Neurosurgical Case of the Month

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12th 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 12th 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.

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 12th cranial nerve.

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.