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AUDITORY PROSTHETICS IN PATIENTS WITH HEARING IMPAIRMENT AND STABLE ANGINA PECTORIS AFTER CORONARY ARTERY REVASCULARIZATION

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Relevance. It is known that effective rehabilitation of auditory function in most patients with sensorineural hearing loss can be provided by hearing prosthesis. In this regard, auditory prosthetics as a method of compensating for the shortcomings of auditory perception is of great social importance. The purpose of the research was to identify etiological and predisposing factors, the main clinical manifestations, and evaluate the effectiveness of various methods of conservative and surgical treatment, hearing replacement, rehabilitation, and measures to prevent sensorineural hearing impairment. There has been a rapid increase in interest in the study of sensorineural hearing impairment since the second half of the 20th century, which is associated with successes in the development of hearing aids and the introduction of cochlear implantation into practice.

The purpose of the study. To study the effectiveness of auditory prosthetics in patients with stable angina pectoris after coronary artery revascularization and sensorineural hearing impairment.

The results and their discussion. Of the total number of patients examined, 37 patients underwent hearing replacement.

Among the hearing-prosthetic patients, 21 had grade II, grade 3 – I, and grade 13 - III hearing loss when the average hearing impairment was less than 26 dB. When analyzing the ratio of hearing prostheses to the total number of examined persons, it was found that this indicator in patients with grade III hearing loss was 13%, grade II hearing loss – 21%, grade I hearing loss – 2.9%, generalized form – 36%. It follows from this that the greatest need for hearing replacement was in patients with grade III and II hearing loss.

Hearing aids were fitted to both ears, i.e. binaural hearing replacement was performed in 3 (8.1%), and monoaural hearing replacement was performed on one ear in 34 (91.9%) patients.

In all cases, during binaural hearing replacement, the same type of hearing aid was selected for both ears.

The process of hearing replacement of patients consisted of the following stages: initial adjustment, adaptation and clarifying adjustment. The most difficult and lengthy stage was the adaptation process, and therefore patients who started using a hearing aid did not immediately feel all the benefits of enhanced hearing.

A number of factors influenced the adaptation process: getting used to the earbud as a "foreign body", the appearance of a condition described as "hearing confusion", therefore, each patient received an individual ear contribution.

The earplug is a visually significant factor influencing the adaptation process, but patients got used to it in a short period of time – 10-20 days.

The factor of "hearing confusion" was significant and prolonged in terms of adaptation to the hearing aid. It arose as a result of the appearance of a fundamentally different perception of environmental sounds against the background of the beginning of using the hearing aid, which the patient heard distorted for a certain time.

In case of hearing loss, due to the amplification of sounds by the hearing aid, previously unheard ambient sounds become audible and enter the cortical representation of hearing. However, in the initial stages, the processing of high-frequency and low-intensity signals occurs with a time delay and it takes a certain period of time for reverse tuning to take place.

This phenomenon manifested itself in the form of the following complaints of patients: an unnatural "metallic" shade of the timbre of the sounds, an unusual amplification of people's voices and, first of all, their own, the presence of background noises. To minimize the feeling of dissatisfaction with the hearing aid in the early period, we explained to all patients about the existence of a time interval for their addiction. This period lasted on average from 10-30 days .

The duration of the process of adaptation of the hearing aid proceeded differently in patients of both groups and with varying degrees of hearing impairment.

The effectiveness of hearing replacement in patients was assessed using the COSI questionnaire, which allowed to determine the subjective benefit of the hearing aid. The survey was conducted in two stages. At the first stage, the patient indicated auditory situations in which he is experiencing the greatest difficulties and wants to achieve improvement with the help of a hearing aid. The most important auditory situation was marked at number 1, the second most important at number 2, and so on. The number was entered in the square next to the description of the situation. In order to statistically evaluate the results, each of these situations was assigned to one of the 16 general categories listed in the COSI questionnaire, and the corresponding number was entered in the "Category" column.

In conclusion, the patient gave an absolute assessment of the auditory ability achieved with the help of a hearing aid for each auditory situation. He indicated how he hears in each of these situations: almost nothing, something, about half, quite a lot, almost everything. Although, at the request of the patient, the answer could be indicated in numbers (in the COSI questionnaire, an appropriate percentage value is given for each answer – from 10% for "almost nothing" to 95% for "almost everything", and it is entered in the appropriate column), it was not implemented in our study.

Thus: In order to minimize the feeling of dissatisfaction with the hearing aid in the early period, we explained to all patients about the existence of a time interval for their addiction. This period lasted on average from 10-30 days .

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