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In the Wrong Place but Perhaps at the Right Time: A Cochlear Implant Electrode Impinging on Tympanic Membrane
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Abstract
Aim: This case report demonstrates the incidental finding of a cochlear implant (CI) electrode impinging on the tympanic membrane (TM). Background: The cochlear implant is the most successful neural prosthesis that has been developed in the last few decades. It has helped thousands of profoundly deaf recipients to have better hearing and improved quality of life. Nevertheless, extracochlear electrode extrusion or migration would occur and this requires special consideration. Case description: We report a case of a 4-year-old boy who was implanted with bilateral CIs for profound hearing loss postmeningitis at 1 year of age, with an incidental finding of the CI electrode impinging on the medial surface of his left TM. A computed tomography (CT) scan confirmed this finding, and the patient had revision surgery and reimplantation of CI. Conclusion: It is advisable for patients to continue follow-up postimplantation in the otorhinolaryngology (ORL) clinic even after years of CI surgery. The early detection of electrode malfunction, extrusion, migration, or misplacement is mandatory to improve patients' quality of life and prevent further complications. © The Author(s). 2023.

Author Keywords
Cochlear implant; Electrode migration; High resolution computed tomography; Meningitis; Postimplantation

Index Keywords
Article, case report, cell proliferation, child, cholesteatoma, clinical article, eardrum, evoked brain stem auditory response, facial nerve paralysis, follow up, head circumference, hearing, hearing impairment, high resolution computer tomography, human, incidental finding, male, mastoidectomy, mastoiditis, meningitis, myringotomy, nuclear magnetic resonance imaging, otorhinolaryngology, perception deafness, quality of life, reimplantation, speech development, telemetry, temporal bone, tympanometry, whole exome sequencing, x-ray computed tomography

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