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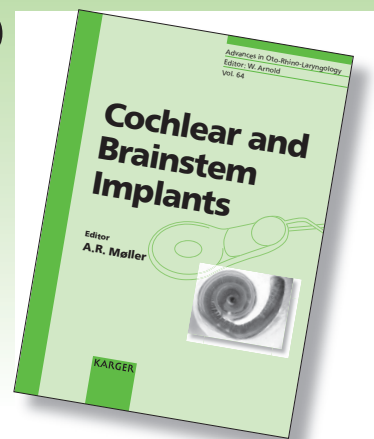
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# New aspects and findings

# Cochlear and Brainstem Implants

Editor  
Aage R. Møller



Today cochlear implants are the most successful of all prostheses of the nervous system. They are used in individuals who are deaf or suffer from a severe hearing deficiency caused by loss of cochlear hair cells. Auditory brainstem implants provide stimulation of the cochlear nucleus and are used in patients with an auditory nerve dysfunction, a deformed cochlea which does not allow cochlear implantation, or traumatic auditory nerve injury.

In this volume different aspects of cochlear implantation such as the role of neural plasticity, the interaction with the development of the auditory system, and the optimal time of implantation in children (sensitive periods) are discussed in detail. Further, the processors and the algorithms used in modern cochlear implants are described. The second part is devoted to auditory brainstem implants. It describes surgical techniques, methods for intraoperative testing as well as speech processing. It also deals with electrical stimulation of neural tissue and the neurophysiologic basis for cochlear and brainstem implants.

The publication provides the latest scientific and clinical knowledge on cochlear and brainstem implants and is highly recommended to audiologists, otolaryngologists and also neurosurgeons.

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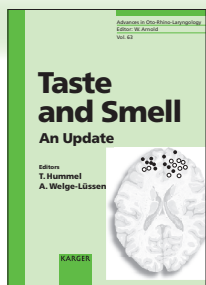
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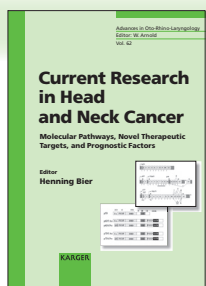
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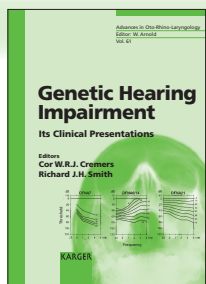
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