Retrosigmoid Craniectomy for Vestibular Schwannoma with Hearing Preservation

Anthony M. Tolisano1  Ankur R. Patel2  Samuel L. Barnett2  Brandon Isaacson1

1 Department of Otolaryngology-Head and Neck Surgery, University of Texas Southwestern Medical Center, Dallas, Texas, United States
2 Department of Neurological Surgery, University of Texas Southwestern Medical Center at Dallas, Dallas, Texas, United States

Address for correspondence Anthony M. Tolisano, MD, Department of Otolaryngology-Head and Neck Surgery, University of Texas Southwestern Medical Center, 5323 Harry Hines Blvd, Dallas, TX 75390, United States (e-mail: anthony.tolisano@gmail.com).

Keywords
► retrosigmoid craniectomy
► vestibular schwannoma
► hearing preservation
► skull base surgery

Abstract

Objectives  To describe a retrosigmoid craniectomy, hearing-preservation approach for resection of vestibular schwannoma.

Design/Setting/Participants  A video of a single patient undergoing the above approach at a tertiary care skull base surgery program.

Results  This video demonstrates a retrosigmoid craniectomy approach for resection of an enlarging intracanalicular vestibular schwannoma in a patient with normal hearing. The video highlights the pertinent surgical anatomy and outlines in a step-by-step fashion the surgical steps. The patient obtained a gross total resection with preservation of hearing.

Conclusion  A retrosigmoid craniectomy approach for vestibular schwannoma offers a potentially hearing preservation approach for selected tumors.

The link to the video can be found at: https://youtu.be/VM663XztRZw.

Conflict of Interest
None.
Fig. 1  T1-weighted magnetic resonance images with gadolinium demonstrating (A) preoperative axial, (B) preoperative coronal, (C) postoperative axial, and (D) postoperative coronal images of a left intracanalicular vestibular schwannoma.