

Case Report

Unusual Neck Swelling: A Case of Vagal Schwannoma

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ABSTRACT

A schwannoma is a tumour of the nerve sheath. Tumour arises from the schwann cells. Most of the schwannoma are benign in nature presenting as a slow growing asymptomatic solitary neck mass. It rarely undergoes malignant transformation [1%]. Most commonly schwannoma originates from the vestibular nerve. Our case is a 60 yr male patient, presented with a painless swelling in the neck since 2 yrs.

A non-tender, oval, firm in consistency in the right lower half of the neck, between two bellies of right sternocleidomastoid. Right common carotid artery was displaced, cough reflex present on palpating the swelling. IDL was normal. FNAC showed chronic inflammatory cyst. CT scan showed a well-defined cystic lesion in right lower carotid space with perceptible wall & thin non enhancing septations in relationship to adjacent structures. The lesion which had displaced the IJV & CCA. Excision of the swelling was done under general anesthesia. Histopathology showed Antoni type B Schwannoma. Post operative period was uneventful.

Keywords: Neck Swelling, Vagus Nerve, Benign Tumor, Schwannoma, Computed Tomography, Diagnosis

INTRODUCTION

Schwannoma arising from the vagus is a rare (2–5%) benign nerve tumour.^[1] It usually occurs between the third and fifth decades of life. It does not show sex predilection.^[1] It most often presents as a slow-growing asymptomatic solitary neck mass. It rarely undergoes malignant transformation. Tumours are mostly sporadic but may also be associated with autosomal dominant inheritance. Magnetic resonance imaging (MRI) has become the routine imaging study for these tumours. A biopsy may confirm the diagnosis. They are universally S-100 positive, which is a marker of neural crest cell origin cells. Surgical excision is the treatment of choice for this tumour, recurrence being rare. Treatment of malignant schwannoma may include both surgery and radiotherapy.

CASE REPORT

A 60-year-old male patient who has been a chronic smoker and alcoholic for 20 years presented with a painless neck swelling of 2 years duration, which gradually increased in size. It was 5 × 3 cm, non-tender, oval, firm to cystic in consistency in the right lower half of the neck, between two bellies of the right sternocleidomastoid [Figure 1]. The right common carotid artery was displaced, cough reflex was present on palpating the swelling. Indirect laryngoscopy—both vocal cords were normal.

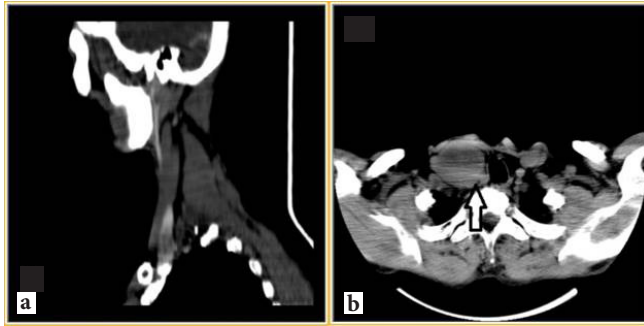


Figure 1: CT –SCAN showing (a and b) a well-defined cystic mass in the right lower carotid space. (a) Sagittal section and (b) Contrast axial sections.



Figure 2a: 5 x 3 cm, oval mass was excised which had displaced the IJV & CCA, within the carotid sheath.

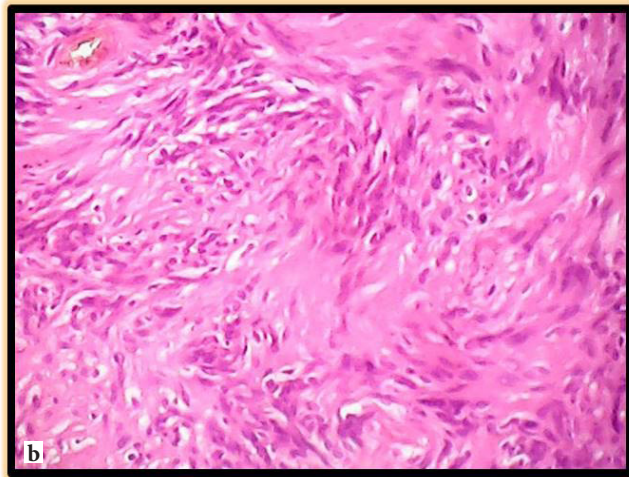


Figure 2b: As seen under 10X Histopathology showed ANTONI TYPE B Schwannoma.

Clinically diagnosed as acquired lymphatic cyst. Possibilities include lymphatic cyst, cystic vagal schwannoma, non-specific inflammatory cyst, and tubercular adenitis. Fine needle aspiration cytology (FNAC) – chronic inflammatory cyst. CT scan – a well-defined cystic lesion in the right lower carotid

space with perceptible wall & thin non-enhancing septations in relationship to adjacent structures. The lesion which had displaced the Internal jugular vein (IJV) & Common carotid artery (CCA). During surgery, the carotid sheath was excised & post-operative recovery was good. Histopathology showed Antoni type B Schwannoma [Figure 2].

DISCUSSION

Schwannomas are rare peripheral nerve tumours; about one-third occur in the head and neck region.^[1] Pre-operative diagnosis of schwannoma is difficult when symptoms are present; hoarseness of voice is the most common.

Paroxysmal cough may be produced on palpating the mass. This is a clinical sign unique to vagal schwannoma.^[2] MRI findings are also useful in providing a pre-operative estimation of the nerve^[3] of origin of the schwannomas.

Imaging plays a central role in diagnosing vagal nerve neoplasm, and in particular [MRI has become the routine imaging study for these tumours.^[3]

MRI provides, in fact, important pre-operative information useful in planning optimal surgical treatment.^[3] Treatment of vagal nerve tumours is complete surgical excision. Dissection of tumour from the vagus with preservation of the neural pathway should be the primary aim of surgical treatment for these tumours.

CONCLUSION

Schwannoma of the vagus is an uncommon benign nerve tumour. Definitive preoperative diagnosis may be difficult and investigations such as FNAC have low specificity. Diagnosis is based on clinical suspicion and confirmation is obtained by means of surgical pathology. Surgical excision is the treatment of choice for this tumour, recurrence being rare.

Author Contributions

All author are contributed to this work

Ethical approval

Institutional Review Board approval is not required.

Declaration of patient consent

Patient's consent not required as patients identity is not disclosed or compromised.

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Conflicts of interest

There are no conflicts of interest.

Use of Artificial Intelligence (AI)-Assisted Technology for manuscript preparation

The author(s) confirms that there was no use of artificial intelligence (AI)-Assisted. Technology for assisting in the writing or editing of the manuscript and no images were manipulated using the AI.

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