



Letter to the Editor: "Cochlear Patency after Translabyrinthine and Retrosigmoid Vestibular Schwannoma Surgery"

Isaac D. Erbele¹, Dwayne T. Anderson², Moisés A. Arriaga³

¹Department of Otolaryngology, Brooke Army Medical Center, San Antonio, Texas, USA

ORCID IDs of the authors: I.D.E: 0000-0002-1865-3347; D.T.A: n/a; M.A.A.: 0000-0002-3647-2574.

Cite this article as: Erbele ID, Anderson DT, Arriaga MA. Letter to the editor: "Cochlear patency after translabyrinthine and retrosigmoid vestibular schwannoma surgery". J Int Adv Otol. 2021;17(3):281.

Dear editor:

At our institution and others, otologists are exploring the role of cochlear implantation after vestibular schwannoma excision.^{1,2} Cochlear patency is clearly an important factor in determining implant candidacy. Your recently published article "Cochlear Patency after Translabyrinthine and Retrosigmoid Vestibular Schwannoma Surgery" highlights this well and contributes to the growing body of knowledge.³ We recently evaluated our postsurgical population of vestibular schwannoma patients and similarly found that loss of patency was more frequent in the translabyrinthine approach than in labyrinth-sparing approaches.⁴

In our case series, however, we found an additional feature on early postoperative gadolinium-enhanced MRIs that is worth bringing to the attention of your readers. Cochlear enhancement was frequently associated with, and possibly proceeded, the loss of patency. We felt that this cochlear enhancement was intense and often more obvious than subtle losses of T2 intensity.

We echo van Waegeningh and colleagues' call for early postoperative MRI imaging to assess for cochlear implant candidacy and help identify patients at risk for the obliteration of their cochlea. We would encourage your audience to also evaluate their patients' T1 images with contrast, as this may be a clearer leading indicator.

Peer Review: Externally peer-reviewed.

Acknowledgments: The views expressed herein are those of the authors and do not reflect the official policy of position of Brooke Army Medical Center, Louisiana State University Health Sciences Center, Our Lady of the Lake Hearing and Balance Center, the U.S. Army Medical Department, the U.S. Army Office of the Surgeon General, the Department of the Army, the Department of the Air Force, the Department of Defense, or the U.S. Government.

Conflict of Interest: Book royalties, Elsevier (MAA).

Financial Disclosure: The authors declared that this study has received no financial support.

REFERENCES

- 1. Beutner C, Mathys C, Turowski B, Schipper J, Klenzner T. Cochlear obliteration after translabyrinthine vestibular schwannoma surgery. *Eur Arch Otorhinolaryngol*. 2015;272(4):829-833.
- 2. Charlett SD, Biggs N. The prevalence of cochlear obliteration after labyrinthectomy using magnetic resonance imaging and the implications for cochlear implantation. *Otol Neurotol.* 2015;36(8):1328-1330.
- van Waegeningh HF, Loos E, Havenbergh TV, Somers T. Cochlear patency after translabyrinthine and retrosigmoid vestibular schwannoma surgery. J Int Adv Otol. 2020;16(1):53-57.
- 4. Erbele ID, Miller LS, Mankekar G et al. Cochlear enhancement may precede cochlear obliteration After vestibular schwannoma excision. *Otol Neurotol*. 2020;41(2):202-207.

281

²Lake Radiology, Our Lady of the Lake Regional Medical Center, Baton Rouge, Louisiana, USA

³Louisiana State University Health Sciences Center, Department of Otolaryngology, Division of Neurology, New Orleans, USA