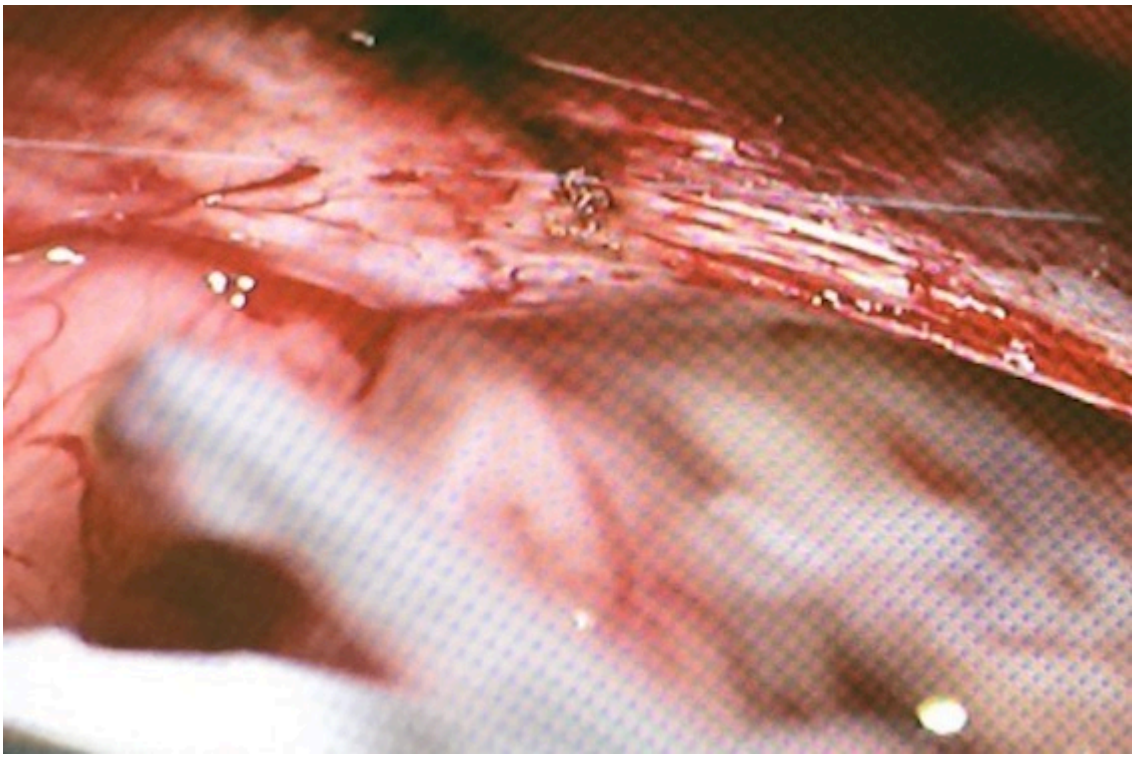
Tübingen line



In cases of large and giant vestibular schwannomas (VS), the visualization of the internal auditory canal (IAC) opening is difficult or impossible.

Ten cadaveric heads were used in a study. Between 2004 and 2009, the senior author (M.T.) used the Tübingen line as a landmark to recognize the IAC in 300 consecutive patients with VS. To locate the Tübingen line, the initial step was to identify several vertical foldings of dura located around the area of the vestibular aqueduct. After this, foldings upward consistently reached a linear level where all of the foldings ended and the dura tightly adhered to the bony surface in a smooth, foldless shape.

The Tübingen line was identified in all temporal bones studied and in all 300 patients operated on, with the exception of 2 cases (<1%).

Removal of the bone just above the Tübingen line located the IAC in all temporal bone specimens studied.

see transmeatal drilling

Similarly, the surgical cases showed that the Tübingen line helped locate the IAC in all patients.

The Tübingen line is an easy, consistent, and safe method to locate the projection of the IAC along the posterior surface of the temporal bone [1].

1)

Campero A, Martins C, Rhoton A Jr, Tatagiba M. Dural landmark to locate the internal auditory canal in large and giant vestibular schwannomas: the Tübingen line. Neurosurgery. 2011 Sep;69(1 Suppl Operative):ons99-102; discussion ons102. doi: 10.1227/NEU.0b013e31821664c6. PubMed PMID: 21415788.