

# Case Report

## Axillary Nerve Schwannoma - A Rare Occurrence

Karthikeyan KV\*, Manimaran R\*\*

\*Consultant Neurosurgeon, \*\*Consultant Plastic Surgeon, Dept. of Neuro Surgery, Chettinad Hospital & Research Institute, Chennai, India.



Dr.K.V.Karthikeyan is currently working as Consultant Neurosurgeon at Chettinad Super Speciality Hospital since 2010. He completed his graduation in 2001 from the prestigious Madras Medical college and completed his MCH (Neurosurgery -5 yrs) from the Madras Institute of Neurology at Madras Medical college in 2007. He is very well trained in Micro neurosurgery and vascular neurosurgery. He has special interest in Vascular Neurosurgery and Endoscopic Neurosurgery.

Corresponding author - Dr. K.V.Karthikeyan (surgenn@gmail.com)

**Key Words:** Schwannomas, Axillary nerve, Posterior cord

Chettinad Health City Medical Journal 2015; 4(2): 103 - 104

### Introduction

Schwannomas affect mainly head, neck and flexor aspect of the limbs. Axillary Schwannoma<sup>1,2</sup> is extremely uncommon. Here we present such a rare occurrence in our patient.

### Case Report

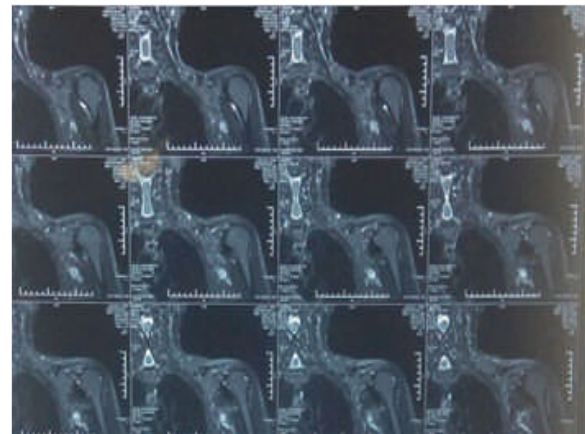
A 48 years old male was presented with a left axillary painful swelling of one year duration with gradual increase in size. There was no history of trauma, pain, altered or localized loss of sensation. Past, personal and family history was non-contributory. On general examination, patient was found to be averagely built and averagely nourished. Local examination of right axillary region revealed smooth, firm, tender swelling of 3 x 2 cms in size. Patient underwent MRI Contrast which showed well circumscribed contrast enhancing lesion arising from the axillary nerve pushing the axillary vessels (Fig 1).

Under ETGA a lazy S shaped incision (Fig 2) the left axilla was made deltoid muscle retracted and axillary fascia opened and axillary sheath identified and opened. There was a well circumscribed lesion of 3 x 2 cm in size attached to the axillary nerve identified. On the anterior surface over the tumor the radial nerve was traversing (Fig 3). With meticulous microscopic dissection radial nerve was lateralised and tumor removed from the Axillary nerve without damaging it (Fig 4). Haemostasis secured and wound closed in layers. Postoperative period was uneventful and no deficit. Histopathology confirmed it as Schwannoma.

### Discussion

Schwannomas also referred as neurilemmomas, are benign, encapsulated perineural tumor of neuroectodermal derivation that originates from the Schwann cells of the neural sheath of motor and sensory peripheral nerves. The etiology is still unknown. In 1910, Verocay, first described a group of neurogenic tumors and referred them as "neurinomas". In 1935, it was proposed that these tumors arise from nerve sheath elements and they were termed as "neurilemmomas". About 25% of the schwannomas occur in the Head and Neck region<sup>3</sup>, usually involving cranial nerves and sympathetic chain, however brachial plexus. Schwannomas are uncommon<sup>4</sup>. Primary tumors of the brachial plexus are an unusual cause of axillary mass.

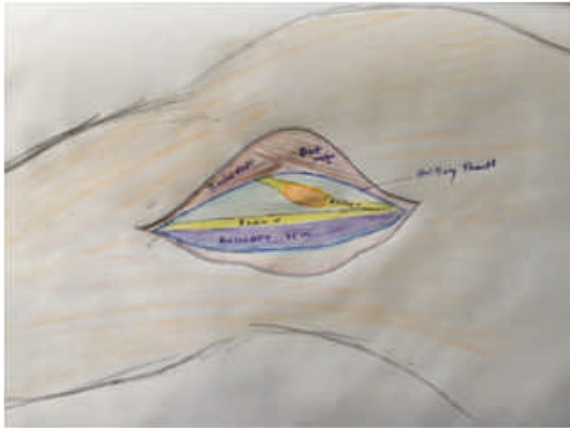
noma are uncommon<sup>4</sup>. Primary tumors of the brachial plexus are an unusual cause of axillary mass.



**Fig 1 - Contrast Mri Showing Contrast Enhancing Lesion in The Axillary Fossa Arising from the Axillary Nerve**



**Fig 2 - Skin Incision for Approaching the Tumor**



**Fig 3** - Representative Diagram of the Lesion Found Intraoperatively



**Fig 4** - Excised Tumor

## Conclusion

Axillary schwannomas are quite a rare occurrence. Only very few cases have been reported in the literature so far. Because of the location most of the time it is misdiagnosed. Complete excision provides cure and recurrence is very rare. Hence we reported the rare case.

## References

- 1) El Andaloussi Y, Abkari I, Bleton R. Axillary nerve schwannoma (case report) .Chir Main. 2008 Oct;27(5):232-4. doi: 10.1016/j.main. 2008.08.004. Epub 2008 Sep 2.
- 2) Tatar IG, Yilmaz KB, Arikok A, Bayar B, Akinci M, Balas S, Ergul Z, Ergun O, Hekimoglu B. Cystic schwannoma of the axillary region: imaging findings of a rare disease. Case report. Med Ultrason. 2015 Mar;17(1):126-8. doi: 10.11152/mu. 2013.2066.171.kyb.
- 3) Kanatas A, Mucke T, Houghton D, Mitchell DA. Schwannoma of the head and neck. Oncol Rev. 2009;(3):107-111.
- 4) Lusk MD, Kline DG, Garcia CA. Tumors of the brachialplexus. Neurosurgery. 1987;21:439-453.

### Answer to : **Diagnose the condition**

ECG shows no obvious P waves but some irregular waves suggestive of fibrillatory waves. There are spikes before each QRS complex and they occur regularly. The patient had undergone permanent pacemaker implantation. It is a paced ventricular rhythm with ventricular rate of 60/min. The characteristic feature is paced ventricular rhythm is not disturbed by atrial fibrillation suggesting that this patient has additional complete heart block also.

- **Dr.M.Chokkalingam**, Consultant Cardiology, CSSH