Intraspinal Cervical Schwannoma: A Case Report

Thavamany AS, Then WJ, Khoh PS, Chong KL, Chopra S
Department of Orthopaedic & Traumatology, Hospital Sultanah Bahiyah, Jalan Langgar, Alor Setar, 05470, Malaysia

INTRODUCTION:
Schwannoma are benign nerve sheath tumors origin from schwan cells. It can occur in any part of the body particularly in the head and neck region, also involving cranial nerves. Cervical schwannoma is not common. It usually does not present with any neck swelling. Slow growing cervical schwannoma can compress cervical spinal cord resembling cervical myelopathy signs.

MATERIALS & METHODS:
Firstly a 51 year old man, presented with neck pain radiating to bilateral upper and lower limbs with progressive weakness of bilateral upper and lower limb for 1 year. He also has unsteady gait.
Examination of upper limb power and sensation is normal. However, left upper limb has power 4, and sensation 1. His reflex was brisk and Hoffman's test is positive. He was unable to perform Tandem gait.
MRI Cervical shows features suggestive of retropharyngeal collection likely abscess with evidence infiltration into spinal cord at level C1/2 causing severe spinal stenosis with multiple enlarged nodes.
An open Cervical Biopsy over C2 was done and HPE was Schwannoma
Patient then underwent Resection C1 posterior arch with posterior instrumentation and fusion of C1-C3. Huge tumor removed in C1 spinal canal, & left C2, C3 foramina. The intra op C2/C3 paraspinal mass biopsy – Schwannoma.
Repeated MRI shows no residual of schwannoma post op, however small focal bulge of CSF at left lateral C1/C2 and fluid collection at posterior C2, possible related to post op or dura leak.

RESULTS:
Patient has improved symptoms and was able to walk steadily without aid. On examination his Left upper limb power remains 4 but sensation has improved. Bilateral lower limbs have no neurological deficit. He also has normal gait. X-ray shows no loosening of implant.

DISCUSSIONS:
Preoperative diagnosis of cervical schwannoma is not common as it usually does not present with neurological deficits. MRI is an important diagnostic tool to determine the size and extend of the swelling. Open cervical biopsy has been a procedure of doubt in many centers due to lack of recourses or expertise. Concerns regarding disturbing the tumor plan or iatrogenic dura tear making the definite surgery more challenging.

CONCLUSION:
Intraspinal Schwannoma are rare neoplasm, which presentation mimics other common conditions such as cervical myelopathy. Diagnosis is established through MRI and surgical biopsy. The definite treatment is surgical resection. Intraspinal recurrance of schwannoma is still poorly understood and will require further study.

REFERENCES: