Ergänzendes Material

Cochlear Implants in Children and Adults

Key words
cochlear implant, hearing loss, hearing impairment, ear, rehabilitation

ABSTRACT
About 4000 patients receive a cochlear implant in Germany every year. Adults have become the main group for cochlear implantation candidacy. Elderly people with progressive and profound hearing loss experienced high communication restraints due to the limits of conventional hearing aids in the past. Nowadays cochlear implants can be offered as a well-established extension to the supply chain of hearing systems. The option of cochlear implantation for children with profound hearing impairment has led to a paradigm shift in hearing rehabilitation. However, there is still great variability in spoken language outcomes in CI children. These range from communicative and linguistic competencies similar to normal hearing children to clearly limited receptive and productive language skills. Besides age of implantation and the quality of previous auditory stimulation, there are additional factors that likely influence the outcome after cochlea implantation. Among them are the quality of caregivers’ linguistic input and an intensive post-operative rehabilitation and intervention program. Ideally, children with CI are included into mainstream educational settings. Considering the high incidence of additional disabilities in children with hearing loss, it seems obvious that this goal cannot be achieved by all implanted children. Therefore, highly complex and individualized rehabilitation concepts are needed, which, in addition to oral language intervention programs, include total communication approaches as well.