius syndrome has been associated with a vascular disruptive process. Intellectual deficit has been reported in 10 to 15% of patients. The syndrome can also occur with neuropsychomotor delay, which can lead to important feeding difficulties, in association with orofacial anatomical alterations, as hemihipoglossia.

Keywords: Moebius syndrome, cranial nerves, hemihipoglossia, micrognathia, feeding difficulties.

8622. Myopathy Associated with Swallowing Disorder and Aspiration Bronchopneumonias: Infantile Form of Pompe Disease

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Introduction: Pompe disease is a rare condition characterized by the lysosomal deposition of glycogen secondary to deficiency of the enzyme alpha-glycosidic acid. **Objectives:** to report a case of the infantile form of the disease, a condition characterized by generalized myopathy and hypotonia. **Resumed report:** the patient is a boy of 1 year and 4 months of age with hypotonia and hyporeflexia, severe swallowing disorder and alteration of muscle enzymes. He is the first child of non-consanguineous parents. At birth, he presented perinatal anoxia and cardiorespiratory arrest. He evolved with bronchopneumonias due to repetitive aspiration and difficulty in swallowing. He was hospitalized in the pediatric intensive care unit to perform aspiration bronchopneumonia treatment. However, he evolved with respiratory fatigue requiring mechanical ventilation, which was dependent. Subsequently, he also needed a tracheostomy. In the evaluation through electroneuromyography, findings compatible with myopathy were evidenced. Alpha-glycosidase dosages were required in leukocytes, blood on filter paper and skin/fibroblasts for screening of Pompe disease, which showed positive results for the disease. **Conclusion:** Pompe disease is a rare autosomal recessive condition. Its rate of progression can be rapid and lethal, and the average survival of individuals with the infant form is about 1 year of age. Thus, this report tries to call attention to the possibility of the diagnosis of Pompe disease in cases of neonates presenting hypotonia and signs of muscular disease, highlighting its otorhinolaryngological symptoms.

Keywords: Pompe disease, myopathy, hypotonia, swallowing disorder, aspiration bronchopneumonia.

8623. Palliative Care in Pediatrics and Speech Therapy: Case Report

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Introduction: According to the World Health Organization, palliative care plays an important role in improving the quality of life of patients and their families when exposed to a life-threatening illness. Speech therapy, as part of the multidisciplinary team, should be part of the palliative care team, aiming for comfort in the process of evolution of each disease, in an individualized way. **Objective:** To report the speech-language practice in a case of pediatric palliative care. **Case report:** Female patient, 10 months, premature of 30 weeks + 5 days, diagnosed with congenital malformations, cardiopathy, osteopenia of prematurity, rickets and severe

malnutrition. She remained in the Neonatal Intensive Care Unit for three months, requiring mechanical ventilation. At 11 months, speech-therapy consultations were started, the patient was being fed exclusively through alternative means. Functional assessment findings included orofacial musculature hypotonia, sialorrhea, altered suction pattern, and oral disorganization. Due to the lack of oral readiness, the conduct was based on the Program of Oral Sensory Stimulation and stimulation non-nutritive sucking. Due to the reserved prognosis, the patient was inserted in the palliative care team. Thus, the main speech therapy goal was to generate oral comfort. **Conclusion:** The speech therapy work, carried out in a humanized manner, had as its aim to promote oral comfort and well-being to the patient, respecting the expectations of the family members and the limits of the clinical picture, contributing to the reserved and limited prognosis of the case.

Keywords: palliative care; pediatrics; speech therapy.

8624. Training Basic Healthcare: A Continuing Education Experience

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Introduction: the permanent education in primary care should encompass the concepts of disability, since they are anchored in the biomedical model, contrary to the one advocated in the Network of Care for the Disabled, which generates access barriers to health by these people (URSINE; PEREIRA; CARNEIRO, 2018). **Objectives:** reports on the experience of training held as part of an extension project aimed at strengthening the care network for people with disabilities. **Methods:** a series of training were held at the basic health units of the municipality of Itapema/SC, aiming to answer participant's questions about Serviço Ambulatorial de Saúde Auditiva (SASA) and Centro Especializado de Reabilitação em Deficiência Física e Intelectual (CER II), specialized care services for people with disabilities of the Universidade do Vale do Itajaí, and to train professionals for better healthcare, referral and follow-up of people with disabilities. **Results:** Nine training were made, totaling 94 trained professionals, among them doctors, nurses, nursing technicians and community health agents. The training enable the elucidation of doubts about the flow of SASA and CER II, as well as the forms of care in basic care for people with hearing physical or intellectual disabilities. **Conclusion:** this experience helped to extend the integration between teaching and services, as well as strengthening the bond between the different levels of healthcare, based on the construction of support networks for people with disabilities. It is believed that permanent education is a means of consolidating and qualifying the care process.

Keywords: healthcare; people with disabilities; health professionals.

8627. Quality of Life Questionnaires Survey Oral Complications in Patients with Head and Neck Cancer

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Introduction: Depending on the affected areas, surgical procedure typology and the intensity of radiotherapy and chemotherapy sessions, patients with head and neck

cancer (HNC) may present functional and organic alterations unleashing oral complications. **Objective:** A systematic review highlighting which are the main questionnaires that assess the oral complications related to quality of life in patients with HNC may be effective in detecting which questionnaire best interprets the oral discomforts generated by the treatment. **Data Synthesis:** The most frequently used questionnaires in the studies were: European Organization for Research and Treatment of Cancer - Head and Neck Cancer Quality-of-Life Questionnaire; Vanderbilt head and neck symptom survey; Xerostomia questionnaire; Oral mucositis weekly questionnaire-Head and neck cancer. Dry mouth / xerostomia / thick saliva was the symptom most commonly evaluated by the questionnaires and consequently, the most frequent symptom. **Conclusion:** From this study it was possible to make a survey of which quality of life questionnaires evaluated the oral complications resulting from surgery, radiotherapy and / or chemotherapy in patients with HNC.

8628. Speech Perception Test with Pictures: Applicability in Children with Down Syndrome

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Objective: to investigate the applicability of the perception test of speech with figures in children with Down syndrome at different chronological ages. **Methods:** an observational, descriptive, prospective study. Study of cases. A total of 25 children, both sexes, aged between two years and ten years and 11 months, participated. The children were divided into three groups, according to chronological age: group I (two years to four years and 11 months) was composed of five girls and five boys, group II (five years to seven years and 11 months) by two girls and five boys, and group III (eight years to ten years and 11 months) by five girls and three boys., and the last step consisted of the applicability of the material. First the basic audiological evaluation was performed, and the second phase consisted in the application of the material. Project approved in CEP, 465.181/2018. **Results:** the groups presented the following percentages of correct answers: GI 72%, GII 85.40% and GIII 97.50%. There were significant differences for five of the 25 words (knife, dog, key, ring, king), when associated with correct and incorrect answers. **Conclusion:** The test is a useful tool in the assessment of the auditory perception of children with DS, since it is independent of the verbal production of the child.

Keywords: auditory perception; child; hearing; audiology; speech, language and hearing sciences; down syndrome; speech perception.

8629. Mismatch Negativity in Adolescents & Young Adults

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Introduction: Mismatch Negativity (MMN) is an electrophysiological response that occurs when the auditory system detects any change in the characteristics, pattern or regularity of the sound stimulus and refers to processing skills, sound discrimination, and auditory memory. **Objectives:** To describe the MMN responses in adolescents and young adults with normal hearing and without auditory complaints. **Methods:** Transversal study. The sample consisted of 109 individuals of both genders. The participants were divided into two groups according to the age range: 41 adolescents, from 12 to 17 years, and 68 young adults, from 18 to 29 years. All

of them underwent peripheral audiological evaluation and MMN research . **Results:** For the group of adolescents, mean latencies and amplitudes were, respectively, 188.2ms and 5.33 μ V in the right ear and 185.3ms and 5.41 μ V in the left ear. For the group of young adults, mean latencies and amplitudes were, respectively, 171.1ms and 4.3 μ V in the right ear and 168.3ms and 4.4 μ V in the left ear. For both groups, there was no difference between genders. There was also no significant difference in the comparison between ears. There was inverse correlation between age and latency and amplitude values. **Conclusion:** Lower latency and amplitude values were observed in the group of young adults when compared to the group of adolescents. However, no significant differences were found comparing gender and ears.

Keywords: evoked potentials, auditory, electrophysiology, adolescent, young adult.

8630. Evaluation of Hearing Answers and Comparison with the Specialized Literature of Children NB Until 12 Months without Risk Indicators for Hearing Loss

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Introduction: Signs of hearing loss in young children are difficult to detect. Thus, there is a need for programs that make it possible to perform exams from birth, such as neonatal hearing screening, which is mandatory throughout Brazil.

Objectives: To analyze the results obtained in the Otoacoustic Emissions Test Evoked by Product Distortion stimuli. Observe and analyze the behavioral responses to the auditory stimuli for uncalibrated sounds and compare them with the specialized literature. **Methodology:** The study was prospective, transversal, analytical-descriptive, experimental, in the field of approach, quantitative. The sample consisted of 12 children, all of whom performed the TOAE, DPOAE and Tympanometry tests and behavioral evaluation performed in an acoustically treated environment. The sample consisted of 12 children who attended the PUC GO Reference Center, in the period between August 2016 and June 2017, aged 0 to 12 months. **Results:** In the evaluation of the results, all children (100%) passed the frequencies (2000, 3000, 4000 and 6000Hz) evaluated in both ears. group 1: CPR, Startle and attention; group 2: lateralization, direct location below and above eye level; group 3: lateralization, location below and above eye level; group 4 lateralization, location below and above eye level. **Conclusion:** There was no difference in DPOAE responses at the different frequencies evaluated for stimulus, noise and signal-to-noise ratio, behavioral auditory responses were better than expected for age when compared with data obtained in the literature.

Keyword: hearing; location of the sound; otoacoustic emissions.

8634. Vocabulary Analysis of Deaf Children

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Introduction: Changes in the auditory function can cause damages in the language development, which can be reduced with the use of the hearing aid (AASI). In Brazil, the ABFW test is one of the means used to evaluate the expressive language on hearing-impaired children. **Objective:** the objective of this paper is to analyze the vocabulary of hearing-impaired children using hearing aids. **Method:** The ABFW

test, which is a vocabulary test, was applied to children with mild to moderate hearing impairment at the Audition and Language Education Center, located in Brasília/DF. The data was analysed. We calculated the average of the children evaluated and compared to that expected for their age according to the protocol for category. **Results:** 8 children, between them 4 boys and 4 girls, with the mean age of 50.13 months, 23.38 months of auditory sensory evaluation time, 26.75 months of AASI use, and 33.5 months of speech therapy. The results of the review were: 25% of the usual vocabulary (DVU) on the clothing's semantic field; 43.52% on animals; 38.52% on food; 35.88% on transport; 23.85% on furniture and domestic utensils; 8.75% on professions; 9.37% on locations; 32.50% on colors and shapes; and 14.86% on toys and musical instruments, and the expected result would be, respectively: 50%; 40%; 60%; 50%; 60%; 20%; 50%; 30%; and 40%. **Conclusion:** The evaluated children vocabulary presented a lower average than it was expected for the normality standard described in the test.

8653. Influence of Environmental Noise in the Reading of a Group of Children

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Introduction: noise can negatively affect short-term memory, attention, executive functions, reading, and writing, impairing cognitive performance and learning of children. Brazilian schools present noise levels above the recommended for acoustic comfort, which can interfere with school performance of them. **Objective:** to Investigate the effect of environmental noise in the reading in a group of children without reading/writing disorders. **Methods:** we evaluated 42 children aged 9 and 10 years old, with no visual and/or auditory impairment, and no reading/writing disorders. This ability assessed by reading a text, part of Brazil test in silence and in competition with 2 levels of background noise: 76 dB (A) and 95 dB (A). **Results:** Data analysis showed that in the presence of noise there was statistically significant differences in reading time and number of errors committed by the child. The same did not occur for the number of omissions, substitutions, additions of letters or syllables, self-correction, changes in punctuation and hesitation/pauses when reading. **Conclusion:** when they made the reading in silence, the children showed better performance as they read more words per minute and less amount of errors than in the presence of background noise, which can affect reading and writing learning

Keywords: reading, attention, hearing, children, education.

8656. Increased Latency in Benign Postural Paroxysmal Vertigo: Case Report

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Introduction: Benign Paroxysmal Postural Vertigo is the most common of vestibular dysfunctions. It is characterized by nystagmus and/or vertigo that emerge in seconds after cephalic movement causing damage to the emotional, functional and physical aspects of the individual. **Objective:** To describe the variation of the latency time during evaluation of an individual diagnosed with Benign Paroxysmal Postural Vertigo. **Resumed report:** Elderly, 71 years old presented recurrent complaints of Benign Paroxysmal Postural Vertigo, with clinical signs varying

between lateral and posterior (right and left) Semicircular Canals, according to the type of nystagmus. In a determined session, the Dix Halpike maneuver showed paroxysmal, exhaustible and accompanied vertigo nystagmus, in agreement with the literature, however, the signals were triggered only after the fifth minute of the right position, compatible with the patient's reference. For the repositioning of the otoconia, the Epley maneuver was used to the right. The possibility of fragments of the otolithic membrane adhering to the duct wall and releasing at the end of this period, occurring nystagmus and vertigo could explain the variation in the latency of the clinical signs. **Conclusion:** The clinical finding of latency in Benign Paroxysmal Postural Vertigo emphasizes the importance, in the clinical routine, of considering patients references to symptoms, which are not always consistent with the literature.

Keywords: vertigo, inner ear, labyrinth diseases.

8663. Food Speech Therapy in Elderly with Delirium

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Introduction: In Brazil, the elderly population is expected to triple over the next 20 years. Delirium is a transient, fluctuating and acute organic mental syndrome. Delirium can generate cognitive alterations that interfere directly in the capacity of accomplishment of the activities of daily life among them to difficulties in the feeding, being able to lead to dysphagia. **Method:** The work was approved by the ethics committee of the Hospital of Emergencies of Goiânia CAAE: 74263417400000033. Patients aged 60 years or more hospitalized in the wards from November 2017 to February 2018 were included. The Confusional Assessment Method (CAM) protocol was applied for the diagnosis of delirium and the Preliminary Assessment Protocol (PAP) and the Dysphagic Risk Protocol (PARD) were later used. **Result:** A total of 63 elderly people were evaluated, of whom 47.62% were aged 80 years or older. As for speech therapy therapies, 31.75% were using an alternative exclusive feeding route, after speech-language intervention, this number was 19.05%. The oral exclusive diets were adapted according to the functionality of the patient, before the intervention, 1.59% had pasty consistency for dysphagia, after the intervention that number was to 36.51%. **Conclusion:** Therapy related to feeding of the elderly with delirium were adapted in the consistencies of the diets and reduction of the use of alternative feeding routes reducing the risk of bronchoaspiration.

Keywords: elderly health; delirium; deglutition disorders.

8667. Acoustically Controlled Auditory Training in Adult with Tinnitus

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Introduction: Studies on hearing loss have verified the interference of tinnitus in different central auditory abilities. The acoustically controlled auditory training is efficient to fit these physiological mechanisms, being a possible tool to improve the auditory abilities that would aid in the perception of tinnitus. **Objectives:** To describe the results of behavioral and electrophysiological evaluation of central auditory processing before and after acoustically controlled auditory training in adult with tinnitus. **Resumed report:** The following procedures were performed: audiometry, immittance, acuphenometry, behavioral evaluation of central audi-

tory processing, auditory evoked potential of the brainstem and P300 elicited by tonal and speech stimuli. Assessments were performed before and after 12 sessions of acoustically controlled auditory training involving the training of closing, figure-fund auditory skills and temporal aspects. Patient 59-year-old, tinnitus for 8 years, sensorineural hearing loss at frequencies of 3, 4, 6 and 8 kHz bilateral. Processing Disorder with inability in the physiological mechanisms of discrimination of overlapping sounds in dichotic listening that were normalized post-training. The electrophysiological evaluation evidenced only an increase in the latency of the wave one to the left ear, with presence of the waves and interpeaks within normal, post therapy there was improvement in the wave morphology in both evaluations without significant changes of the latency. **Conclusion:** The results of acoustically controlled auditory training were effective for behavioral assessment and morphology of electrophysiological findings.

Keywords: tinnitus; controlled acoustic training; auditory processing disorder.

8674. Classification of Deglutition in Hospitalized Elderly

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Introduction: According to the IBGE in 2025, Brazil will be sixth with the largest elderly population in the world, and in 2030 will have an age index of 76.39%, thus predicting that an 85-year growth rate will grow at a rapid pace. 7% of total people that same year. Studies that are over 80 years of age are more likely to be seen in emergency hospitals than younger people. The changes that occur in the physiological process of swallowing naturally, such as that of the nerve and muscle fibers, compensations occur during chewing and swallowing, this phenomenon is called presbyphagia. **Objective:** to characterize a deglutition of elderly people aged 80 years or more hospitalized in the Urgency Hospital of Goiânia. **Method:** The project was elected by the Research Ethics Committee of HUGO. of CAAE: 74263417.4.0000.0033. Patients aged 80 years and older hospitalized from 2017 to May 2018 were included. The Dysphagia Risk Protocol (PARD) was used to assess dysphagia. This protocol allows identification and classification of the swallowing profile. **Results:** 75 elderly people were evaluated. Of these, 50.67% dysphagia, 37.33% functional swallowing and 12%, normal swallowing. **Conclusion:** We conclude half of the elderly over 80 years hospitalized in the HUGO dysphagia presentation. Early detection of dysphagia in older adults allows swallowing control, minimizing the risk of dehydration, malnutrition and aspiration pneumonia.

Keyword: deglutition disorders, elderly health, speech, language and hearing sciences.

8678. Level of Response of TEOAE and their Variations in Newborns of Different Races

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Objective: To describe the level of response of otoacoustic emissions evoked by transient stimulus in newborns of white, black and brown races. **Methods:** Observational, descriptive, cross - sectional, retrospective study with a focus on diagnosis. Approved by CEP, 69367017.2.0000.5538. Responses obtained in the examinations of 344 newborns up to 48 hours of life between blacks / pardos and whites were analyzed, those without a risk factor to develop hearing loss were selected, it was considered the amplitudes per frequency band, and the mean of these amplitudes in each ear separate-

ly. The equipment used for the measurement of otoacoustic emissions evoked by transient stimulus was the Otodynamics brand, model Otoport DP + TE. Statistical analysis was performed using statistical software SPSS version 20. **Results:** The overall TEOAE response level was 16.63db and 16.70db, black / brown and white, right ear; at 15.75dB and 16.19dB, black / brown and white left ear. In 2kHz presented in 9.17dB and 9.00dB, black / brown and white, right ear; at 8.49dB and 8.86dB, black / brown and white left ear. At 3kHz presented at 12.45dB and 12.73dB, black / brown and white, right ear; at 11.67dB and 12.25dB, black / brown and white left ear. In 4kHz was 8.07dB and 8.07dB, black / brown and white, right ear; in 6.57d and 7.59dB, black / brown and white left ear. **Conclusion:** We did not observe significant statistical difference between the ears and between the white and black / brown races in the TEOAE of the newborns.

8679. Finding on the Application of an Investigation Instrument on the Risk of Falls In Elderly

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Introduction: The vestibular system undergoes structural and electrophysiological changes with aging, such as loss of ciliary and nerve vestibular cells, increased friction of the nerve fibers of the vestibular nerve, selective loss of myelin fiber density and reduction of the conduction velocity of the stimulus electrical in the vestibular nerve (SAES e PEREIRA, 2006; SLOANE et al., 1989). The body balance is also altered due to the commitment of these and other structures responsible for its maintenance. With aging, the elderly present complaints of bodily instability, and this, coupled with several factors, increases the risk of falling in the geriatric population.

Objective: To investigate and correlate the risk of falls in the elderly. **Method:** The study is transversal, analytical-descriptive, quantitative-qualitative approach. The sample has been recruited from dance houses, social centers and elderly people attended in the audiology sector of PUC-GO. The sample is still in progress, to date, the sample is composed of 74 elderly people, of both sexes, aged between 60 and 90 years. Participants answered a multidimensional questionnaire, adapted from already validated instruments, containing data regarding their socio-demographic, audiological, clinical profile, emotional aspects and daily life routine. **Results:** Of the participants, 54% presented dizziness, 36% had lost their balance, 44% had fallen, 51% had difficulty hearing, 50% had tinnitus and 24% reported having sensitivity to sounds. **Conclusion:** The incidence of falls was in almost half of the elderly investigated, and the risk of falls is also associated with vestibulopathies.

Keywords: old man; fall; balance.

8686. A Smiling-Faces Based Voice Representation for Better Therapists-Patient Interactions

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Introduction: Speech therapists face the challenge of explaining technical concepts to patients, whereas people are naturally sensitive to facial expression, regardless their cultural or educational background. **Objectives:** To implement an interface based on face drawings parametrized by acoustic features from a sustained vowel. Thus, face drawing expressions (such as happiness or sadness) do reflect voice impairments. **Methods:** From a database where volunteer voices were manually labelled according to the GRBASI scale, six acoustic parameters were de-

rived from the 19 first harmonics above the fundamental frequency, along with the total signal power. These features are intended to represent voice quality. Samples whose Grade equals zero (good quality) yield an average set of parameters whose representation was associated to a smiling face, around which 'good quality' voices are expected. These parameters were then used to process new voices, and the visual aspect of corresponding faces were subjectively evaluated. **Results:** A Mean Opinion Score test is under preparation to measure the association between specialist evaluation and layman perception of face drawings. So far, subjective evaluations done by non-specialists suggest a rough but useful correlation between Grade and face distortion. **Conclusion:** Representing relevant technical information about voice as facial expression is a potentially useful tool for proper communication between speech therapists and patients, specially during sessions where those information can be used to suggest voice exercises and practices. For instance, a therapist may use the face-based communication to ask the patient to target a 'smiling-face' during exercises.

Keywords: harmonic analysis; GRBASI scale; Intuitive interfacing.

8695. Pitch and Loudness of Tinnitus before and after Use of Hearing Aids

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Introduction: one of the treatments of patients with tinnitus and hearing loss is the use of hearing aids. **Objective:** to analyse changes in pitch and loudness of tinnitus in patients with tinnitus and hearing loss after the use of hearing aids. **Methods:** were evaluated patients with chronic tinnitus, hearing loss and hearing aids indication. The pitch and loudness of tinnitus were measured before and after 30 days of hearing aid use. **Results:** The sample consisted of 20 individuals, 50% female, with the average age of $63,7 \pm 10,5$ years. The median time of tinnitus was 6,5 (5-15) years, with the majority had presenting unilateral tinnitus (55%). Concerning hearing, 95% had hearing loss in both ears and were used bilaterally hearing aids. Concerning median of loudness of tinnitus, in the pre-hearing aid evaluation was 10dBNS in both ears. Already after use of hearing aids, the loudness of tinnitus in the right ear was 2dBNS and in the left ear was 5dBNS, with difference between the two evaluations ($p=0.026$ in the right ear and $p=0.025$ in the left ear). About the pitch, in the pre-hearing aid stage the median was 3500Hz in the right ear and 3000Hz in the left ear. In post-hearing aid, the pitch was 1750Hz in the right ear and 3000Hz in the left ear, with a difference only in the right ear ($p=0.028$). **Conclusion:** it was evidenced that there was reduction of pitch and loudness of tinnitus comparing pre- and post-adaptation of hearing aids.

Keywords: tinnitus, hearing aid, hearing loss.

8696. Oncologic Treatment and Hearing Function: The Importance of the Clinical Audiology

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Objective: To describe the importance of audiological evaluation for the monitoring of hearing loss in patients diagnosed with head and neck cancer and treated with chemotherapeutic and / or radiotherapeutic drugs. **Methods:** Literature review on the topics: audiological monitoring, types of instruments used to evaluate hearing loss in onco-

logical patients, and existence of clinical protocols. The following descriptors were used: hearing loss, head and neck cancer, treatments, hearing tests and hearing disorders. Research was conducted in national and international databases (www.periodicos.capes.gov.br, // www.scielo.org, // www.bireme.br), as well as by the use of related documents and legislation. **Results:** Of the thirty studies consulted, 23 were scientific papers, 77% (16 national, 53% and seven foreign, 23%); six documents of public entities, 20% (four national, 13% and two foreign, 7%) and a national master's dissertation, 4%. **Conclusion:** The research revealed that there is a large literature describing the types of cancer, its causes and the action of ototoxic drugs in the reduction and cure of oncological diseases. Although the subject of audiological evaluation and cancer has been found, there are gaps in studies and implementation of public policies and practices in the Brazilian reality. The literature review reaffirmed the importance of hearing monitoring of patients treated with radiotherapy and chemotherapy, exposed to ototoxic medication, for the early detection of hearing loss, a procedure that assists in reviewing treatment, choosing alternative procedures and identifying the progression of the lesion.

Keywords: hearing loss, head and neck cancer, treatments, hearing tests and hearing disorder.

8700. Perception of the Vocal Self-Image of the Performing Arts Academics

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Vocal psychodynamics is the process of reading a voice and the effects of the voice by the listeners and the actor is the vice professional responsible for transmitting to the other a written work, giving life to the characters removed from written texts. **Objective:** to compare a perception of the vocal self-image of the performing arts academics. **Methods:** the Vocal Description Questionnaire was applied with 15 first-year students and 15 senior year students of performing arts, with space to indicate the negatives and positives points of their voices itself, the Vocal Satisfaction Questionnaire was also applied to the students in the senior year, because they have knowledge of all undergraduate years. **Results:** first-year academics were better known as compared to the senior year. The chosen Voice aspects can show the subjective concept attributed to the voice. And about vocal satisfaction, academics are not totally satisfied with their vocal abilities. **Conclusion:** the theater study improved the perception of the vocal self-image of the performing arts academicians, however, a more negative vocal satisfaction suggests that the coordination and teachers return attention to the vocals worked on in the undergraduate program. And also that the voice must be analyzed within the subjectivity of each subject, giving speech therapy a possibility to explore new fields of action

Keywords: voice; speech therapy; vocal psychodynamics; actors and theater.

8702. Implementation of the Newborn Hearing Screening Program: School Maternity of the Federal University of Rio de Janeiro

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Objective: Describe the Neonatal Hearing Screening Service (NHS) of School Maternity of the Federal Uni-

versity of Rio de Janeiro (UFRJ), in the implementation year. **Methods:** Project approved on CEP, 2.247.511. Observational, cross-sectional, retrospective study. Analyzed the medical records of newborns and babies attended in 2014. NHS was performed through TEOAE; on retest, TEOAE and DPEO-AE. REDCap platform for data record. Descriptive, bivariate, multivariate statistical analysis with logistic regression. Tests Anova, Chi-square, Fisher ($p<0.05$). **Results:** Sample, 1568 medical records, 746 (47.6%), male, 777 (49.5%), female, 45 (2.9%) had no sex record in the medical records. Cover rate of 97.27% in NHS. Mean gestational age was 37.51 weeks. Average weight at birth of 3180 grams ($p=0.002$). Risk indicators of hearing loss of greater occurrence, ICU stay, incubator, history of congenital infections, use of ototoxic medication. NHS performed until 48 hours after birth, 60% of the sample. Cooeleopalpebral reflex present in 91%; use of ototoxic medication is risk to failure ($p=0.005$). In TEOAE, 1466 (97.2%) passed bilaterally, 42 (2.8%) failed bilaterally and unilaterally; ICU presence is to risk failure ($p=0.023$). In DPEOAE, 270 (90.9%) passed bilaterally, 27 (9.1%) failed bilaterally and unilaterally. **Conclusion:** Percentage coverage of 97.27% in the NHS is more than the recommended to be classified with universal screening. The RIHL should be analyzed in association with each other, according to the procedures performed, RCP, TEOAE, DPEOAE, to identify those who offer a greater chance of hearing alterations in the newborn population.

8707. Vestibular Evoked Myogenic Potential with the TDH-39 Headphone: Reference Values

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Introduction: The cervical Vestibular Evoked Myogenic Potential is an examination that evaluates the functioning of the saccule and lower portion of the vestibular nerve through the saccule-colic reflex. The reference values diverge between the studies, because they are influenced by equipment, protocols and type of earphone used. Most studies are performed with insertion earphone. **Objectives:** To describe the reference values of the exam with TDH-39 headphone in subjects without complaints. **Methods:** Eighteen (72%) women and seven (28%) men (mean age 24.84 years) were selected, with no complaint of any kind. The test was performed with tone burst at the intensity of 118dBNA, 10-1.500Hz bandpass filter (TDH-39 headphone). Were presented 200 stimuli with 500Hz frequency at the rate of 5.1 stimuli per second (analysis window of 50ms). The tracings obtained were analyzed for latency of P13 and N23 waves, and their inter-amplitude. **Results:** The averages were obtained through 50 ears, since there was a correlation between the right and left side for P13 ($p=0.02$) and N23 ($p=0.04$). The latency values for P13 were 19.34ms (+2.28), ranging from 18.69ms to 24.51ms, with amplitude of 26.04 (+16.62), ranging from 1.94 to 60.13, and for N23 of 26.48ms (+2.89), from 19.46 to 33.22, with amplitude of 26.94 (+18.25), from 2.07 to 65.85; the inter-amplitude was 53.58 (+33.81), ranging from 5.39 to 119.92. **Conclusion:** Were suggested the reference values of the cervical vestibular myogenic responses with the TDH-39 headphone in individuals without complaints.

Keywords: vestibular function tests, vestibular evoked myogenic potentials, vestibulocochlear nerve diseases.

8710. Correlation between the Functionality and Staging with the Findings of Videofluoroscopy in Amyotrophic Lateral Sclerosis

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Introduction: the Brazilian Functionality Index (IF-Br) and the Amyotrophic Lateral Sclerosis Severity Scale (ALSSS/Egela) assess severity of the disease. In addition, dysphagia is a common condition in this population. **Objectives:** to describe the results of IF-Br and ALSSS in Amyotrophic Lateral Sclerosis (ALS) and to establish possible correlations with the findings of the Videofluoroscopic Swallowing Study (VFSS).

Resume Report: series of two cases, 57 years, male (A) and 64 years, female (B). IF-Br classified 100 (complete independence) 75, 50 and 25 (does not perform activity or complete dependency). ALSSS varies from 10 (normal) to 1 (total impairment). IF-Br for A: 52.77 and ALSSS (four domains) 1, 1, 1 and 5. Patient B: IF-Br 84.82 and ALSSS 10, 10, 1 and 1. VFSS analyzed elevation and anteriorization of the larynx, opening of the upper esophageal sphincter (UES) and total laryngeal excursion (millimeters) for 5ml, 10ml and comfort swallowing. Respectively, the findings for A: (6.55, 7.24, 12.41), (13.45, 13.45, 11.38), (3.45, 4.18, 2.76), (14.7, 17.2, 16.84). Patient B: (19.33, 12.33, 13.33), (5, 11.66, 10.33), (5.66, 8.66, 8.66), (19.67, 16.72, 17.7). Rosenbek Scale, patient A = 6 and B = 1. **Conclusion:** according to the evolution of ALS, the indexes of functionality and severity undergo significant variation. This is related by the difference, among cases, in the degree of UES opening, which corresponds to the main defense mechanism. It is concluded that severe dysphagia with a higher risk of aspiration are usually associated with more severe functional conditions and with a reserved prognosis.

8714. Prevalence of Vocal Symptoms In Future Teachers

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Introduction: Teachers represent the group with the higher prevalence of vocal symptoms among voice professionals (Jones, 2002). The teacher students also fit into this reality: about 34% present frequent vocal symptoms (Simberg, 1999). **Objectives:** Determine the prevalence of vocal symptoms among teacher students of the third year course, from Nova Friburgo, in Rio de Janeiro State, Brazil. **Methods:** This is a cross-sectional study, which 57 students (6 male and 51 female) from a teacher training course were invited to participate. It was used the self-assessment questionnaire "Voice Symptom Scale" (VoiSS), developed by Deary et al (2003) and validated in Brazil by Moretti et al (2012). It is composed by thirty questions, and it is divided into three domains: limitation, emotional and physical. Total score and scores by domains were analyzed. **Results:** Ten participants were excluded by not answering all questions. The total score of the 47 participants was 21.3, exceeding the cut grade (16). More than 55% had a greater score than the cut grade and 54% said they already "lost" their voice at least once. About 20% of the participants reported perceiving tiredness sometimes and 11% effort in speaking, which indicates risk of dysphonia.

Conclusion: The prevalence of vocal symptoms among the future teachers is higher (57,4%) compared to that found in the literature, presenting a risk for the development of dysphonia. On this sense, health promotion actions, including voice training, are recommended for teacher students to minimize absenteeism and withdrawal from work due to voice problems in future.

8716. Monitoring of Neonatal Hearing Screening in a Private Clinic in Brasilia
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Introduction: Even if discreet, hearing loss may alter the development of oral communication, in this way we implemented programs aimed at neonatal care for diagnosis and follow-up such as the Universal Neonatal Hearing Screening. This, at a time, aims to diagnose early and rehabilitate the neonates at risk or not for hearing impairment. **Objectives:** The objective of this study was to analyze the Neonatal Auditory Screening Private Clinic of the city of Brasilia through neonatal auditory monitoring. And to know the index of babies evaluated in the Universal Neonatal Hearing Screening who concluded the diagnostic process having failed Transient Evoked Otoacoustic Emissions Test. **Method:** This is a prospective study. The sample is composed by 2343 exams of babies evaluated in the Universal Neonatal Hearing Screening Program of this clinic, from January 2018 to May 2018. **Results:** The sample consisted of 2343 neonatal hearing screening exams, of which 93% passed the exam presenting no auditory risk, 7% failed screening. Of those who presented risk factors for hearing loss, 4% of neonates who did the retest of neonatal screening were diagnosed with hearing loss. **Conclusion:** The Neonatal Hearing Screening service flow converges to the Auditory Health Care Directive for Children, but it is not yet universal. In conclusion, the monitoring of children submitted to the Neonatal Hearing Screening program, is feasible and recommended. Even so, the data suggest the need for improvement in the implementation of the program, such as the implementation and data collection.

8720. Headache Increases the Handicap of Dizziness without Impairment in Postural Performance In Women
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Introduction: Headache is one of the most common symptoms associated to dizziness. Nevertheless, the literature lacks studies to verify that presence of headache can actually interfere in the maintenance of postural balance and perception of this dizziness, especially in female population. **Objectives:** Analyze the occurrence of headache among women complaining of dizziness and to verify the relationship with the results of posturography and the handicap caused by dizziness. **Methods:** Observational, cross-sectional, quantitative analysis, performed through a database of 216 exams were selected 49 of women complaining of dizziness, between 2016 and 2017. The patients were submitted to anamnesis, Foam-Laser Dynamic Posturography and the Dizziness Handicap Inventory quality of life questionnaire. A comparative inferential analysis was performed using the parametric Student T Test and the non-parametric Mann-Whitney U Test. **Results:** the sample presented mean age of 57.7 years, all with complaints of dizziness. Thirty were of long duration, six of short duration and 13 did not know to refer. Twenty-four patients reported headache, 14 of them bilateral. Nineteen women had a diagnosis of vestibular dysfunction. In the posturographic evaluation, the values, on average, were lower than the PFL standard without relation to the presence of headache. However, in relation to quality of life the total sample presented a severe handicap with a significant relation for the group with headache. **Conclusion:** The presence of headache was an aggravation of the handicap

caused by dizziness, although it did not have significant influence postural balance in the present sample.

Keywords: postural balance; dizziness; headache.

8723. Hemispheric Difference in Perception of Dizziness: Subjects Handicap after Stroke

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Introduction: Dizziness is one of the main complaining in patients with stroke sequels, what makes it becoming a relevant fact to limit the vestibular functionality, besides presenting damages to the postural control and ocular motricity, showing the differences between the impairment of left and right hemisphere, especially of spatial relationships. **Objectives:** Compare the difference between the handicap caused by dizziness in subjects with left and right stroke sequels. **Methods:** Observational, transversal quantitative research approved by the Ethical commission of research nº CAAE 16728013.0.0000.5346 and accomplished after the authorization of the subjects and their signature an Informer Consent Form. Attend to the research 46 subjects, 25 women and 21 men, with an average age of 63.87, which were submitted to clinical anamnesis and the Dizziness Handicap Inventory. The subjects were classified in two groups: Right CVA (12-26.1%) and Left CVA (34-73.9%). Were employed to the inferential analysis the U teste of Mann-Whitney considering $p < 0.05$, with Statistic software 9.1. **Results:** A significant difference between right CVA and higher handicap in emotional domain ($p = 0.02$). Other domains did not differ in terms of handicap with regard to damaged hemisphere, physical namely: $p=0.74$; functional: $p=0.67$; total score: $p=0.51$. **Conclusion:** Future research can analyse whether such handicap being the higher involvement of right hemisphere to emotional issues or because of processing information specialize and posture balance control, exacerbates dizziness and perception of it.

Keywords: dizziness; stroke sequels; handicap after stroke; hemisphere difference.

8724. Turner Syndrome and Dysphagia: Case Report

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Introduction: Patients with Turner Syndrome may present changes in the biomechanics of swallowing, due to the presence of diverse anatomical anomalies such as cardiovascular and craniofacial renal, in addition to impairments of language and hearing. **Objectives:** A case report of a child with Turner Syndrome and Dysphagia. **Resumed report:** Patient of 13 months, with diagnosis of Turner Syndrome associated with pangastrite, laryngeal cleft, adenoid hyperplasia, short ariepiglótic folds. She underwent supraglottoplasty and videofluoroscopy of swallowing, evidencing episodes of penetration and silent laryngotracheal aspiration of thin liquid. Patient with difficulty of weight gain, feeding by alternative route. Speech therapy team requested for clinical evaluation of swallowing. Initiated intervention for oral organization and introduction of oral feeding with training of deglutition in the slurry pasty consistency. During speech therapy sessions the patient presented good clinical evolution. In reevaluation, he presented good capture of the bolus, adequate chewing and cervical auscultation with swallowing

clicks. Patient was discharged from the hospital with an indication of oral feeding with a concomitant alternative route for nutritional gain. **Conclusion:** Patients with Turner Syndrome may present with several comorbidities that may be associated with oropharyngeal dysphagia. The importance of the investigation of swallowing disorders in these cases is observed, aiming at better nutritional and clinical management.

Keywords: Turner syndrome, deglutition disorders, nutritional sciences.

8726. Role of the Speech-Language Pathologist in Deciding How to Feed in Case of Complete Post-Foramen Cleft Palate During Hospitalization in a Pediatric Intensive Care Unit - Case Report

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Introduction: The unoperated cleft palate compromises the biomechanics of deglutition, due to the lack of functional velopharyngeal mechanism. This mechanism plays an important role during sucking and swallowing, allowing separation of the nasal and nasopharyngeal cavities from the oral and oropharyngeal cavities, preventing nasal reflux of food and allowing the intraoral pressure changes required for suctioning. **Objectives:** To describe the speech-language pathologist's role in deciding how to feed in case of complete post-foramen cleft palate during hospitalization in a Pediatric Intensive Care Unit. **Resumed report:** Received in the intensive care unit with diagnosis of dehydration due to low ingestion and hypoglycaemia. In clinical evaluation of swallowing, performed at 22 days, complete post-foramen fissure and tongue were observed in the buccal floor, as well as the presence of search, bite and suction reflexes. Exclusive supply via alternative way. In non-nutritive suction, strength, tongue cancellation and adequate intraoral pressure were observed. Cervical auscultation without change. In maternal breast patient did not perform adequate handle. With bottle formula, the patient performed strong and arrhythmic sucks, and a rhythm control maneuver was necessary. Cervical auscultation with swallowing clicks and respiratory stridor. **Conclusion:** It was observed that the maternal breast would not be indicated as a form of nutrition of this patient at the moment due to the conditions of the evaluations performed. In this way, Speech Therapy contributed by opting for oral feeding with bottle from the result of the same.

Keywords: cleft palate; deglutition disorders; speech, language and hearing sciences

8727. Otoneurological and Reading Aspects In Students

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Introduction: The integrity of balance systems is important to school learning, their impairment can affect the child performance, especially reading. **Objectives:** Characterize otoneurological and reading complaining in students, as well as studying the relation between those complaints. **Methods:** Descriptive, transversal, quantitative research approved by the Ethical commission of research n° 87637718.3.0000.5346. An anamnesis were applied to parents or guardian of 44 students of both genders, enrolled in third grade of public elementary school in Santa Maria/RS. **Results:** Children between the ages of 8 and 10 years (mean age 8), 59% of them, female. With regard to otoneurological

complaining, 75% presented some type of complaint: 59% headache, 32% nausea and vomit while traveling, 11.4% frequent falls, 9.1% tinnitus, 4.5% otalgia, 2.3% dizziness and 2.3% decrease of hearing acuity. Related to reading, 41% report some reading difficulty: 28% cannot read, 67% read but do not understand, 50% takes a long time to read and 16% prefer do not read. Related to otoneurological and reading complaints, it was found that 11 students without otoneurological complaint, 72.72% also did not presented reading complaint, whereas 48.48% of the students with otoneurological complaints also presented reading complaints. **Conclusion:** The prevalence of otoneurological complaints were greater than reading complaining in this sample, otoneurological and reading being associated in approximately half answers; suggesting the importance of deepening the study about otoneurological aspects in students, in order to minimize the effect of otoneurological alterations over the learning process in school.

Keywords: postural balance; child; learning; reading; academic performance.

8729. Speech-Language Pathology Findings in a Case of Tetralogy of Fallot Associated with Esophageal Atresia - Case Report

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Introduction: Tetralogy of Fallot is a frequent cyanogenic congenital heart disease caused by pulmonary hypoflow, characterized by four associated defects: ventricular septal defect, pulmonary stenosis, right ventricular hypertrophy, and aortic dextroposition. The literature reports the occurrence of esophageal atresia in about 20% of these patients.

Objectives: To describe speech - language pathology findings with Tetralogy of Fallot associated with esophageal atresia.

Resumed report: An eight-month-old patient admitted to a hospital in Porto Alegre on the fifth day of life, diagnosed with pulmonary atresia, with extensive interventricular communication and abdomen with probable duodenal atresia, with significant gastric distension. Decompressive gastrostomy was performed with rupture of the stomach, followed by raffia and ileostomy. Esophagoplasty with correction of atresia, tracheal fistula and reconstruction of intestinal transit. He started speech therapy with three months receiving oxygen therapy and feeding exclusively through an alternative route. At four months, he began clinical evaluation of swallowing in an orthodontic bottle. Afterwards, there was clinical worsening requiring mechanical ventilation, interrupting the speech-language therapy. Two months later, the patient was tracheostomized and maintained on mechanical ventilation with clinical stability, restarting evaluation with the adapted Blue Dye Test. Currently patient, feeding by alternative route with sensory motor stimulation oral and non-nutritive suction with thermal stimulation. **Conclusion:** It is observed the importance of speech-language intervention in this association, considering the impacts on nutrition and the safe feeding of this patient during his treatment.

Keywords: tetralogy of fallot; esophageal atresia; deglutition disorders.

8731. Occurrence of Hearing Alterations In Workers Exposed to Harmful Agents in a Cutlery
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Introduction: Workers of cutlery are generally exposed to physical (noise and extreme temperature) and chemical risks (smoke and dust). Those agents combine can enhance the affects to the hearing system. **Objective:** Verify the occurrence of hearing alterations in workers exposed to harmful agents of a cutlery. **Methods:** Research approved under CAAE 16728013.0.0000.5346. It is transversal, observational and descriptive; with workers of a cutlery, exposed to physical harmful agents (noise, and/or extreme temperature) or physical combined to chemical (smoke and/or dust), served in Center of Reference in Worker Health, in 2017. They were submitted to anamnesis, visual inspection of the external ear canal, tonal threshold audiometry and transient otoacoustic emissions and distortion product. **Preliminary Results:** Participated 17 men, average age of 33.05 years, ranged of 21 to 47. Observed isolated exposure to physical agents in 41.18% and physical and chemical combined in 58.82%. Audiological alterations in 41.18%, being 14.29% with audiological alterations only; 28.57% with normal audiometry and transient otoacoustic emissions absent; 57.14% with disturbed audiometry and transient otoacoustic emissions absent; and of those 28.57% with distortion product otoacoustic emissions absent. The average time of exposition of the altered subject was 13.71 years; these, just exposed to physical agents (noise) presented an average of 8.66 years of exposition; and exposes to combined agents (physical and chemical) presented average of 17.5 years of exposition. **Conclusion:** There was a higher occurrence of exposition to combine agents with more audiolologic alterations, which have significant media in years of exposition.

Keywords: workers; cutlery; harmful agents.

8733. Quality of Life in Individuals Diagnosed with Larynx Tumor
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Introduction: Malignant neoplasm of the larynx (C32), has clinical-stage depending on the tumor (T) and the region of involvement of the larynx. If the patient is assisted by the speech therapist since the pre-surgery up to the rehabilitation helps re-establishing speech communication. Evaluating the quality of life of those individuals makes it possible to understand how the chosen method of the speech rehabilitation interferes with the aspects of the life of those individuals. **Objective:** Analysing global and voice-related quality of life in individuals diagnosed with a laryngeal tumor. **Methodology:** 35 participants were invited (29 men and 6 women), all of whom were exclusively diagnosed with T3 and T4 larynx tumors. Characterization data of the sample related to the speech-language intervention were collected. In addition, the respondents answered two specific questionnaires to the quality of life: SF-36 and EORTC QLQ-C30, as well as a specific questionnaire of vocal disadvantage, was applied Voice Handicap Index. **Results:** All participants underwent total laryngectomy, with 18 (17 men and 1 women) diagnosed with tumor T3 and 21 (16 men and 5 women) with tumor T4. The VHI protocol score was 43,89 for men and 39,33 for women. On the other hand, The SF-36 protocol reached an average score of 93 for men and 108,53 for women. The EORTC QLQ-C30 obtained an average score 58,08 for men and 60,51 for women. **Conclusion:** Results

indicate that although individuals perceive little voice disadvantage, even in adverse communication conditions, the overall quality of life is greatly affected.

8734. 3D Anatomic Model of Internal Ear
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Introduction: The reduced proportions of anatomical structures compromise their visualization and their practical studies. This is the case of the constituents of the inner ear - cochlea, vestibule and semicircular canals (CSC). It also corroborates with its difficult visualization the location within the petrous part of the temporal bone. **Objective:** To report the construction of a large scale anatomical model of an inner ear with its respective structures. **Methodology:** A systematic study of the structures and position of the human inner ear was carried about anatomy books, with a three-dimensional drawing (3D) in Autodesk AutoCAD 2017 software. design a series of vertical supports to help the printing process (subsequently removed from the model). The model was printed ABS on 3D Cube3-3D Systems printer. Printing imperfections were corrected with epoxy resin; for the understanding and differentiation of its parts, the model was colored with acrylic paintRevell, the cochlea was colored white, the vestibule of beige, the anterior CSC of red, the lateral CSC of green and the posterior CSC of blue. **Results:** The enlargement of the inner ear 7.5x larger than the original structure, resulting in a 3D piece with 120mm in length. **Conclusion:** With the enlargement, it was possible to obtain a better view of the structures when compared to the original size of the human skull. The model produced will be used in practical human anatomy classes in phonoaudiology, medicine and odontology courses, which may facilitate learning.

8744. Evaluation of Deglutition in Post H1N1 Patients in the Municipality of Goiânia
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Introduction: The Influenza A (H1N1) is a respiratory disease caused by type A virus that normally causes outbreaks of flu among swine. The H1N1 has frequent respiratory complications, which influence ventilatory support. Swallowing is the act of conducting food from oral cavity to stomach, safely and with airway protection. Besides maintaining adequate nutrition and hydration, the coordination between swallowing and breathing is essential to prevent pulmonary aspiration and other complications. **Objective:** To evaluate the deglutition of patients reported with H1N1 by the Municipal Health Department of Goiânia. **Method:** The project was approved by the ethics committee with CAEE: 49267315.9.0000.5078. Patients aged 18-70 years with diagnosis of H1N1 in 2016 were included. The initial contact was made by phone and after that a face-to-face assessment was scheduled at the Federal University of Goiás. The Functional Deglutition Protocol was applied. **Results:** Of the 329 people who were contacted by phone, 48 died, 102 reported the wrong number, 141 had no interest in the research, 38 scheduled the evaluation, but only 7 attended. Of these, 71,42% were men, the average age was 44,2 years. As for dysphagia classification, 71,42% were on the sixth level of the dysphagia severity scale. All patients with H1N1 had a pneumophonoarticulatory incoordination with maximum time of reduced phonation, averaging 7,21 seconds for men and 6,46

seconds for women. **Conclusion:** The coordination of breathing and deglutition is the most significant change after H1N1.

Keywords: deglutition, speech, language and hearing sciences ,influenza a virus, H1N1 subtype.

8754. Audiological Profile of Offshore Workers

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Introduction: Offshore workers perform a production on offshore platforms. They need to analyze the audiological profile of offshore workers of a maritime company. **Methodology:** A cross-sectional study was carried out with the career evaluation services. The variables collected were: sex, age, exposure time, mean of the lows (0.5, 1 and 2 KHz) and high frequencies (3, 4 and 6 KHz) and type of exposure. Pearson's chi-square test was used to evaluate an association between variables. The study was submitted and approved, following the rules of the Research Ethics Committee: 62731416.5.0000.5257. **Results:** It was the highest prevalence of male workers (89.8%). The age range varied between 21 and 57 years and the presentation time between 0 and 32 years. The frequency extension corresponded to 24.9 % in the OD and 23.7% in the OE. The mean severity score is 2.3% in OD and 2.8% in OD. Exposure to sound was observed in 96% of the workers and 42.4% with the combined exposure between noise and solvents. The association between the variables type of exposure and the means of the high frequencies with $p = 0.088$. **Conclusion:** Workers with continuous and sensitive exposure may have an audit at high frequencies enhanced when there are risk factors in the work environment.

8756. Health Management and Activit: Insertion of Speech Therapy

Scheila Farias de Paiva

The objective of the study was to perform a documentary analysis of the care given in a city in the central south of the state of Sergipe, as well as describe the current work panorama and the insertion of Speech Therapy from the clinical demand until the possibility of its insertion as manager of the network's city. A documentary analysis of the records of users of the health services and of the Municipal Plan of Lagarto's City - Sergipe was carried out during the period from January 2016 to September 2017. The results showed a total of 24 public health service centers distributed among the levels of basic care and medium complexity, both with speech-language pathology. The analysis of the data brings to the management of the health services the monitoring of all the territorial demand and the opportunity to expand resources and services based on epidemiological data, offering to the Speech Therapist not only acting as a clinician, but also as a manager.

Keywords: speech-language pathology; health management; research on health services; collective health.

8759. Action of Speech Therapy in a Moderate Premature Newborn with Epignathus Tumor: Case Report

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Introduction: Epignathus is a rare terathoid tumor of unknown origin and usually in females. However, studies suggest that the tumor may develop disorganized in the region of the Rathke pouch (pharynx and / or bones of the skull base) and hard palate, occupying the entire oropharyngeal cavity. **Objec-**

tives: Describe the findings of suctioning and swallowing functions in Epignathus. **Resumed report:** Moderate premature newborn (RNPTM) of 34 weeks and 5 days, female, with cesarean section weighing 2020g, APGAR 7/8. After birth she had respiratory discomfort, requiring intubation in the 36th second of life and referred to NEONATAL ICU due to tumor in the oral cavity, without other associated craniofacial formations. Full tumor resection was performed without complications. The speech-language evaluation was based on the Protocol for the Evaluation of the Early Premature to Start Oral Feeding, which evidenced RNPTM with oral bite reflexes, demand and vomiting present, weak suction, adequate lip sealing, present tongue cannulation, RNPTM assessed in the maternal breast, difficulty in maintaining effective grip and disorganization between sucking and swallowing. Thus, with oral dysfunction, suggested indication of alternative feeding pathway and phonotherapy. Speech and language therapies aimed to optimize the oral phase of swallowing, including stimulation of nutritive sucking and stimulation to exclusive breastfeeding. After speech therapy RNPTM presented improvement in suction, being discharged with breastfeeding on demand. **Conclusion:** Therefore, the presence of the speech therapist inserted in the NEONATAL ICU is important, in order to favor the early intervention optimizing suction.

Keywords: epignathus, suction, new born.

8760. Speech Therapy Effectiveness in a Case of Expressive Aphasia Resulting from Stroke

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Introduction: Stroke is a neurological deficit (transient or definitive) in a cerebral area secondary to vascular injury. These brain lesions that cause aphasia can be caused by factors exogenous to the subject, such as traumatic brain injury or infectious diseases, or tumors, for example. Aphasia is traditionally defined as an acquired language disorder caused by injury or brain dysfunction, which may or may not be associated with other cognitive changes. The compromise caused by aphasia varies according to the location and extent of the injury. **Objective:** to report and analyze the case of a patient with aphasia, an adult in speech therapy at home. **Method:** The subject studied is a female patient, 54 years old, who has been in treatment since April 2018, presenting Bipolar - euphoric disorder. Regarding the clinical history, the patient suffered an ischemic vascular accident in the left hemisphere in March 2018, when he suddenly presented with a mutism. After conducting speech therapy evaluations, it was concluded that it presented as a diagnostic hypothesis aphasia of expression. In view of this, specific and intense therapeutic planning was developed. **Results:** In approximately one month (30 days) of speech therapy, the patient expanded her vocabulary considerably, again expressing herself both verbally and in writing. Although the injured area is fundamental to language, there have been very positive advances in therapy. **Conclusion:** Early speech therapy contributes in large part to the reorganization of linguistic activity, since the patient communicates satisfactorily considering the extent of her lesion.

8764. Discrimination of Speech In Cochlear Implant Users

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Deafness becomes a problem on people's lives, which difficult and alters their day by day. Cochlear implantation (CI) has been indicated as a solution for people with severe

/ profound bilateral hearing loss who do not get benefit from the hearing devices. **Objective:** The research verifies the implanted patient's speech auditory discrimination. **Methods:** The discrimination test using 25 trisyllable words and 10 sentences was applied, as the Latin American Cochlear Implant Protocol, HCCFMUSP / 2003 describes. Results and **Conclusion:** It was found sentences and words with a percentage of agreement higher than 80%, considering a data from patients with 25 to 64 years old separate by 2 groups, one from 25 to 45 years old and another from 46 to 64 years old.

Keywords: cochlear implant; sensorineural hearing loss; speech perception; prognosis.

8765. Comparison of Respiratory Capacity and Efficiency Glottal between Singers and Practitioners Aerobics Activity

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Introduction: The physical activity is something that visibly improves breathing, however singers also can exercise the respiratory muscles in another ways. This study has as aim to investigate exposure of respiratory capacity of female singers 18-40 years old. Thus, this study presents a review and field research, which were condensed theory and practice for comprehension of the potential of the work with breathing. **Methods:** To collect data on respiratory capacity and maximum phonation time of the surveyed individuals, spirometry technique was applied with and without nasal occlusion and evaluation technique of maximum phonation time of the vowels / a /, / ε /, / i / and / u /, and fricatives / s / and / z / medial, voiced and unvoiced, whose data were collected in corresponding protocol every researched. **Results:** Submitted collected data calculations, we obtained results where it was observed that 90% of them had vital capacity on higher than expected and that the maximum phonation time of the vowels / a /, / ε /, / i / and / u /, these maintained scores higher than 20 sec. **Conclusion:** It was concluded that physical activity serves to assist the capacity of work of breathing for female singers, enabling speech therapists include the physical activity in their techniques of vocal guidance.

Keywords: respiratory capacity; speech therapy; singers; practitioners of aerobic exercise.

8766. Fonoaudiological Intervention of the Mastigatory Process In Patients After Bariatric Surgery: Literature Review

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Introduction: Bariatric surgery is considered the most effective way to reduce weight in morbidly obese patients, but it can present risks at any stage of the process. And to assist the process it is necessary that the patient be accompanied by a multidisciplinary team including the audiologist¹. Purpose: This study was carried out to try to clarify the alterations of the masticatory process through the speech-language pathology in individuals who underwent bariatric surgery. **Methods:** The search for scientific papers was carried out in the databases Lilacs, Google academic, Pubmed and Scopus, covering the period from July 2007 to February 2018, using the **Keywords:** speech therapy, bariatric surgery, mastication and stomatognathic system. **Results:** We found 30 articles, without repetition, from the search of descriptors (DeCS / MeSH). Of this total, 07 were excluded by title, 05 by abstract and 11 by reading the full text. According to the inclusion and exclusion criteria, we selected 07 papers that could be analyzed in this review and included in the Bib-

liographic review. **Conclusion:** Based on the findings of this review, it was possible to identify part of the scientific panorama on the speech - language intervention in the masticatory process, and it was possible to see good perspectives for the research activity in this area. Thus, what was verified was that few studies specify changes and functioning of the masticatory process, even more being analyzed by the speech and hearing professionals.

8768. The Impact of an Expositive Class on the Vocal Intensity of University Professors

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Introduction: Intensity is one of the vocal parameters that can vary during vocal production. It is proposed that such parameter may suffer impact during teaching practice. Brazilian literature does not show occupational parameters of vocal safety in teaching. **Objective:** The aim of this study was to investigate vocal intensity variation in university professors after a 120-minute class. **Methods:** This research was approved by Veiga de Almeida University Ethics Committee under number 109388. It was an experimental and transversal study with thirteen 30 to 50-year-old female local professors. The inclusion criteria were: normal vocal pattern (score of 0 in the GRBAS scale); integrity of the respiratory system; being a non-smoker; not having been sick for seven days prior to the study. Two spontaneous speech samples were recorded, before and after class, using a Logitech H55 microphone plugged to a Dell Inspiron notebook. The speech samples were recorded and analyzed with Praat program. The sections containing initial and final noises were cut out. The final recorded samples had their average intensity obtained in dB. **Results:** It was observed that 54% of participants presented raised vocal intensity after class. Among these individuals the average increase obtained was 3,46 dB. **Conclusion:** These findings show a significant increase in this parameter and a tendency to present higher vocal intensity after class. Because of this, the present work reinforces the need for further studies in order to obtain occupational safety vocal parameters specific for teaching and classroom context.

Keywords: voice; intensity; professor.

8771. Can the Cerumen in the External Auditory Canal Influence the Caloric Stimulation Results? A Case Report

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Introduction: The caloric stimulation allows to evaluate each labyrinth and is among the most informative tests of the vecto-electronystagmography. This test can be realized with water or air, and it creates endolymph stream inside of lateral semicircular canal and it is necessary to this right way, controlling the temperature and output of stimulus. It is known the air has lower temperature maintenance capacity than water, because the thermal particularities between air and water, therefore, the test with air requires greater technique in its employability. **Objectives:** To describe the possible interference of cerumen in the caloric stimulation results with air in a female patient, 32 years old, with isolated vestibular complaint of vertigo when lying down on the left side and raising the head, without other vestibular antecedents. **Resumed report:** The patient was submitted to vecto-electronystagmography after verification of presence of cerumen, by means of otological inspection, partially obliterating the

light of the right external auditory canal (about 50%). The caloric stimulation was performed bilaterally at temperatures of 50°C and 24°C, and repeated on the right in the same period, after the mechanical removal of the cerumen by the otorhinolaryngologist. Before to remove the cerumen, it was observed vestibular weakness, incompatible with the patient complaint. After cerumen was removed, it was observed normal results. **Conclusion:** The results suggest the importance of otological inspection and subsequent removal of cerumen, prior to the examination. Besides that, it is emphasized the importance of more investigations about this subject.

8774. Acoustic Measurements of Glottal Source of Women Teachers with Vocal Complaints and Normal Larynx: Preliminary Results

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Introduction: Teachers are the voice professionals most susceptible to present vocal disturbance. **Objective:** Verify the acoustic measurements of the glottal source of women teachers with vocal complaints and without laryngeal affection. **Methods:** Preliminary research data approved by the Ethics Committee in Research with Humans (76336417.2.0000.5346). The participants signed a Term of Free and Informed Consent. Six women teachers were examined by an otorhinolaryngologist, were subjected to hearing screening and answered an anamnesis. For acoustic vocal analysis, the sustained emission of the vowel /a/ in usual pitch and loudness was collected using a professional digital recorder, after deep inspiration, in maximum phonation time, without making use of the expiratory reserve. We used the shortest time of the vowel /a:/ edited from all the subjects, excluding the vocal attack and the final part of the emission, resulting in an analysis window of 4 seconds. Measures of fundamental frequency, frequency perturbation, amplitude perturbation, noise, voice breaks, deaf or unvoiced segments and sub-harmonic segments were taken through the Multi-Dimensional Voice Program (Kay Pentax®). **Results:** All measurements of voice breaks, as well as most of fundamental frequency measurements, frequency perturbation, amplitude perturbation, noise, deaf segments and sub-harmonics remained within the range of normality. **Conclusion:** The acoustic measurements of glottal source of teachers with vocal complaints and with normal larynx were mostly within normality, demonstrating compatibility with the absence of laryngeal affection.

Keywords: speech acoustics; voice; women's health.

8773. Audiological Findings and Results of Hearing Rehabilitation in Hunter's Syndrome: Case Report

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Introduction: Hunter syndrome is a hereditary pathology linked to the X chromosome, which mainly affects males. Hearing impairment is a very common symptom in this syndrome, and may present acute otitis media or effusion, mixed hearing deficiency, otosclerosis and sensorineural hearing loss. **Objectives:** To describe the audiological findings and the results of the Auditory Rehabilitation process of an individual with a diagnosis of Hunter Syndrome. **Resumed report:** RSYJ, male, 21 years old, diagnosed with Hunter Syndrome, around 18 months of age, due to delayed motor development. He reported hearing difficulties since the age of three, worse in the

left ear, reported good audibility for high intensity sounds and altered sound localization ability. It was verified in the tonal threshold audiometry hearing loss of severe degree in both ears. Immitance testing indicated right middle ear normality and inadequate left ear tube functioning. The contralateral and ipsilateral acoustic reflexes were absent bilaterally. The otoacoustic emissions were absent and it was observed in the brainstem auditory evoked potential increase of the interpico III-V bilaterally, suggesting possible retrocochlear alteration. The rehabilitation process using the individual sound amplification apparatus proved effective, improving speech recognition and speech recognition. **Conclusion:** The electroacoustic and electrophysiological evaluation was fundamental for the definition of the diagnosis and for the choice of the best therapeutic intervention. Auditory rehabilitation improved audibility and, consequently, the patient's quality of life.

Keywords: mucopolysaccharidoses II; hearing; electrophysiology.

8776. Overall Degree of Voice Change and its Relation to the Risk of Dysphonia, Quality of Life and Classification of Dysphonia in Voice Professionals

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Introduction: Individuals may develop dysphonia due to the vocal demand required in the work environment associated with biological, physical, social, environmental, organizational and psychological factors, their health conditions, anthropometric factors and individual susceptibility. It is interesting to analyze to what extent these factors interfere in a more or less independent way in the development of the vocal disorder with these professionals and if different aspects are related or not to the degree of vocal alteration. **Goal:** To analyze the relation between the general degree of voice alteration, risk scores for dysphonia and quality of life, and the classification of dysphonia in voice professionals who sought care. **Methods:** Analysis of 68 charts of 20 men and 48 women, mean age 46.72 years. The general degree of voice change was correlated with Dysphonia Risk Trace Protocol scores, voice quality of life index, and dysphonia classification. **Results:** There was no correlation between the general degree of voice alteration and the risk scores, quality of life and dysphonia classification. **Conclusion:** Voice professionals, regardless of the degree of voice change and dysphonia being behavioral or organic, presented a high risk for dysphonia and great impact of dysphonia on quality of life, reinforcing the need for speech therapy intervention in these patients.

8777. Evolution of the Oral Intake Scale Pre and Post Speech Therapy

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Introduction: Patients hospitalized with neurological disorders may present oropharyngeal dysphagia as a symptom of their condition. Dysphagia is a change in the deglutition process in the oral and/or pharyngeal phases. The speech therapist is the professional who evaluates and rehabilitates dysphagia. The Functional Oral Intake Scale (FOIS Scale) was created to accompany and document the level of food and drink that a patient with dysphagia ingests through the oral cavity. The evolution of safe and functional oral ingestion is a significant evidence of therapeutic efficacy. **Objective:** To verify the evolution of oral intake before and after speech therapy. **Method:** A prospective study of medical records was carried out on dysphagic patients with a diagnosis of stroke, and hospital-

ized from March to May 2018 at the Emergency Hospital of Goiânia. Data from the functional oral intake scale (FOIS) were collected at the first medical care and after five speech-language therapies. **Results:** There was a total of 16 patients with a mean age of 66,5 years. Most were male corresponding to 68,75%. Regarding the evolution of the FOIS scale, 81,25% presented improvement after speech therapy, of these, 25% improved in 3 or 4 levels. **Conclusion:** We observed an effective improvement in oral food intake in patients with a diagnosis of stroke and neurogenic dysphagia who were treated at an emergency room after speech therapy.

Keywords: deglutition, stroke, speech, language and hearing sciences.

8778. Association between Hearing Loss and Exposure to Physical and Chemical Agents in Marine Workers

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Introduction: The naval work environment involves different types of risks to the health of the maritime worker, such as physical and chemical. Research shows that other risks, other than noise, can cause occupational hearing loss. There are few studies in the literature that address hearing loss in marine workers as well as the effects of chemical compounds. **Objective:** To identify association between hearing loss and exposure to chemical and physical agents in workers of a naval company in the city of Rio de Janeiro. **Method:** This is an observational, sectional study, based on the data collection of 240 medical records. Approved by the Ethics and Research Committee of the University Hospital Clementino Fraga Filho of the Federal University of Rio de Janeiro, CAAE 62731416.5.0000.5257-17. Statistical analysis was performed using the SPSS program. The workers were divided into two groups: exposed to isolated noise (Group I) and exposed to noise and associated chemical agent (Group II). The QuiQuadrado Pearson and Fisher tests were applied for statistical analysis. **Conclusion:** Continuous exposure to noise and / or combined chemical agents is associated with the development of auditory alterations, initially in the acute frequencies, in naval workers of this study.

Keywords: hearing loss, occupational, chemical compounds, noise-induced hearing loss.

8780. Treatment of Facial Paralysis Associated with Low-Power Laser: Systematic Review

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Introduction: Difficulty in movements and expressions of the face, such as facial paralysis, can interfere substantially in the relationship of the human being. In this way speech therapy works on the structures and functions of the musculature of the face through conventional therapies, increased, in the last five years, of adjacent therapeutic methods. **Objective:** This study was undertaken to try to clarify that the treatment of low-power laser has efficacy in the treatment of facial paralysis, in a way associated with facial exercises. **Method:** The search for scientific articles was carried out in the databases Lilacs, Google academic, Pubmed and Scopus, covering the period from January 2008 to January 2018, using the **Keywords:** speech therapy, facial paralysis, low frequency laser, physiotherapy and laser therapy. **Results:** 168 articles were found, without repetition, from the search of descriptors

(DeCS / MeSH). Of this total, 38 were excluded by title, 27 by abstract and 54 by reading the full text. According to the inclusion and exclusion criteria, 30 suitable papers to be analyzed in this review were selected and included in the systematic review. **Conclusion:** Based on the findings of this review, we verified few studies in the area of speech therapy that specify the use of low power laser as well as its association with associated therapies, but the great majority in the physiotherapy area. This study also concludes that there is a need for clinical studies in the field of speech therapy.

8781. Hearing Rehabilitation in Acoustic Neuromas: Case Report

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Introduction: Neurofibromatosis 2 is an autosomal dominant disease that affects 1 in 40,000 individuals. The patients be characterized for developed multiple schwannomas along the spine and intracranially, also acoustics neuromas, that cause a progressiv, bilateral, sensorineural, deep hearing loss and consequently a bad speech discrimination. **Objectives:** To investigate what is it the hearing rehabilitation benefit in a patient with bilateral acoustic neuromas. **Resumed report:** Patient with neurofibromatosis 2 and bilateral acoustic neuromas, developed sensorineural hearing loss, of deep degree in the right ear and of moderate degree in the left. It was adapted in the Faculty of Dentistry of Bauru with an individual sound amplifier Although the hearing aid was helping, the patient complained that he does not understand speech, so, he was forwarded to a hearing rehabilitation. In the hearing rehabilitation, the patient was evaluated with speech comprehension assessments, such as Hearing Handicap Inventory for Adult, Client Oriented Scale Of Improvement and Alpiner - Meline Aural Rehabilitation, also speech perception tests, such as sentences list and mono and disyllabic words lists before and after therapy. The therapy consisted in a informal auditory training and counseling sessions. After three months of therapy, was possible to verify that the patient had a great improvement in the speech comprehension. **Conclusion:** Within care during the hearing rehabilitation process, the use of strategies such as auditory training can benefit the patient communication and speech comprehension, directly reflecting the improvement of the quality of life.

Keywords: neuromas, hearing loss, rehabilitation.

8783. Correlation between Audiological Profile, Hemogram and Sound Pressure Level in Fuel Station Fronts

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Introduction: Although frequent, occupational hearing loss still has its origin quite questioned. At first it was attributed only to the noise level present in the environment, and we ended up ignoring the ototoxic chemical agents. Gasoline and other fuels contain toxic chemicals such as benzene that can bring a wide range of health damage, including cancer. **Objectives:** Correlate the audiological profile, hemograms and the sound pressure level of workers exposed to noise and chemical solvents. **Methods:** Through a questionnaire the researcher selected two fuel stations in the city of Bauru and classified them as P1 - Station with less movement and P2 - Station with greater movement, taking into account the flow of supply per day. Both were submitted to measurement of the sound pressure level. 8 workers from each station were submitted to blood sampling and basic and high frequency tonal threshold audiometry. **Re-**

sults: In the results thresholds were found within normality in all cases, however, all of them presented the trait characteristic of the evolving occupational hearing loss. The sound pressure levels varied between stations, with Station 1 not exceeding 80dB, while Station 2 with peaks exceeding 100dB. The hemogram was altered, with leukocyte reduction, in 9 of the 16 participants. **Conclusion:** This study concludes that exposure to chemical solvents be related to occupational hearing loss, and warns of the importance of new studies in the area as well as the value of preventive measures in this population.

Keywords: hearing, sound pressure, hearing loss, occupational health, ototoxics.

8784. Central Auditory Changes and Turner Syndrome

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Introduction: Turner syndrome (TS) is a genetic disease characterized by total or partial absence of a sexual chromosome. It presents a well-known phenotypic variability, with different clinical features that include middle ear alterations and hearing loss. However, TS hearing problems are not clinically apparent in most cases. Currently, electrophysiological exams, such as long-latency auditory evoked potentials (LLAEPs), are able to identify abnormalities not found through subjective methods or peripheral auditory evaluations. **Objectives:** Thus, our aim was to describe and analyze the peripheral and central auditory findings in patients with TS, regarding the occurrence or not of hearing loss and auditory nerve conduction at the auditory cortex level. **Methods:** Our sample was composed by 11 girls aging from 4 to 18 years old. We performed auditory evaluations composed by peripheral audiological evaluation followed by central audiological evaluation, through electrophysiological examinations, that include the latency, amplitude and morphology of LLAEPs (P1, N1, P2, and N2 complexes) and cognitive potential (P3). **Results:** Five girls presented auditory alterations in the peripheral evaluation and 8 in the latency and morphology of P3 waves. **Conclusion:** Based on the results found, patients with TS seems to have a high frequency not only of peripheral but also of central auditory changes. Increased latency of the waves of the LLAEPs and cognitive potential provided indications that there may be changes in the integration between areas of auditory association and cortical and subcortical regions of the central nervous system among these patients.

Keywords: Turner syndrome; hearing; auditory evoked potentials; long latency auditory evoked potentials; cognitive potential.

8786. Results of the Cochlear Implant in a Patient with Neurocryptococcosis - Case Report

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Introduction: Neurocryptococcosis is a serious fungal disease, which affects the Central Nervous System, presenting headache, visual deficit, nausea and hearing loss. **Objectives:** Check the benefit of the cochlear implant in a patient with neurocryptococcosis **Resumed report:** Patient, female, 34 years old, referred to the cochlear implant section of the Hospital for Rehabilitation of Craniofacial Anomalies, complaining of hearing loss and bilateral tinnitus, after a clinical presentation of treated neurocryptococcosis, accompanied by total visual deficit. After evaluation in the sector, the patient was diagnosed with bilat-

eral profound sensorineural hearing loss and individual hearing aid was adapted bilaterally, without benefit. Patient underwent cochlear implant surgery in the right ear, with total insertion of the electrodes. After 2 years and 7 months of use of the implant, she presented free-field tonal thresholds with a mean of 20dBNA in the frequencies of 500 to 4000Hz, word recognition in open set, and reported to understand simple and complex sentences when spoken slowly. **Conclusion:** The cochlear implant facilitated the access to speech sounds, with consequent improvement in hearing abilities, proving to be a viable and beneficial option in the auditory rehabilitation of cases of neurocryptococcosis with profound bilateral sensorineural hearing loss. References: FURTADO, Karen Cristini Yumi Ogawa. Caracterização epidemiológica, genotípica e fenotípica da criptococose em uma unidade de referência no Estado do Pará. 2012. 103 f. Dissertação (Mestrado) – Universidade Federal do Pará, Núcleo de Medicina Tropical, Belém, 2012. Programa de Pós-Graduação em Doenças Tropicais.

Keywords: cochlear implant, cryptococcosis, audiology.

8787. Center of Pressure of Postural Balance and Physical Activity in Teachers: Probable Relationship

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The practice of physical activity reduces body oscillations because of exercise on both the sensory and motor systems. Teachers with satisfactory practice of physical activity have better balance, but the prevalence of insufficient physical activity is greater than in the general population. **Objective:** Compare the center of pressure (COP) area of teachers with sufficient and insufficient physical activity. **Methods:** 50 teachers (14 men and 36 women, age \pm 48.8 years) were evaluated using a force platform, in the bipodal position on a fixed surface with open eyes and the parameter analyzed was the area ellipse of the COP in square centimeters. The International Physical Activity Questionnaire (IPAQ) was used to assess the level of physical activity. Based on the performance achieved in the IPAQ, according to the percentage of the predicted value, the teachers were separated into two groups: low performance group and normal performance group. **Results:** A statistically significant difference was no observed. **Conclusion:** There was no significant association between COP and practice of physical activities. Conclusion: It was verified that in this population, the COP was not related to the physical activity, however, there is a need for further studies with larger populations and thorough evaluation of balance characteristics to prove these probable associations and to suggest the importance of the practice of physical activities promoting the improvement of the health and quality of life of the worker. Support: FUNADESP.

8788. Influence of Occupational Agents in the Hearing Conditions of Rural Workers

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Introduction: Obfuscated by noise, chemical agents act on the auditory pathways as harmful as high levels of sound pressure, example these agents are pesticides and the natural ototoxins present, for example, in tobacco farming. **Objectives:** The objective is to investigate and differentiate the influence of occupational agents on the auditory health of smokers and farmers of other cultures. **Methodology:** This work is part of a broad investigation about the auditory and labor conditions of rural workers. Three groups of workers were divid-

ed, being G1 without exposure, G2 with general farmers and G3 smokers. Each working environment had its sound pressure level measured during a day of work and were also raised which chemicals are present in the routine. Each worker was submitted to the research of transient evoked otoacoustic emissions (EOA-t). **Results:** Comparing the NPS of the three environments it is observed that the highest mean happened with G1, followed by G2 and G3. G3 makes greater use of agrochemicals. The reproducibility of transient Otoacoustic emissions indicated better functioning of outer hair cells in G1. G2 and G3 presented similar results, being worse in G3. **Conclusion:** These data suggest that hearing damage occurs not only through noise but in synergy or other factors. In this case, natural pesticides and ototoxins. It is evident the need for further studies in order to investigate the real influence of these agents on auditory health so that greater prevention and diagnostic effectiveness can be achieved.

Keywords: hearing, sound pressure, hearing loss, occupational health, ototoxins.

8794. Profile of Patients Attended by Speech Therapy in a Pediatric Intensive Care Unit

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Introduction: The care team in an Intensive Care Unit should be multiprofessional, in which a speech therapist should be inserted, developing actions to rehabilitate the functions of the therapeutic system. **Objectives:** To describe the profile of patients assisted by Speech Therapy in the Pediatric Intensive Care Unit of a hospital in the south of the country. **Methods:** Retrospective study for the analysis of medical records, approved by CEP 604.754-0. **Resumed report:** The Speech Therapy team between October/2017 and April/2018 served 74 patients with ages ranging from 1 day to 13 years, with an average of 10 months. The requests for interconsultation came mainly from the teams of: 5% otorhinolaryngologist, 12% neurologist and 65% cardiologist. In the first speech-language evaluation, 4% of the patients were exclusively orally fed, 9% of the patients were fed via the oral route, and 82% of the patients were exclusively fed via an alternative route. Each patient received an average of 5 visits. At the time of discharge from the Intensive Care Unit, 18% of the patients were fed via the oral route, 23% were exclusively orally, and 58% were fed via an exclusive alternative route, 1% received a diagnosis of refusal 11% with normal swallowing, 12% diagnosed with moderate dysphagia, 30% with mild dysphagia, and 46% with severe dysphagia or without conditions for clinical evaluation of swallowing. **Conclusion:** Speech therapy enabled a greater chance of initiating oral feeding in the cardiopathy infants who were fed via an exclusive alternative route.

Keywords: deglution disorders; intensive therapy; pediatrics.

8803. Auditory Evoked Potential Brain Stimulus per click and per specific frequency in infants - Equipment Standardization

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Objective: Characterize Brainstem Auditory Evoked Potentials (BAEP), Neurodiagnostics and Electrophysiological Thresholds of infants who passed in the Neonatal Hearing Screening, with no risk indicators for hearing loss, between 1-2 months old. **Methods:** Twelve babies were divided into

two groups, GI (30-42 days old) and GII (66-69 days old). They were evaluated by the BAEP Neurodiagnosis through the click stimulus analyzing the absolute latencies (I, III, V), interpeak intervals (I-III, III-V, I-V), interaural difference of the V wave and the interpics interval I-V amplitude (I, V) and BAEP Specific Frequency for 0.5, 1, 2, 4 kHz. **Results:** Statistically significant difference in the BAEP with click in latency of wave and in the interpeak interval I - V between groups. In the BAEP-FE at 0.5 kHz, there was a statistically significant difference in latency wave V at 80 dBHL, right ear, 45 dBHL in the left ear and in amplitude wave V at 65 dBHL in the ear right. For 1kHz, there was a statistically significant difference in the latency wave V at the intensities of 80, 65 and 45 dBHL in left ear. At 2kHz, there was a statistically significant difference at 80 dBHL and at 4kHz at 80 dBHL in left ear. **Conclusion:** The values obtained allowed the standardization of the equipment, to determine normal values for this population, evidencing the importance of maturation of the auditory system and how the age interferes in the answers obtained in BAEP.

Keywords: electrophysiology, hearing, brainstem auditory evoked potentials, children, auditory threshold.

8833. Speech Therapist Associated with the Treatment of Facial Paralysis with Low-Power Laser: Pilot Project

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Introduction: Difficulty in movements and expressions of the face, such as facial paralysis, can interfere substantially in the relationship of the human being. In this way speech therapy works on the structures and functions of the musculature of the face through conventional therapies, increased, in the last five years, of adjacent therapeutic methods. **Purpose:** This cross - sectional, prospective study is a pilot project carried out to try to clarify the role of Speech - Language Pathology in the treatment of facial paralysis associated with the low power laser punctual application and its efficacy. **Method:** Four adult subjects with facial paralysis were used for this study. The procedures adopted for the evaluation of the participants were protocol of evaluation of Facial paralysis, specific. These patients were offered therapeutic plans containing myofacial exercises followed by a punctual application with low power laser application in the affected region. **Results:** There was an improvement in the individuals, satisfactorily in the treatment, especially for those who had facial paralysis after trauma. **Conclusion:** On the basis of the findings, the results indicate that there is a correlation between the methods tested, suggesting that only a randomized clinical trial should be performed comparing the procedures presented here.

8834. Difficulties Self-Reported of Chewing and Swallowing by Active Elderly

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The purpose of this study was to compare the presence of difficulties self-reported of chewing and swallowing by active elderly with a group of university adults. In this analytical study of transversal cohort 186 subjects divided into two groups: 93 active elderly from community center for health and leisure activities for people over 60 years old and 93 university adults. The age of the elderly was 63 to 93 years old (mean 72.3) and adults 17 to 45 years old (mean 24.8). Respondents selected by screening answered questions regarding their dental conditions, use of prosthetic implants and difficulties in chewing and swallowing in varying consistencies.

The mean of teeth present among adults was 30.6 against 8.7 of the elderly. In the elderly group, there was edentulism in 28% of respondents. None of them refers to the presence of all teeth. Already in the adult group, edentulism has not been reported and nearly 40% of them reported the presence of all teeth. Thirty-one point two percent for the elderly reported difficulties chewing against 1.1% of adults. Swallowing difficulties were statistically prevalent in the elderly group: 21.5% thin liquid, 4.3% viscous liquid and 16.1% dual consistencies against adults group; 39.8% solids and 34.4% saliva compared to 1.1% of adults and 40.8% pills versus 9.7% of adults group. These results support the idea that prevention programs, early detection and warning of nutrition and physical consequences of the problems swallowing should be implanted in institutions whose focus is serving the active elderly.

8860. Melodic Intonation Therapy in Two Cases Of Broca's Aphasia

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Introduction: Broca's aphasia is a nonfluent classical aphasia, which main characteristics are reduction of speech fluency, difficulty of spontaneous speech and repetition, and relatively preserved comprehension. Melodic Intonation Therapy is a therapeutic intervention recommended to treat nonfluent aphasias. It aims to rehabilitate the patient's language using a song and following a progressive increasing of difficulty level.

Objectives: To present the performance of Melodic Intonation Therapy in Speech-Language Intervention by re-establishing the expressive language of patients with Broca's Aphasia. **Resumed report:** Two men, A.B. (63 years old) and N.S. (52 years old), who had ischemic strokes about 2 years ago, and were diagnosed with Broca's Aphasia after speech-language evaluation. The song "Carinhoso" was used during the intervention and its melodic production was the strategy of the language therapy. The patients completed 7 sessions of treatment. Qualitative results indicated improvement in the expressive language of both patients. A.B. showed a better performance at the beginning of treatment, but in the following sessions he presented with less progress to increase the difficulty level. N.S. had difficulty initiating therapy with the use of intonation, however he progressed rapidly in the following stages and in the last session he was able to produce the target phrases. **Conclusion:** Although both patients had the same language disorder, the intervention provided distinct outcomes. It suggests that more studies regarding the functionality of this intervention in Broca's Aphasia are necessary to understand the reasons for different prognosis.

Keywords: rehabilitation, broca's aphasia, speech therapy, language disorders.

8877. Maximum Phonation Time of Vowels of Dysphonic Teachers with and without Laryngeal Disorder: Preliminary Results

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Introduction: The Maximum Phonation Time allows verifying the efficiency of the laryngeal and respiratory coordination, providing data of coordination pneumophonoarticulatory, skill very required in the teaching. **Objective:** To verify the phonation maximum time of /a/, /i/, /u/ of teachers with vocal complaints with and without laryngeal disorders. **Method:** Cross-sectional, quantitative and retrospective study

of a research previously approved by the Research Ethics Committee with Human Beings (23081.016945 / 2010-76). Criteria for selecting database: being a teacher; presence of vocal complaints; without hearing loss and/or alterations in the stomatognathic system; non-smokers or alcoholics; no history of neurological, endocrinological, psychiatric, gastric or respiratory diseases; out of menstrual period, premenstrual or pregnancy, influenza or respiratory allergy in the evaluation; phoneme recordings. The records were divided into: a group with no laryngeal disorder ($n = 14$) and a group with laryngeal disorder ($n = 7$). In the collection, the teachers maintained the phonemes /a/, /i/ and /u/ after deep inspiration and until the end of the expiration, in orthostatic position, three times each, considering the highest timed value of each phoneme. Patterns of normality for vowels proposed in the literature are between 15 and 25 s for females. **Results:** Mean group without laryngeal disorder: /a/: 14.43 sec; /i/: 14.17 sec; /u/: 13.87 sec and group with laryngeal disorder: /a/: 13.46 sec; /i/: 13.63 sec; /u/: 15.54 sec. **Conclusion:** Teachers with vocal complaints already installed, regardless of the presence or absence of laryngeal disorder, presented reduction of the Maximum Vowel Phonation Times.

Keywords: voice; larynx; phonation.

8878. Expectation Regarding the use of Hearing Aids for Adults and Elderly Patients Attended at the University Hospital of Brasília

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Introduction: Hearing is one of the most important senses of the human being, through which we listen to the sounds of the environment and develop cognitive and psycho-social skills. When there is deprivation, with a hearing loss, there is a difficulty for such functions. In order to reduce these problems, it is necessary to adapt the hearing aids, which allows access to sound, guaranteeing a better quality of life. **Objectives:** To verify the level of expectation of adults and elderly, hearing aids users, attended at the Hospital Universitário de Brasília (HUB). **Methods:** This cross-sectional, analytical and descriptive study was approved by CEP: 1,148,251. The study included 51 adults and elderly individuals with ages ranging from 35-93 years of age, both men and women, with mild to profound neurosensory or mixed sensorineural hearing loss. A questionnaire was applied to evaluate the expectations of a new user of hearing aids at the moment of receipt of the hearing aids. **Results:** 100% of the participants demonstrated positive expectations regarding the situation of conversation with the family and audibility in leisure situations; 42% showed doubt or stated that they did not expect to listen as they listened before the hearing problem, with the use of hearing aids; 94% presented positive expectation regarding the comprehension of speech on the telephone; only 1% had no expectation to feel at ease in conversation with strangers. **Conclusion:** The study showed that users have positive expectations regarding the use of hearing aids.

8881. Oropharyngeal Dysphagia Associated with Wallenberg's Syndrome: Case Report

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Introduction: Wallenberg syndrome (WS) is a retro-olivary lesion due to an Ischemic Vascular Stroke in the intracranial region of the Vertebral Artery or in the Cerebellar Posterior Inferior branch. The main features of WS are nausea, vertigo, nystagmus, facial hemiparesis, dysarthria

and oropharyngeal dysphagia (OFD). There is damage to the Trigeminal (V), Vagus (X) and Glossopharyngeal (IX) cranial nerves that are important for the swallowing process. **Objectives:** Descrever os achados da deglutição em um paciente com WS. A 59 years old male patient, hospitalized due to headache, right hemiface pain, rotational dizziness, nausea, speech disorders and difficulty swallowing, admitted to a private hospital in Salvador / BA. Computed tomography of the skull showed small area of ischemic insult in the lower and right lateral region of the bulb. Evaluation based on Preliminary Assessment Protocol, showed a reduction of sensitivity in the right hemiface, reduced laryngeal elevation and absence of saliva swallowing. Therefore, patient with clinical findings of neurogenic OFD. Functional Oral Intake Scale-FOIS1, being contraindicated oral feeding, suggested alternative feed route (AFR) and speech therapy. He underwent speech-language therapy aimed at optimizing the pharyngeal phase of swallowing, including exercises for laryngeal elevation, gustatory-thermal-tactile stimulation and postural maneuvers. After speech therapy, the patient remained unable to swallow saliva, without criteria for oral reintroduction, being discharged from the hospital with AFR. **Conclusion:** The subject of this study presented OFD associated with WS, being necessary AFR and speech-language therapy to rehabilitate deglutition.

Keywords: dysphagia, swallow, Wallenberg syndrome.

8882. Hearing Findings in Enlarged Vestibular Aqueduct Syndrome in Siblings: Case Report

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Introduction: Enlarged Vestibular Aqueduct Syndrome (EVAS) is mainly associated with sensorineural hearing loss. **Objective:** To describe hearing findings in two siblings with EVAS. **Clinical report:** M.L.R.P, 6 years old, was diagnosed with sudden hearing loss. It was found in the Auditory Brainstem Evoked Response (ABR) the electrophysiological threshold in 75dBnHL in the right ear and absence of neural response in 95 dBnHL in the left ear, Transient Evoked Otoacoustic Emissions (TEOAE) and by Distortion Product (EOAPD) bilaterally absent. Cochlear implant was indicated in the left ear and Personal Hearing Amplification Device (AASI) on the right ear. Currently presents result in the Speech Perception Test (STP) with sentences of 94% in silence and 79% in noise. The brother, P.H.R.P. at 2 years presented thresholds within the normal range. However, at 5 years old, severe hearing loss was found on the right and slight on the left. He presented in the ABR absence of neural response in 95dBnHL in the right ear and electrophysiological threshold in 20dBnHL in the left, with TEOAE and EOAPD absent in the right ear and TEOAE present in the frequencies of 2kHz, 3kHz and 4kHz in the left. The patient received an indication of AASI on the right, presenting results in the STP of 95% in silence and 59% in noise. Both did have imaging tests diagnosed with EVAS. **Conclusion:** The need for follow-ups in a short period of time, aiming the management of possible hearing loss.

Keywords: enlarged vestibular aqueduct, hearing loss, child.

8887. The Effect of Controlling Tongue Strength in the Efficiency of the Pharyngeal Phase Of Swallowing

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Introduction: With age, several anatomical and functional changes may occur, such as the decrease of muscle tis-

sue and its functionality, therefore, swallowing in the elderly may be altered by a decrease in the muscle strength of the tongue, which may generate residue in the pharyngeal cavity during eating. There are very few studies on the effect of age on pharyngeal clearance. **Objective:** To review the literature on the impact of tongue clearance in the pharyngeal phase of swallowing in elderly individuals, to explore the clearance of the pharyngeal phase using a combination of technologies. **Data Synthesis:** Systematic review of the literature according to the PRISMA model for the purpose of selecting studies that link tongue strength training to the pharyngeal swallowing residue in healthy elderly people, using a combination of technologies. The databases consulted were PubMed, Scielo and Scopus. We examined 729 studies resulting from the targeted search using a combination of terms "elderly", "pharyngeal clearance", "tongue pressure". Four publications met the criteria for inclusion. In summary, these studies showed that there was a negative correlation between tongue strength and a lower presence/absent of pharyngeal residue in healthy elderly people. Additionally, they pointed out compensatory mechanisms to maintain functional swallowing among healthy elderly people. **Conclusion:** There are very few studies on pharyngeal clearance, in elderly people aged 75 and over. The study using combined technologies allows for observing the effects of compensatory mechanisms in healthy elderly people, which can be adopted in the rehabilitation of elderly patients with dysphagia.

8896. Speech Therapist in the Clinical Performance with Oral Respirator

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This research has as objective understands the causes and consequences of the oral breathing better through a 07 year-old child's study, driven through a bibliographical revision. The oral respirator, of the classic type, is that that stays most of the time with the lips half-open, a lot of times dried up, the language projected previously and undereye circles among other alterations. The oral respirator can present a larger fatigue and a smaller income, attention and concentration decreased and acting, in the work and in the school, affected. In this work, I intend to develop and to analyze the decisive factors of the oral breathing, as well as their characteristics, alterations and causes through the case study and of a theoretical to make a profound study of bibliographical revision. I intend, with this work, to show to the fonoaudiólogo and other professionals the importance of the health and of the performance fonoaudiológica to the oral respirators, well with his/her acting their several alterations and characteristics. For an appropriate and definitive treatment it is important to know the exact hour of treating, of directing and so that area to direct, what demands besides the professional qualification the integration multidiscipline.

8899. Proposal of Speech-Language Intervention In Peripheral Facial Paralysis: Report of the Therapeutic Process of a Case

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Introduction: Peripheral Facial Paralysis (PFP) is the interruption of motor information to the facial muscles resulting from a lesion of the seventh pair of cranial nerve, which can affect the hemiface unilaterally and / or bilaterally, with complete or incomplete paralysis of facial expression

and mimicry, hyperacusis, change in mastication and swallowing, speech and palpebral occlusion. **Purpose:** To analyze a proposal for speech-language therapy intervention for PFP presenting limits and therapeutic possibilities. **Methods:** Longitudinal study, 24-year-old patient and first episode of PFP. The Data were collected at the Facial Paralysis / Otorhinolaryngology Outpatient Clinic, at the Hospital das Clínicas of UNICAMP. The data were recorded from standardized protocols by the evaluation and therapy sector, photographs and filming of all sessions. The therapeutic process had 25 sessions, occurred with the patient positioned properly and with regulation of the orofacial system with intraoral and extraoral maneuvers, isometric and isotonic myofunctional exercises. **Results:** there is an evolution of the case with beginning in the fifth session with discrete movement in all thirds of the face. In the tenth session, facial mimic return and onset of synkinesis were observed. Therefore, specific exercises were introduced for each muscle group in order to dissociate the synkinesis. **Conclusion:** As a result, the patient presented symmetry at rest with improvement of muscular function and considerable improvement of the synkinesis, the rapid observation of the synkinesis. was an important factor for the smoothing of the same.

8910. Seniors in Long-Term Institutions: Literature Review

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Introduction: Aging is a process characterized by a decrease in the metabolic rate, that results in changes in the life of the elderly. Among them is the prejudice of autonomy, which is one of the main reasons for the isolation, so that institutionalization becomes a necessity to aggregate the elderly into a new social group. Long-Term Care Institutions for the Elderly (LTCIE) may be governmental or not - residential character -, intended for the collective domicile of persons aged 60 and over, with or without family support, in a condition of freedom, dignity and citizenship. **Objective:** To evaluate the health impact of institutionalized elderly people. Abstract: The understanding of the living conditions of elderly people living in Long-Term Institutions is a dynamic process involving a thematic plurality, which has three main sub-themes: the profile of this group and the institutions they inhabit; the functional capacity and components that surround it, such as the auditory capacity; and the quality of life of these elderly people. The data obtained shows different impairment levels of the functional capacity and life quality. **Conclusion:** Provided by the current reality, in which the elderly grow in number and the aging process is increasingly well studied, the study of the subject in question reveals the importance of knowing better this group and the multifactorial complex that reaches it, in order to improve the social and functional aspects involved.

Keywords: long-term institutions; aging; health.

8913. Behavioral and Electrophysiological Evaluation of Auditory Processing in Individuals with Type 1 Neurofibromatosis

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Introduction: Neurofibromatosis is an autosomal dominant genetic disease, clinical manifestations are multiple tumors in the nervous system. In the auditory system, alterations

can occur throughout the pathway, causing hearing loss, neural changes and auditory processing. **Objective:** Describe the behavioral and electrophysiological evaluation of auditory processing in individuals with type 1 neurofibromatosis. **Methods:** Six subjects were submitted to behavioral assessment through the tests (sound localization; memory for verbal and non-verbal sounds in sequence; speech recognition percentage with recording; speech with white noise; staggered spondaic word; synthetic sentence identification with ipsilateral competitive message; duration pattern test; consonant-vowel dichotic test (Attention-Free Stage); random gap detection test; masking threshold differential) and electrophysiological auditory processing using the P300-long latency auditory evoked potential recorded. **Results:** Six individuals aged between 11 and 24 years old were evaluated. Central auditory processing disorder was evidenced in all individuals involving auditory temporal ordering abilities for verbal sounds (66,67%), figure-background for verbal sounds (100%), auditory closure (100%), binaural interaction and selective attention (33,33%), difficulty for verbal sounds in sequence (50%), moderate degree (83,33%). The electrophysiological evaluation revealed the presence of the P3 component in 91,67% of the individuals. **Conclusion:** The behavioral evaluation of auditory processing evidenced auditory processing disorder in all individuals with neurofibromatosis type 1, affecting the processes of decoding (100%), coding by sensory integration (83,33%), coding for gradual memory loss (33,33%), organization (66,67%) and non-verbal (100%), whereas the electrophysiological evaluation identified changes in response in only 8,33% of the individuals.

Keywords: neurofibromatosis; hearing disorders; hearing tests; event-related potentials, P300.

8916. Audiological Evaluation in Individuals with Type 1 Neurofibromatosis

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Introduction: Neurofibromatosis type 1 is a progressive genetic disease with an incidence of 1/3.000 births. The auditory system of these individuals may be affected due to the presence of neurofibromas installed in the external acoustic meatus, in addition to findings compatible with possible cochlear dysfunctions. **Objective:** To characterize the basic, electroacoustic and electrophysiological evaluations of hearing in neurofibromatosis type 1. **Methods:** All subjects underwent basic audiological evaluation (tonal and vocal audiometry and immittanceometry). In addition, we investigated the effect of suppression of otoacoustic emissions and the uptake of auditory brainstem evoked potential. **Results:** Nine individuals aged 9 to 31 years were evaluated. The auditory thresholds were found to be within normal limits bilaterally (mean 8,52dB in the right ear and 6,85dB in the left ear). The immittanceometry revealed tympanometric curves of type A (94,4%) and Ad (5,6%), the acoustic reflex evidenced changes with absence of response in 44,4% and reflexes increased in 88,89%. The suppression effect of otoacoustic emissions was present in 72,22%. Neurodiagnosis with the Brainstem Evoked Response Audiometry showed changes in 100% of individuals with latency of the absolute waves of I (72,22%), III (44,44%), V (22,22%); interpeaks I-III (38,89%), III-V (11,11%), I-V (22,22%). **Conclusion:** The audiological evaluation in individuals with type 1 neurofibromatosis evidenced audiometry within normality patterns, changes in the transmission of sounds through the ossicle tympanic system and alterations in neural conduction up to the brainstem.

Keywords: neurofibromatosis; neurofibromatosis 1; hearing disorders, audiometry.

8920. Application Prototype to aid in the Treatment of Tinnitus
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Introduction: Tinnitus is known in other countries as acufenus or tinnitus. Tinnitus is classified as non-auditory and auditory. There are several types of treatment for tinnitus, such as the retraining at reducing the intensity of tinnitus and relieving the discomfort associated with tinnitus. The development of the prototype consists of a digital application that allows the patient to be able to perform the treatment without necessarily being in the speech-language clinic or compromising their daily activities. **Objective:** To present an application prototype in a mobile platform to assist in the treatment of tinnitus in an accessible way. **Methods:** Based on the treatment of cortical neuromodulation, a prototype was developed which allows the speech-language pathologist to register the TRT training program that will be used by the patient and to inform the sound frequency, intensity and duration of the signal, as well as the number of repetitions the patient will have to perform in a certain period of time. **Results:** The patient accesses the system using their own smartphone and selects the treatment option proposed by the speech therapist, thus demonstrating a low cost and the possibility of performing the controlled treatment in their residence, while the result and status of the treatment allows the speech therapist to have a feedback on how to perform the treatment. **Conclusion:** The present study evidences the

possibility of affordable and low-cost treatment for tinnitus patient rehabilitation, allowing the speech-language pathologist to follow-up and patient evolution.

Keywords: tinnitus; zumbido hearing health service.

8922. Sarcopenic Dysfunction: Systematic Review
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UNB/IBORL

Introduction: Sarcopenia is characterized by loss of mass and strength in the skeletal muscles and mainly affects older people, from the age of 65 years. The frequency of sarcopenia in the elderly varies from 15 to 43%. Sarcopenic dysphagia is a difficulty in swallowing due to generalized sarcopenia of the skeletal muscle and muscle chain involved in breathing and swallowing. **Objective:** To describe the sarcopenic dysphagia in the elderly and the importance of speech therapy in this type of dysphagia. **Methods:** The search for scientific articles was carried out in the databases Lilacs, Scielo, PudMed and Periodicals Capes, covering the period from January 2010 to March 2018, using the following **Keywords:** dysphagia, sarcopenia, nutrition and malnutrition. **Results:** Initially, 21 articles were found from the descriptive searches. After applying the inclusion and exclusion criteria, 06 articles were included and analyzed, resulting in the research on sarcopenic dysphagia. **Conclusion:** The treatment of sarcopenic dysphagia is multidisciplinary and it is not enough to only restore the musculature, however, it needs to be activated. In the face of literary scarcity, there is a need to conduct more research scientific, investigative, clinical and observational studies, focused on reports of speech-language pathology in sarcopenic dysphagia.

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