

Audiological profile of the oncological patient with tinnitus

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Background: The oncological patient may present, due to the location of the pathology or oncological treatments, different symptoms, including tinnitus. The presence of tinnitus, in turn, can be a triggering factor for anxious and depressive symptoms, with a negative impact on the healing process of cancer patients, which can affect their well-being and quality of life. The aim of this study was to understand the audiological profile of cancer patients with complaints of tinnitus, who attend the otorhinolaryngology consultation of an oncology hospital.

Material and methods: Forty-eight oncological patient with tinnitus from the otorhinolaryngology consultation in a oncological hospital participate in this study. A sociodemographic questionnaire, tympanogram, pure tone audiogram, tinnitogram test and the Mini-Tinnitus Questionnaire – Portuguese version scale was used to assess the impact of tinnitus.

Results: Forty-eight cancer patients with tinnitus (60.4% male), with a mean age of 57 years ($SD = 8.5$) were evaluated. Many patients had head and neck tumors and they are polymedicated. Most had sensorineural hearing loss, with a representation of 50% in the right ear and 66.7% in the left ear, followed by mixed hearing loss, with 27.1% in the right ear and 18.8% in the left ear. Tinnitus was described as bilateral in 81.3% of subjects. All subjects reported continuous and subjective tinnitus. In the Mini TQ-PV 48% get the rating of “extremely distressing”, 44% of “severely distressing” and no one gets the rating of “compensated”.

Conclusions: This study demonstrates that cancer patients who go to the ENT consultation complaining of tinnitus have, for the most part, hearing loss, which justifies the need to carry out an effective follow-up in patients undergoing cancer patients. It also demonstrates that the negative impact of the presence of tinnitus, associated with hearing loss, can lead to a worsening of the patient’s physical and psychological well-being. It is extremely necessary to establish a follow-up plan and an intervention to be applied to cancer patients.

Auditory brainstem response in children with risk factor for hearing loss: comparative analysis between the use of different acoustic stimuli in electrophysiological findings

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Background: The auditory brainstem response (ABR) is classically evoked with the click stimulus. New stimuli, such as chirp, have been proposed with the aim of improving the identification of different types and degrees of hearing loss.

Material and methods: 30 children aged between 4 and 11 months participated in this study, with one or more risk factors for hearing loss. The study participants were submitted to the electrophysiological hearing assessment by ABR, with click and LS CE-chirp stimuli, at different intensities, with different waves identification (I, III and V) as a function of the intensity been evaluated. The data was acquired using a clinical equipment with the Eclipse software, module EP25, of Interacoustics, which was used for data analysis. The latency and amplitude values obtained in the evaluations of each stimulus were compared, and the respective electrophysiological hearing thresholds obtained analyzed.

Results: It was verified that there was a difference in the results of the evaluations due to the use of click and LS CE-chirp stimuli, being statistically significant in the latency of wave I at intensities of 80 and 90 dB, in the latency of wave III at the intensity of 80 dB and wave V latency at intensities of 90, 80, 30 and 20 dB. As for the amplitudes, this difference proved to be statistically significant for wave V at the intensity of 80, 60, 30 and 20 dB. No statistically significant differences were found by comparing the electrophysiological hearing threshold between click and LS CE-chirp stimuli.

Conclusions: The differences observed in amplitude facilitate the identification of waves using the LS CE-chirp stimulus. In latency, the found differences did not present constraints to the electrophysiological assessment, as they were superior, except at 60 dB, using the LS CE-chirp stimulus in the assessments, also allowing the identification of the electrophysiological hearing threshold efficiently. Electrophysiological hearing threshold evaluation is facilitated by the use of the LS CE-chirp stimuli, although there was no statistically significant difference at the level of the electrophysiological hearing threshold between stimuli.

Benefits of bimodal auditory stimulation

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Background: Bimodal stimulation is an aural rehabilitation method that uses bimodal hearing devices and consists of a combination of electrical stimulation of one ear through a