INTERNATIONAL JOURNAL OF MEDICAL AND APPLIED SCIENCES
Earthjournals Publisher
eISSN:2320-3137
www.earthjournals.in

CASE REPORT

VAGAL SCHWANNOMA – A CASE REPORT

***C.RAMAKRISHNA , * * ZAHIDA BEGUM**

1. Dr.C Ramakrishna, Prof. and HOD , otorhinolaryngology, SVS medical college and hospital , mehaboobnagar , Telangana.

2. Dr. Zahida Begum , PG (ENT- DORL) , SVS medical college and hospital, mehaboobnagar , Telangana.

Corresponding author: Dr. C Ramakrishna

Publication history: Received on 16/11/2016, Published online 5/12/2016

ABSTRACT:

Schwannoma of Vagus Nerve Sheath in Cervical region is a rare case. We report a case of 29 yr old male patient presented to ENT out patient department on 27th May 2016,at SVS medical college /Hospital , Mahaboobnagar,Telangana state. After clinical and radiological diagnosis the tumour was completely removed with preservation of vagus nerve. We discuss here clinical presentation, differential diagnosis,pathological diagnosis ,therapy of this rarely encountered neoplasm.
Keywords: Schwannoma- vagal nerve, FNAC-fine needle aspiration cytology,Transcervical approach

INTRODUCTION

Schwannomas or Neurilemmomas or Neurinomas are benign tumors arising from schwan cells , occurring in 3rd to 6th decade of life with no sex predilection, half of them occurs in head and neck region. They are most frequent neurogenic tumours of Parapharyngeal space, most of them occurring in post styloid compartment,typically encapsulated, mostly solitary.They can arise from cranial nerves, sympathetic chain,cervical nerve roots,brachial plexus and from nerves of jugular foramen.Among schwannoma of cranial nerves, vestibular schwannoma is more common followed by the trigeminal schwannoma.

Case report:A 29 yr old male patient farmer by occupation came to ENT out patient department on 27th May 2016, with complain of swelling in right side of the neck since 18 months.O/E single swelling of 4.5x3cm was found beneath upper one third of sternocleido mastoid muscle.skin over the swelling was normal,it was smooth ,non pulsatile,non tender, transversely mobile,firm in consistency. ENT and systemic examination were normal.USG showed fig:1 heterogeneously hypoechoic lesion of 4.3x2.8cm,just posterior to right submandibular galnd causing splaying of jugular vein and surrounding submandibular gland. FNAC showed moderately cellular smears with spindle shaped elongated cells. MRI fig:2 and 3 showed well encapsulated oval shaped hyperintense lesion in Right carotid space displacing common carotid medially and jugular vein laterally.No evidence of flow void.

INTERNATIONAL JOURNAL OF MEDICAL AND APPLIED SCIENCES
Earthjournals Publisher
eISSN:2320-3137
www.earthjournals.in

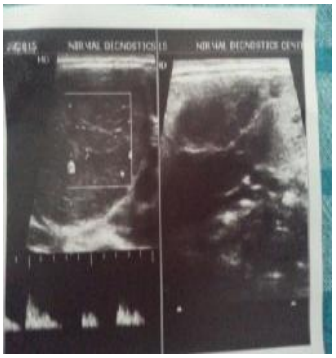


Fig:1

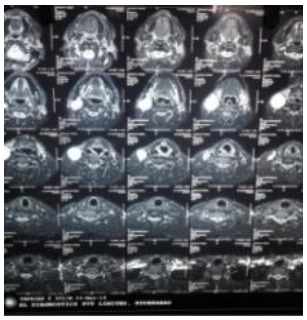


Fig:2

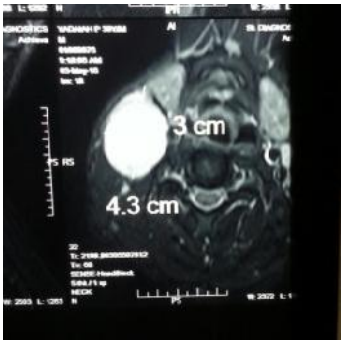


Fig:3

Operation:On 1st of june 2016 ,Through Transcervival approach mass was removed. Under general anaesthesia ,transverse incision at the level of hyoid bone, extending from 2cm from midline to the anterior border of right sternocleido mastoid was given. Layer by layer dissection was done and the oval mass over the vagus nerve was visualized, medial to the jugular vein and lateral to the carotid artery. It was separated from the nerve sheath carefully, leaving the nerve intact and removed in toto . Post op condition was fair. No neurological deficit was found.

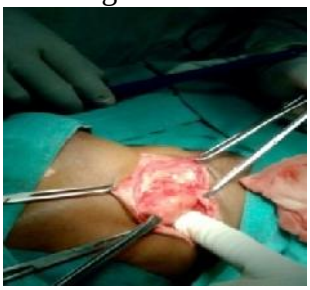


Fig:1

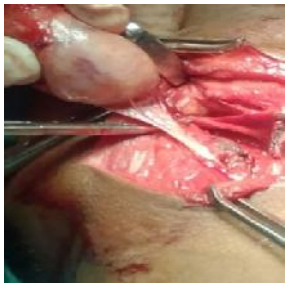


Fig:2

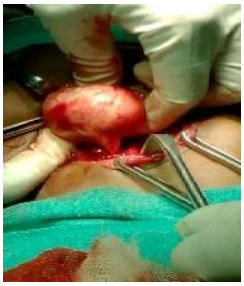
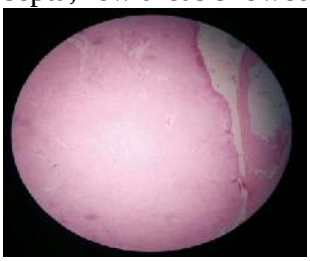
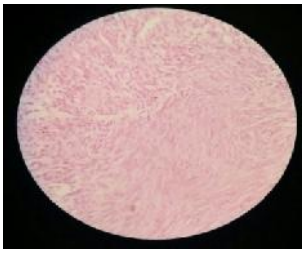


Fig:3

Fig:4

The specimen on HPE showed cells arranged in groups and lobules separated by fibrous septa, few areas showed cystic spaces lined by flattened epithelium.





DISCUSSION: Schwannomas are most frequent neurogenic tumours of para pharyngeal space.Vagal nerve schwannoma is a rare benign nerve sheath tumour with incidence of 2-5%, they account for common tumour of jugular foramen followed by glossophayngeal schwannoma.Presenting as slowly growing painless mass. Due to rarity of tumour they are missed in differential diagnosis of neck masses like carotid body tumour,glomus vagale,paragangliomas,neurofibromas,lymphomas.They causes displacement of carotid anteriorly and medially, and internal jugular vein laterally and posteriorly.On USG they

are eccentric and usually hypervascular,in contrast to neurofibroma which is less vascular). FNAC shows Antony type A- spindle cells with palisade of nuclei around central mass of cytoplasm . **verrocay bodies** is characteristic of schwannoma.Typically few of them shows areas of necrosis or hemorrhage and cystic degeneration. They causes smooth bony erosion when present in jugular foramen.On MRI they are Isointense on T1 weighted image and Hyperintense on T2 weighted image, with no flow void which is seen in carotid body tumour and glomus vagale (salt and pepper appearance).

conclusion: vagal scwannoma is a rare tumour,presents as slowly growing painless mass in neck.Surgical removal is the mainstay of treatment with nerve preservation wherever possible. In our case tumour was resected carefully off the nerve. No post op neurological deficit was found. As this nerve function is related to speech,deglutition,gastric motility, care has to be taken to preserve the nerve wherever possible. Recurrence in schwannomas is rare and malignant transformation is unusual.

REFERENCES:

1.Kragh lv,soule EH,masson jk. Benign and malignant neurilemmomasof Head and neck surgery,211-218.
2.Fine sw,McClain- Immunohistochemical stainingfor calretinin is useful for differentiating schwannoma and neurofibromas.Am J Clin Pathol 122:552-559.
3.Scott Brown otolaryngorhinology, Head and neck surgery.7th Edition- vol.2, chapter 191: Tumours of parapharyngeal space, page: 2527,2533.
4. Stell and Marans – Text book of head and neck surgery and oncology.5th Edition- chapter head and neck pathology page: 93.
5. Cummings otolaryngology head and neck surgery, 6th Edition, Vol.1,overview of Diagnostic imaging of head and neck,Page : 126.
6. Cummings otolaryngology head and neck surgery, 6th Edition,Vol.2, Neoplasms of Neck page: 1795
7. Surgery of the Ear- Glassock Schambaugh- 6th Edition, section vii- Vestibular schwannoma ,page: 644.

Paper cited as: **C.RAMAKRISHNA , ZAHIDA BEGUM . VAGAL SCHWANNOMA – A CASE REPORT. International Journal of Medical and Applied Sciences, 5(3), 2016, pp.20-22.**