Implementation of auditory screening programs at preschool and school age: a way to follow

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Introduction:

The auditory screening is an evaluation that aims at identifying early any alteration in hearing in order to permit the earliest possible diagnosis. In pre-school and school children, e verify a high pathological prevalence in the middle ear which is asymptomatic in many cases and that can only be detected through the implementation of auditory screening programmes.

Objectives:

To determine the prevalence of hearing loss in the auditory screening programmes at preschool and school age.

Methods

The sample consisted of 420 children, aged between 3 to 11, attending pre-school and primary school in a school group in the centre of the country. All the children have undergone an otoscopy, a tympanogram and a pure tone audiogram screening ("pass / fail") ") at the frequencies of 1000Hz, 2000Hz and 4000Hz. The children with cerumen obliterans, those with hearing threshold superior to 20db in at least, one tested frequency in one ear, those who presented a tympanogram type B, uni or bilateral or type C2 in both ears didn't undergo the screening. The cases that presented a tympanogram type C2 unilateral were submitted to repetition.

Results:

Although most children (77,6%) passed the screening, we verified that 19% were sent to the Otorhinolaryngologist (ORL) for not having passed the screening and 3,4% of the children were requested to repeat the tympanogram one month and a half later. The children aged 3 to 5 were the ones who failed the screening the most and were sent to ORL consultation -35,7% children aged 3 and 31,4% aged 5. On the other hand, the 10 year-age range was the one that presented the lowest percentage of cases sent to ORL consultation (6,5%).

Conclusions:

The auditory screening is a process that should be compulsory in pre-school and school age in order to obtain early diagnosis and intervention, reducing the impact of hearing loss in the global child development.