

## 11932 Association between posturography findings and the practice of physical activities in children

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**Introduction:** Physical activities play a crucial role in adjusting the vestibular, visual and somatosensory systems. These are essential for maintaining body balance, computerized posturography is available as a tool for evaluation.

**Objective:** To verify a possible association between Horus® computerized posturography findings and the practice of physical activities, in children aged 4 to 6 years, with typical development.

**Methods:** Cross-sectional study, with a quantitative approach, approved by the Ethics Committee under number 39835. For participation, all parents signed the Consent Term, and the children, the Participation Term. The sample consisted of 216 children aged 4 to 6 years, without hearing problems and/or complaints related to body balance. For evaluation, anamnesis was carried out with the parents, and after the children underwent auditory evaluation, visual screening and computerized posturography. The results were analyzed by non-parametric Kruskal-Walli and post hoc Dunn-Bonferroni tests, with p<0.05 being significant.

**Results:** The children performed the following regular physical activities: dance(n=30), soccer(n=10), horseback riding(n=2), children's gym(n=5), martial arts(n=8), swimming(n= 6), another sport(n=14), more than one sport(n=19). In addition, 121 did not practice physical activities. There was a difference(p=0.002) between those who practiced dance versus martial arts(p=0.005) for residual functional balance, only at first examination condition, in the anteroposterior frequency. The length of the oscillation trajectory at the stability limit showed a difference(p=0.02), in general data, for practice of other sports versus soccer(p=0.042).

**Conclusion:** There was an association between computerized posturography findings and practice of physical activities such as dance, soccer and martial arts, in the studied population.

**Keywords:** postural balance; vestibular system; proprioception; exercise; child.

## 11937 Translation and cultural adaptation of the deafness and additional disabilities questionnaire

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Introduction: The instruments used in Brazilian Portuguese to assess deaf children are standardized for use with children without additional disabilities. The "Deafness and Additional Disabilities Questionnaire" consists of 42 items, divided into five domains (Perceptual Skills; Preferred Mode of Communication; Communicative Behaviors; Attention and Memory and Social Interaction, Behavioral Control and Self-regulation), and is a tool for evaluating the progress of deaf children with additional disabilities.

**Objectives:** Translate and adapt the Deafness and Additional Disabilities Questionnaire to Brazilian Portuguese.

**Methods:** The study began after approval by the Research Ethics Committee. The instrument was translated from English to Portuguese, synthesized by a committee of experts, back-translated, and reviewed. For cultural adaptation, mothers of deaf children using cochlear implants with additional disabilities participated. Reliability was estimated using internal consistency analysis (Cronbach's alpha).

**Results:** Eleven mothers of deaf children using cochlear implants responded to the Brazilian Portuguese version of the questionnaire. Eight children were additionally diagnosed with autism, one with cerebral palsy, one with semilobar holoprosencephaly, and one with Waardenburg syndrome, which included visual and

intellectual impairments. 90.9% of the respondents rated the Brazilian Portuguese version of the instrument as easy or very easy to respond to; 81.8% rated the application as quick or very quick. None of the participants had any difficulties understanding the questions or had any suggestions. The 42 items produced a Cronbach's alpha of 0.91, indicating high internal consistency.

**Conclusion:** The Brazilian Portuguese version of the Deafness and Additional Disabilities Questionnaire was obtained.

Keywords: child; cochlear implantation; comorbidity.

## 11960 Cognitive screening in the elderly with hearing loss

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**Introduction:** Population aging is a global reality, with the growth rate of the elderly increasing in both developed and developing countries, such as Brazil. In developed countries, individuals over 65 years old are considered elderly, while in developing countries, the age is 60 years (United Nations, 1982). Age-related hearing loss is characterized by a decline in auditory function and increased hearing thresholds, especially at high frequencies (Korotky, 2012). In recent years, many studies have been published on the possible relationship between age-related hearing loss and cognition. In 2020, the Lancet Commission reported that hearing loss is a major risk factor for dementia, meaning that hearing loss can result in cognitive decline due to reduced signal input into the sensory system, leading to decreased cognitive stimulation (Livingston et al, 2020).

**Objective:** To verify the cognitive status in a group of elderly individuals with hearing loss who are either users or non-users of hering aids.

**Methods:** This is a descriptive study conducted with 35 individuals who underwent auditory evaluation (Pure Tone Audiometry, Speech Audiometry, Immittance Audiometry) and responded to the Cognitive Screening instrument (Point Cognitive Screener 10). Results were analyzed according to age, sex, education level, use or non-use of hearing amplification devices, and screening results.

**Results and Conclusion:** the majority of the elderly individuals presented cognitive impairment in the screening test, corresponding to 23 (66%) people.

**Keywords:** cognitive decline; hearing loss; presbycusis; audiology.

## 11967 Auditory hypersensitivity in children with autism spectrum disorder

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**Introduction:** Autism is a neurodevelopmental disorder with several sensory-perceptual changes, and auditory hypersensitivity is a sensory change prevalent in the population with autism spectrum disorder (ASD), defined as excessive or abnormal sensitivity and distress to sensory stimuli that are evident in the individual's behavioral reactions.

**Objective:** This research aimed to identify the presence of auditory hypersensitivity in children with Autism Spectrum Disorder.

**Methods:** The study took place in two phases, in the first phase, the children's parents/guardians responded to a sociodemographic form and reported on the presence or absence of auditory hypersensitivity in the child. In the second phase, the children underwent a hearing assessment using Transient Otoacoustic Emissions, with the aim of ruling out peripheral hearing loss. The sample was made up of children aged 5 to 12 years, diagnosed with ASD.

**Results:** 120 children with ASD participated, 78 (65%) of the children had auditory hypersensitivity and 42 (35%) did not, 83 (69.2%) were male and 37 (30.8%) were female. Regarding the performance of