Retrosigmoid Approach for Resection of Large Cystic Vestibular Schwannoma

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Abstract

Objectives This video was aimed to describe the surgical indications, relevant anatomy, and surgical steps of retrosigmoid approach for resection of a large cystic vestibular schwannoma (VS).

Design The operative steps are described in a surgical instructional video.

Setting The surgery took place at a tertiary skull base referral center.

Participant Patient is a 62-year-old man who reported with right sided profound hearing loss with no word recognition, progressive dizziness and tinnitus, excruciating burning pain in the V2 distribution of right trigeminal nerve, wide-based gait, and a right cerebellopontine angle (CPA) cystic VS measuring 3.3 cm.

Main Outcome Measures The large cystic VS was resected through retrosigmoid approach.

Results The surgery resulted in removal of the large cystic VS with initial delayed facial weakness that completely resolved (House Brackmann grade 1) by 3 month follow-up. The patient had no other postoperative complications and is convalescing well from the procedure.

Conclusion Cystic VS presents some unique challenges compared with their solid counterparts. The cystic tumor capsule may be very adherent to the adjacent structures, and distinguishing thin cyst walls from the arachnoid of the CPA, can be quite challenging. The retrosigmoid approach provides adequate surgical exposure for VS tumor resection. The link to the video can be found at: <https://youtu.be/sFNvRWG465Q>.

Keywords

- retrosigmoid
- vestibular schwannoma
- acoustic neuroma
- skull base

Conflict of Interest
None.

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