Comparative informativeness of vegetative resonance test and methods of objective audiometry in patients with various forms hearing loss

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Previously, we published the results of assessing the informativeness (sensitivity and specificity) of the autonomic resonance test (ART) in the diagnosis of pathology of the inner ear, according to which the sensitivity and specificity of ART were comparable with those of other research methods (ultrasound, X-ray, MRI, NMR, Polygraph and others) used in clinical medicine for diagnostic purposes ("Materials" of the 5th and 6th conferences on otorhinolaryngology, 2006, 2007).

The next stage of the study of the informativeness of ART was the assessment of the sensitivity index of the test with the organ preparation "cochlear nerve and duct" (the number of positive tests for the organ preparation "cochlear nerve and duct" in persons with reliable, according to the audiological study, mixed or sensorineural hearing loss and deafness) using the methods objective audiometry, since the registration of various classes of auditory evoked potentials (SVP) is one of the most effective and accurate methods for studying the auditory analyzer (Tavartkiladze G.A., 2003).

The study involved 21 patients with sensorineural and mixed hearing loss of various etiologies at the age from 1 to 60 years. All patients underwent examination of ENT organs, tone threshold audiometry (adults and children over 5 years old), impedance measurement, tympanometry, registration of a detained evoked otoacoustic emission (TEOAE) and registration of stem short-latency evoked potentials (ABR).

All patients underwent diagnostic use of the study with organopreparation "cochlear nerve and duct" in the D6 potency, the resonance response was recorded using a MINI-EXPERTDT apparatus (IMEDIS, Moscow). In accordance with the ART methodology, when a decrease in the initial (80 cu) measuring level more than the for $ 20 after the connection to the measuring circuit of the organopreparation, test was considered positive.

As the analysis of the measurement results showed, the data of hearing research in persons with sensorineural hearing loss and deafness using objective methods and tests using ART completely coincided, which characterizes the sensitivity of the test with the organopreparation “cochlear nerve and duct” as 100%.

The results obtained indicate a high informative value of ART in diagnosing the level of damage to the structures of the inner ear, and therefore the method can be a valuable addition to audiological research methods. In our opinion, this is especially important for solving the problems of audiological screening, for example, for predicting the ototoxic effects of drugs, since it is known that damage to the receptor formation of the spiral organ is one of the most important risk factors for the development of this form of drug disease.

A negative test with the organopreparation “cochlear nerve and duct” may have a differential diagnostic value in deciding the topic of lesions of the auditory analyzer, but this issue requires a separate and comprehensive study.

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