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**ACHIEVEMENTS OF COCHLEAR IMPLANTATION IN THE REPUBLIC OF BELARUS**  
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**Topicality.** Nowadays the doctors all over the world are facing the problem of deafness and hearing loss. A person with hearing thresholds less than 25 dB is said to have hearing loss. Over 360 million people worldwide have disabling hearing loss; more than 8% of them are children. One child per 1,000 newborns has hearing impairment in the Republic of Belarus. About 2-3 children lose hearing during the following 3 years. By 2020 30% of the world's population will have disabling hearing loss (WHO). The causes of hearing loss include: damage of the inner ear (aging and exposure to loud noise may cause wear and tear on the hairs or nerve cells in the cochlea that send sound signals to the brain), a gradual buildup of earwax (earwax can block the ear canal and prevent conduction of sound wave), ear infection and abnormal bone growths or tumors and also tympanic membrane perforation. Surgeons use a special implanted electronic device – a cochlear implant, in order to provide a sense of sound to a deaf or a person with severe hearing problems.

**Objective:** to analyze current scientific data about deafness and the most common ways of its treatment.

**Materials and methods.** We have analyzed various articles on the problem of hearing loss. To find out the situation on this problem in our country, we have studied the latest publications in the sphere of the cochlear implantation in the Republic of Belarus and statistical data of Republican Scientific and Practical Center of Otorhinolaryngology, where cochlear implant surgery is performed.

**Results.** The principles of candidates selection for clinical trials have been developed. 3 surgical teams perform 70 surgeries annually. 553 cochlear implantations have been made in the Republic of Belarus since 2000. 11 children (less than 1 y.o.) have been operated. Organ maintaining techniques of cochlear implantation with residual hearing preservation are introduced. The patients, who had survived the cochlear implantation in childhood, underwent an effective course of rehabilitation. They are at a high level of speech development: 3 of them got higher education successfully, 2 persons study at the universities, all the children attend school (70 children entered school this year). So, the majority of patients survived the operation without complications.

**Conclusion.** Cochlear implantation is a highly effective method of rehabilitation for the patients with hearing loss. It helps to restore socially adapted hearing.