

METHODS OF REALIZING THE TASKS OF AURAL AND SPEECH REHABILITATION OF CHILDREN WITH COCHLEAR IMPLANTS

This article identifies effective methods for implementing aural and speech rehabilitation for children with cochlear implants. It highlights the significant role of cochlear implants in promoting speech development among preschool children. The article emphasizes that designing a rehabilitation program for children with cochlear implants should consider several factors: the nature of the hearing impairment, the child's speech and psychophysical abilities, the timing of hearing loss and subsequent prosthetics, and the child's response to changes in familiar cognitive activities.

It is emphasized that children with cochlear implants represent a unique group within the educational system, as the goal of the surgical intervention extends beyond implanting an effective device to fostering the child's ability to hear and speak. The success of cochlear implantation relies heavily on the timely provision of professional support to both the child and their family. Additionally, it is crucial to involve parents or guardians in the hearing and speech rehabilitation process for children with cochlear implants. In this process, parents and guardians serve as natural teachers for the child's hearing and speech development. Meanwhile, specialists in fields such as otolaryngology, physical therapy, ergotherapy, and speech therapy should guide the family in fostering the child's hearing and speech comprehension skills through everyday interactions.

Most experts recommend cochlear implantation (CI) for children under the age of 2–3 years. The rationale is that the auditory stimulation from the implant promotes the formation of neural connections in the central auditory system, which are crucial for hearing and speech development. However, before making a final decision on surgery, a period of extended observation—typically 5–6 months—is required. During this time, specialists monitor the child's hearing and speech progress after fitting hearing aids to assess their effectiveness in the individual case.

The purpose of postoperative rehabilitation is to teach a child to perceive acoustic sound signals (non-speech and speech), understand them, and use new aural sensations to develop oral speech. The postoperative rehabilitation process involves a

team of specialists: an otorhinolaryngologist (audiologist), speech therapist, sign language therapist, psychologist, psychiatrist, engineer, and others. In three to four weeks after the surgery, the speech processor is connected to the cochlear implant and initially adjusted. This allows the patient to hear sounds. The speech processor can be adjusted several times, and individual programs for listening to sounds in different noise conditions are created, which ensures that a person develops complete auditory sensations. Cochlear implantation does not allow children with deafness to distinguish sound signals and communicate verbally immediately after the speech processor is installed. After the first adjustment of the processor, the child needs special assistance to develop auditory perception. In this regard, an important task of rehabilitation of children with implants is to teach them to perceive, distinguish, recognize, and identify sounds from the environment, understand their meaning, and use the acquired knowledge and skills for speech development. Hearing and speech rehabilitation for a child with a cochlear implant utilizes techniques traditionally applied to develop hearing and speech in children with hearing aids, adapted to suit the child's individual needs.