

Decision Making In Acoustic Neuromas

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Due to the progress in electrophysiology, neuroradiology, neuroanesthesia, microsurgery, and radiosurgery, the treatment of vestibular schwannomas underwent a considerable and astonishing evolution in the past decades. My personal philosophy for their treatment evolved over the years with an experience of more than 4000 personally operated cases. The ability to remove the vestibular schwannoma totally and to preserve facial and cochlear nerve functions follows a steep learning curve. In my last 2500 cases there were no mortalities. In the last 200 cases total tumor removal was achieved in 98% and the facial nerve was preserved in 98.5%. At the last follow-up examination excellent or good facial nerve function had 81%. In tumors, corresponding to grades T1-T3 of our classification (less than 3 cm), the integrity of the nerve was preserved in 100%. Hearing preservation is strongly dependent on the size of the lesion and the level of preoperative hearing. If functional hearing is available preoperatively in tumors corresponding to grades T1-T3, the rate of hearing preservation after surgery was 51%. No permanent morbidity related to surgery was observed in the series.

Considering the rising number of patients treated with radiosurgery, a major issue becomes the management of those, in which the treatment fails. The complexity of microsurgery after failed radiosurgery and the risks for the facial nerve are higher. Still, complete removal of these tumors is possible and should be the goal. Another controversial recent trend is to perform partial tumor removal, followed by radiosurgery of the remnant. All these issues, as well as the details of our operative technique, will be presented and discussed in the current presentation.