

# Nuances in the Understanding of Facial Nerve Preservation Techniques for Large & Giant Vestibular Schwannomas

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## Introduction

An understanding of the mechanism of formation of arachnoid fold around vestibular schwannoma is crucial in preserving the anatomical integrity of 7th nerve

## **Methods**

The author, who has an operative experience of 778 cases of vestibular schwannomas, describes the technical pearls for preservation of facial nerve. The essential initial step is peeling of the double layer of arachnoid from the posterior tumor surface. After reduction of the tumor volume, continued dissection of the arachnoid fold toward the brainstem can be achieved without opening the arachnoid over the fifth and lower cranial nerves. which are in separate cisterns.

#### Results

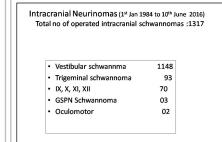
The key element in successful vestibular schwannoma is understanding that flattened facial and cochlear nerves do not have a arachnoid separating them from the tumor capsule which is essentially the compressed and attenuated perineurium of the vestibular nerve from which tumor has grown. If the tumor cannot be dissected from 7th nerve easily, a sub-perineural dissection is advised

#### Conclusions

: Acoustic neurinoma surgeons should strive to keep anatomical integrity of 7th nerve even in large acoustic tumors.

# **Learning Objectives**

Contrary to the age old belief, no arachnoid membrane separates tumor capsule from 7th and cochlear nerves



- ❖ Feb 1998 to July 10th 2016
- 804 consecutive patients of vestibular schwannoma operated by retrosigmoid – transmeatal approach by the author
- operative mortality 9/804(1.1%)

