

8KHz/40dB) and left ear (6KHz/40dB and 8KHz/60dB). Normal Acoustic immittance measures; normal tympanometric curves (type A) with ipsilateral stapedial reflexes present at 500, 1000, 2000, and 4000Hz frequencies at normal levels. The research about potential auditory brainstem presented nerve conduction to the auditory pathways within the normal range (with the presence of the waves I, III and V) to the right afference and abnormal (presence only of the wave I and absence of the generate sites waves III and V) to the left afference. Magnetic resonance showed a large lesion on cerebellopontine angle (2.0 x 2.0 cm), well delineated, with intermediated signal T1 weighted MR image, high signal T2W MR image, high signal T2W MR image and strong enhance, shaped filling defect in internal auditory canal - "ice cream in cone signal". Conclusion: We emphasize that, despite the slight alterations, with a minor discrepancy in interaural hearing thresholds and the absence of otological symptoms, it is important to perform the differential diagnosis of the acoustic neuroma.

POSTER SESSION I - DATE: 29/3/2010 TIME: 8H00 - 18H00 - PANEL 130

NEWBORN HEARING SCREENING PROGRAM IMPLANTATION AT VIRVI RAMOS HOSPITAL

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Abstract: Aim: To show the results of the Newborn Hearing Screening Program implantation at Virvi Ramos Hospital in Caxias do Sul, Rio Grande do Sul. Methods: Interviews with parents, analyses of the medical charts of the patients and research of the transient evoked otoacoustic emissions (TEOE) in order to verify the cochlear functioning of the newborns. Results: During the first five months of this Program, 252 (out of 262) neonates born alive were screened, corresponding to 96.1%. Among these, 180 (71.4%) had regular TEOE in both ears. Among the 72 (28.2%) patients who failed in at least one ear, 66 (91.6%) returned to be screened again 15 days after leaving hospital, and among this last group, only three (4.5%) neonates failed again bilaterally. The most prevalent risk factors for hearing loss were: pregnancy problems (22.6%), heredity (9.9%), stay in incubators (9.1%) and stay at intensive care units (7.1%). The newborns' mothers were questioned about the test and the majority (69.4%) did not know about the Newborn Hearing Screening (NHS) yet. Conclusion: The results obtained in the first months of the implantation of the Newborn Hearing Screening Program at Virvi Ramos Hospital can be considered expressive, specially if the number of adherence (91.6%) is considered and the number of mothers who knew about the neonatal hearing screening (30.6%). This Program is a pioneer service in the city that permits an early detection of deafness in newborns with and without risk factors.

POSTER SESSION I - DATE: 29/3/2010 TIME: 8H00 - 18H00 - PANEL 131

AUDITORY MIDDLE LATENCY RESPONSE (AMLR) IN CHILDREN WITH LEARNING DISABILITIES

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Abstract: Authors Ana Claudia Figueiredo Frizzo¹, Carolina Araujo Rodrigues Funayama Auditory Middle Latency Response (AMLR) in children with learning disabilities Abstract: Research involving auditory middle latency response (AMLR) has stood out as a tool to evaluate the integrity of the central hearing system and seems to be useful in clinical practice. The aim of this study was to examine the components of the AMLR in a sample of children with disabilities in reading and writing, according to their IQ levels. This contemporary cross-sectional study included 25 children with learning disorders, from 8 to 14 years of age (median, 10 years). These children showed no organic or environmental cause for their disabilities and were matched by age and gender to controls with good academic skills. The AMLR of the study group with total IQ (WISC-III) below 80 (N=15) was compared to that of the group with IQ above 80 (N=10), and both were compared to the control group. The data were analyzed by comparing confidence intervals for the latencies of Na, Pa and Nb waves and the Na-Pa amplitude for various combinations of ears and brain hemispheres. The findings did not characterize any unique marker for the group with IQ < 80. The latencies of Nb and Pa (LatNb and LatPa) were slower in the right brain hemisphere of the group with IQ >80 in relation to the right (LatNb and LatPa) and left (LatPa) hemispheres of the control group. These findings regarding AMLR measurement may represent a marker for dyslexic children.

POSTER SESSION I - DATE: 29/3/2010 TIME: 8H00 - 18H00 - PANEL 132

226HZ AND 1000HZ TYMPANOMETRY IN INFANTS: SENSIBILITY AND SPECIFICITY

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Abstract: Introduction: Tympanometry is a very established tool in the audiological evaluation battery. However for neonates and infants there are controversies, mainly concerning to false-positives and false-negatives outcomes. The literature recommends 1000Hz tympanometry for infants under six months of age because it shows higher sensitivity and accuracy to correctly identify middle ear diseases in this population. Goal: To describe the sensitivity and specificity of tympanometry outcomes with 226Hz and 1000Hz probe tones on infants. Method: 142 infants took part in the study (245 ears), ages between 12 and 180 days, presenting risk indicators for hearing loss. They were evaluated with Transient Otoacoustic Emissions (TOAE), Automatic Auditory Brainstem Response (AABR) in 35dBHL and Tympanometry with 226Hz and 1000Hz probe tones. The curves were classified in types A, Flat, C, Double Peak (DP), Asymmetric (ASS), Inverted (I), and also as normal (type A) and abnormal (types C, Flat, ASS and I). The statistical measures aimed to verify which probe resulted in better concordance with TOAE. In addition, it was calculated the sensitivity and specificity for 226Hz and 1000Hz probe tones. Results: Otoacoustic emissions were present in 211 ears (group 1) and absent in 34 ears (group 2). Results with 226Hz probe tone revealed: in group 1, 90,28% of the tympanometries were considered as normal, and 9,72% as abnormal; in group 2, 76% of all tympanometries were considered normal, and only 24% as abnormal, showing low sensitivity for this probe tone. The 1000Hz probe tone revealed: in group 1, 83,94% tympanometries normal and 16,06% abnormal. In group 2, 74,07% showed abnormal tympanometries and 25,93% were normal. These results demonstrate that 1000Hz probe is more efficient for infants. The 226Hz probe showed sensitivity of 24%, specificity of 90,28%, with false-positive results of 70% and false-negative results of 12,75%. The 1000Hz probe has presented sensitivity of 74,07%, specificity of 83,94%, false-positive results of 60,78% and false-negative results of 4,14%. The concordance between curve classifications as normal or abnormal and TOAE was higher for 1000Hz probe tone than for 226Hz probe. Conclusion: The results of tympanometry using 1000Hz were more concordant with TOAE results. It is possible to observe that the sensitivity is greater concerning the use of 1000Hz probe, although the specificity with 226Hz is slightly higher. Similarly, the false-positive and false-negative results were less frequent by using the 1000Hz tone probe. We conclude that 1000Hz probe tone is more suitable to evaluate infants under six months of age.

POSTER SESSION I - DATE: 29/3/2010 TIME: 8H00 - 18H00 - PANEL 133

AUDITORY FUNCTION IN AUDITORY DYSSYNCHRONY: LONGITUDINAL STUDY

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Abstract: The auditory dyssynchrony (AD) is a neural synchrony disorder, probably related to myelination alterations of these fibers, to the inner hair cells, synapses between the cells and the auditory nerve, in the nerve itself, or still, in several of these structures. Objective: To verify the performance of the auditory abilities and language of individuals diagnosed as auditory dyssynchrony with hearing aids during the rehabilitation process. Methods: This study presents the follow-up results of audiological hearing aid fitting, speech perception and language evaluation in seven male patients (age range 3-8 years). Results: Bilateral hearing loss of moderate degree was found in three patient, severe in three and profound in one, 5 showed absence of Otoacoustic emissions and all absence of BERA with presence of bilateral cochlear microphonic. Amongst the cases, 3 were adapted with hearing aids of digital technology type A, 1 B and 3 C and presented functional gain of in average 30, 60 and 40dB respectively. All patients had rehabilitation sessions. Conclusion: it was evidenced that despite the diagnosis being auditory dyssynchrony and literature to question the use of hearing aids, the majority of the cases they presented development of language beyond the waited one and auditory performance next to normality.

POSTER SESSION I - A DATE: 29/3/2010 TIME: 8H00 - 18H00 - PANEL 133 A

ANALYZE STUDY OF THE EXAM P300 IN INDIVIDUALS WITH NORMAL HEARING

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Abstract: Objective: This research had like objective carry out a study normative of the results of the exam P300, regarding amplitude and latency of the wave presented, in a population/sample of persons that hear normally, of age between 17 and 50 years, related of it verify itself some there is difference statistically significant between the results obtained. As well as for comparison of news and future studies and a possible standardization of these results. Methods: They were selected 57 volunteers without alteration in the hearing, they submitted to an evaluation by the medical ear, nose and throat specialist, it was carried out a short interview, in the which, each individual answered some questions of a questionnaire, being evident personal facts and questions related to the criteria of enclosure and exclusion of the research, after it was carried out an evaluation auditive with pure tone and speech audiometry, immittance measures and finally the exam P300. Results: They were not found values statistically significant regarding latency and amplitude, compared with age and left and right ears. However, it was found values statistically significant for values of latency of P300 and N2 regarding the female kinds, with smaller latency regarding the male kind, and the male kind with bigger amplitude of P300, regarding the female kind. Conclusions: Like this, it is possible say that this exam electrophysiological is viable and its results matches what the literature shows. However, note itself a significant lack and interest of more professional for better knowledge and applicability of the approach. A bigger sample would be of big value for a possible standardization. KEYWORDS: P300; Cognition; Long latency auditory evoked potential; Audiology; Cognition; Hearing.

POSTER SESSION I - B DATE: 29/3/2010 TIME: 8H00 - 18H00 - PANEL 133 B

AUDITORY STEADY STATE RESPONSE BY BONE CONDUCTION IN NORMAL ADULTS

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Abstract: The Auditory Steady State Response (ASSR) which can be defined as electrophysiological responses to continuous tones with specific frequency modulated amplitude and / or frequency, are likely to be included in the next few years in the battery of audiological tests for the detection of hearing loss. However research by bone conduction have received limited attention. The objective of this study was to verify the gap found between the ASSR bone conduction and air, then compared to the air-bone gap found in pure tone audiometry and ASSR. Participated in this study young adults with normal hearing, aged between 18 and 28 years, not otological problems and hearing below 15dB NA. We surveyed the carrier frequencies of 0.5, 1, 2 and 4 kHz modulated in amplitude and frequency from multiple stimulus monaural. The results showed a gap consistent with other studies in the area, ie, a moderately strong correlation between them. Due to the difficulties of artifact from the bone vibrator to estimate the thresholds and the level of sensory acuity of the respondents may be noted the great variability of response. The ASSR is a method that can predict the hearing threshold by bone conduction, but it is understood that to become a clinical tool in diagnosing hearing more research must be made for the standardization of bone conduction PTA before clinical implementation.

