Large vestibular schwannoma treatment

- Comparing surgical outcomes of the semisitting versus lateral position in large vestibular schwannoma surgery: a randomized clinical trial
- Gamma Knife radiosurgery in a cohort of neurofibromatosis type 2-associated and sporadic pediatric meningiomas and schwannomas
- Large vestibular schwannoma treated using a cranial nerve sparing approach with planned subtotal microsurgical resection and stereotactic radiosurgery: meta-analysis and International Stereotactic Radiosurgery Society (ISRS) practice guidelines
- Incidence and Risk Factors of Delayed Facial Paralysis After Vestibular Schwannoma Resection: A Systematic Review and Meta-Analysis
- Quality-of-life assessment instruments for patients with vestibular schwannoma: A systematic review
- Manifestation of a Vestibular Schwannoma in a Patient With PHACE Syndrome
- A standalone minimally invasive presigmoid retrolabyrinthine suprameatal approach: A cadaveric morphometric study
- Tinnitus after treatment of vestibular schwannoma: a systematic review and comparative analysis of microsurgery and stereotactic radiosurgery

see also Giant vestibular schwannoma treatment.

They are generally considered to be an indication for microsurgical excision because of the need of immediate surgical decompression and symptom alleviation.The sole exceptions are patients with major comorbidities, in which GKS can be used [1].

However, it must be kept in mind that there is a risk of transient tumor expansion during the following 6 to 18 months after GKS, with subsequent risk of additional clinical deterioration [2] [3].

Two-Stage Surgery

Large vestibular schwannoma Two-Stage Surgery

Subtotal removal followed by GKS

A combined approach with planned subtotal removal followed by GKS has been increasingly adopted as the main strategy for preserving cranial nerve functions along with long-term tumor control, as a paradigm shift in the past decade [4] [5] [6] [7] [8] [9] [10] [11] [12]

The mechanical stress related with direct dissection can be reduced or avoided in case of subtotal resection and represents the “nerve-centered” tumor surgery approach inherent in this treatment philosophy [13].

Data suggest that large VS management, with planned subtotal resection followed by GKRS, might yield an excellent clinical outcome, allowing the normal facial nerve and a high level of cochlear nerve functions to be retained. Our functional results with this approach in large VS are comparable with those obtained with GKRS alone in small- and medium-sized VS. Longer term follow-up is necessary to fully evaluate this approach, especially regarding tumor control [14]. Daniel et al. published a consecutive series of 47 patients.The data showed excellent results in large VS management with a combined approach of microsurgical subtotal resection and GKS on the residual tumor, with regard to the functional outcome and tumor control. Longer term follow-up is necessary to fully evaluate this approach, especially regarding tumor control [15].

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