Abstract

Objective: To determine the prevalence of infantile hearing loss in a population of 0-5 years old treated in the Instituto Colombiano de Bienestar Familiar (Colombian Family Welfare Institute). Materials and Methods: Descriptive study, with correlational multivariate analysis in 300 children. A socio-demographic, environmental, home, and parental characterization was made as well as the one of the pre-natal and peri-natal child’s background, and signals of factors related to audiological problems. The children were examined clinically and transient evoked otoacoustic emissions and brain-stem auditory evoked potentials were systematically performed. Children with abnormal tests were reevaluated by audiology and those with persistent abnormalities were evaluated by an otolaryngologist and a Clinical Neurophysiologist. Results: Prevalence of childhood hearing loss was 6.3% after the first evaluation, and 2.3% after the second: all of them with conductive hearing loss, in which two cases were mild, and five moderate hearing loss. The causes of hearing loss were: in four cases tonsillar hypertrophy and/or dysfunction of the Eustachian tube; otitis media and/or rhinoacute sinusitis with effusion were detected in two children; and adhesive otitis media with tympanic membrane perforation in one child. The logistic regression analysis suggest statistic significance only for scolarity and otalgia Conclusions: The most predictive factors for infant hearing loss in the studied population were environmental, including proximity to roads, exposure to industrial noise, landfills, and exposure to smoke. Prevalence of childhood hearing loss is similar to the one described in developed countries in North America and Europe. All the identified disorders were the cause of conductive hearing loss.

Keywords

Evoked potentials, auditory, brain stem, hearing loss, deafness, otoacoustic emissions.