

Clinical outcomes of scala vestibuli cochlear implantation in children with partial labyrinthine ossification

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摘要

Abstract

Conclusion. Cochlear implantation via the scala vestibuli is a viable approach in those with ossification in the scala tympani. With extended cochlear implant experience, there is no significant difference in the mapping parameters and auditory performance between those implanted via scala vestibuli and via scala tympani. **Objectives.** To assess the clinical outcomes of cochlear implantation via scala vestibuli. **Patients and methods.** In a cohort follow-up study, 11 prelingually deafened children who received cochlear implantation between age 3 and 10 years through the scala vestibuli served as participants. The mapping parameters (i.e. comfortable level (C), threshold level (T), dynamic range) and auditory performance of each participant were evaluated following initial cochlear implant stimulation, then at 3 month intervals for 2 years, then semi-annually. The follow-up period lasted for 9 years 9 months on average, with a minimum of 8 years 3 months. **Results.** The clinical results of the mapping parameters and auditory performance of children implanted via the scala vestibuli were comparative to those who were implanted via the scala tympani. No balance problem was reported by any of these patients. One child exhibited residual low frequency hearing after implantation.