



CERVICAL VAGAL SCHWANOMMA -A RARE CASE REPORT

Surgery

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KEYWORDS

INTRODUCTION-

Schwannoma originating from the cervical vagus nerve is extremely rare neoplasm. These are usually always benign. It usually occurs between the third and fifth decade and it does not show sex predilection, both sexes being equally affected. (1) MRI has become the routine imaging study, it also helps in planning optimal surgical treatment. MRI is also helpful in differentiating cervical sympathetic schwannoma and vagal schwannoma, as vagal schwannoma displaces the internal jugular vein laterally and carotid artery medially while cervical sympathetic schwannoma displaces both the internal jugular vein and carotid artery without separating them.

Clinically, on palpating the mass paroxysmal cough will be present. (2) Treatment is complete surgical excision with preservation of neural pathway.

Case Report-

A 34-year-old female admitted to our department for a palpable lump in the left side of the neck for the last two years with no significant past history. On palpation, a smooth surface swelling of size 3*3 cm is present in the left lower cervical region. Upon palpating the mass, paroxysmal cough is also elicited.

USG neck revealed a heterogeneously hypoechoic vascular lesion measuring 3.0*4.4*3.0 cms, noted arising in the left carotid space just after carotid bifurcation, splaying the carotid and left internal jugular vein and causing mass effect on the jugular vein. Vagal schwannoma? Carotid body tumor. CECT NECK shows a well-defined lobulated heterogeneously enhancing soft tissue with internal hypodense areas measuring approximately 2.9*2.7*3.5 is seen in the left carotid space causing anteromedial displacement of the left ICA and ECA. It is abutting the left proximal ICA without luminal narrowing and causing mass effect over the left IJV and displacing it posterolaterally. Features suggestive of left carotid space mass lesion likely neurogenic in origin (D/D 1. glomus vagal, 2. Carotid body tumor).

MRI NECK shows an ovoid lesion measuring 4.6*2.9*2.8 cm with well-defined margins and apparent encapsulation without any invasive features. Carotid bifurcation + ICA and ECA are displaced anteromedially while the compressed internal jugular vein is displaced posterolaterally. These imaging findings are suggestive of left vagal schwannoma.



fig 1.1

The patient underwent complete excision of the schwannoma with preservation of the neural pathway and vascular structures. Intraoperatively, a yellowish-white, ovoid-shaped mass was observed measuring approximately 4*4 cm, lying between the carotid artery and the internal jugular vein. The schwannoma was separated from the surrounding vessels by blunt and fine dissection and excised completely. Postoperatively, the patient has no complications and was discharged on post-operative day 7.

The pathological examination confirmed the diagnosis of benign schwannoma of the vagus nerve. Microscopic features show tumor cells arranged loosely in a fibrillary eosinophilic background, which is in favor of schwannoma.

DISCUSSION:

Schwannomas are rare peripheral nerve tumors, about one-third occur in the head and neck region. (3) Clinically, they present as asymptomatic, slowly growing lateral neck masses that can be palpated along the medial border of the sternocleidomastoid muscle. Schwannomas are difficult to diagnose preoperatively as they do not present with any neurological symptoms. (3) Sometimes, patients present with hoarseness of voice. The reported incidence of preoperative vocal cord paralysis is about 12%, but hoarseness is almost always present following surgery as far as concern postoperative vocal palsy, an incidence of 85% has been reported. (4)

The differential diagnosis of the tumor of the neck includes paraganglioma, brachial cleft cyst, malignant lymphoma, metastatic cervical lymphadenopathy. (5)

Furthermore, since vagal schwannomas are almost invariably benign in nature, a conservative approach should always be considered first. Fig -1.1

REFERENCES-

1. Neurilemmoma of the vagus nerve: a case report and brief literature review. *Laryngoscope* 1984;94:946-9. [PubMed] [Google Scholar]
2. Colreavy MP, Lacy PD, Hughes J, Bouchier-Hayes D, Brennan P, O'Dwyer AJ, et al. Head and neck schwannomas – a 10-year review. *J Laryngol Otol* 2000;114:119-24. [PubMed] [Google Scholar]
3. Ford LC, Cruz RM, Rumore GJ, Klein J. Cervical cystic schwannoma of the vagus nerve: diagnostic and surgical challenge. *J Otolaryngol* 2003;32:61-3. [PubMed] [Google Scholar]
4. Fujino K, Shinohara K, Aoki M, Hashimoto K, Omori K. Intracapsular enucleation of vagus nerve-originated tumors for preservation of neural function. *Otolaryngol Head Neck Surg* 2000;123:334-6. [PubMed] [Google Scholar]
5. Gilmer-Hill HS, Kline DG. Neurogenic tumors of the cervical vagus nerve: report of four cases and review of the literature. *Neurosurgery* 2000;46:1498-503. [PubMed] [Google Scholar]