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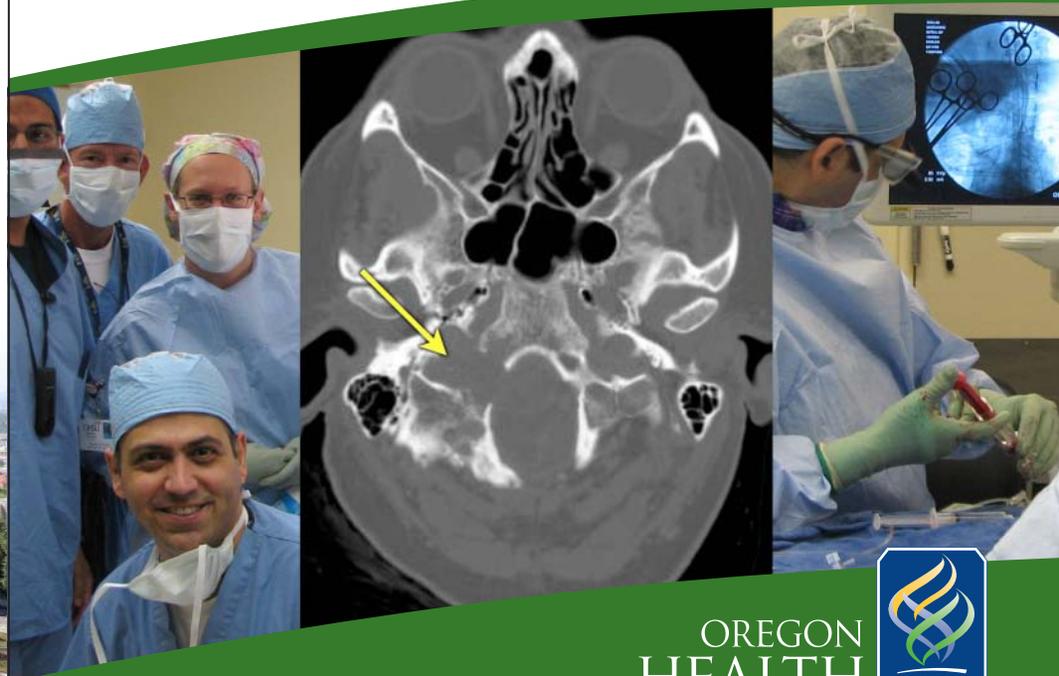


OHSU Neurological Surgery

## Neurosurgical Case of the Month by Aclan Dogan, MD

July 2009:

### 12<sup>th</sup> Nerve Schwannoma



# 12<sup>th</sup> Nerve Schwannoma

## Patient history and diagnosis

An otherwise healthy 59-year-old female presented with: headache, balance problems, a hoarse voice and tongue deviation.

Past medical history was significant for rheumatoid arthritis, deep vein thrombosis and pulmonary embolism.

### Neurological Examination Results:

Mental status: awake, alert and oriented to person, place and time

Cranial Nerves: intact except right 12<sup>th</sup> nerve palsy

Motor: strength 5/5 in all extremities

Sensory: intact

Cerebellar: normal

Pathologic Reflexes: absent

## Imaging Results:

CT scan and MR imaging: revealed a large right posterior fossa mass with hydrocephalus, brainstem compression and extension into the jugular foramen.

Cerebral angiography: revealed no significant tumor blush.



Figure 01: Preoperative CT shows bony erosion of the right hypoglossal canal and jugular foramen

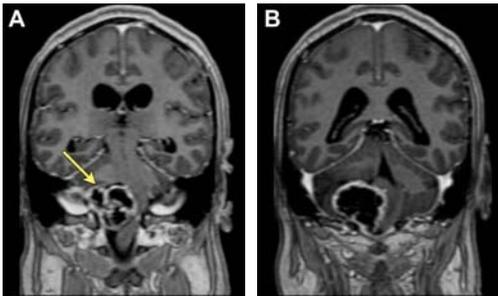


Figure 02: Preoperative coronal MRI with contrast showing large cystic mass compressing the brainstem and extending into the jugular foramen

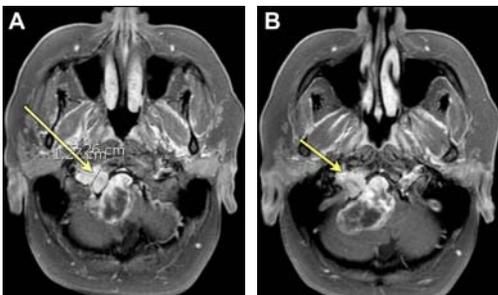


Figure 03: Preoperative axial MRI with contrast showing the same lesion on the right side

## Plan and Surgical Treatment

A right far lateral retrosigmoid craniectomy was performed with the jugular foramen and hypoglossal canal opened by drilling. Tumor located in the subarachnoid space was mostly cystic and dissected completely from the brainstem. The jugular foramen and hypoglossal canal were then opened and further tumor resection was performed. Lateral tumor adjacent to the right internal carotid artery was left behind. It was likely that the tumor originated at the 12<sup>th</sup> cranial nerve.

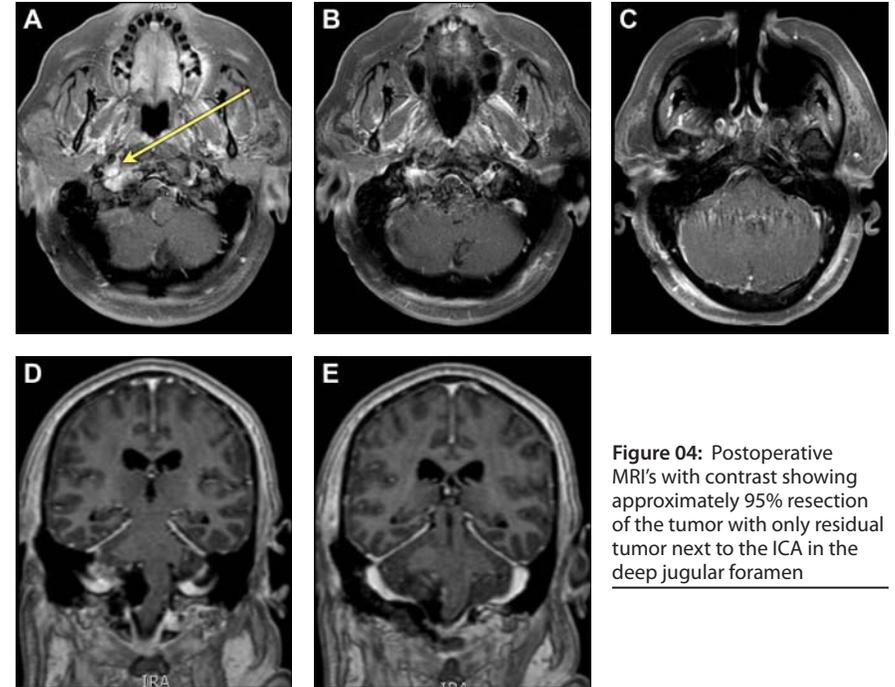


Figure 04: Postoperative MRI's with contrast showing approximately 95% resection of the tumor with only residual tumor next to the ICA in the deep jugular foramen

## Outcome

Postoperatively, the patient was neurologically intact with no additional neurological deficit. Postoperative MR imaging showed approximately 95% tumor resection with residual tumor next to the right internal carotid artery deep in the skull base.

