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Case Report

AN UNUSUAL CASE OF NASAL SCHWANNOMA: A CASE REPORT

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ABSTRACT
Schwannomas are benign neoplasms arising from Schwann cells of peripheral cranial and autonomic nerves. They arise from the sheath of myelinated nerves. Only 4% of schwannomas are located in head and neck region involve the sinonasal tract. Neuroplasms of Schwann cell origin occur rarely in the nasal cavity. They have also been termed as neuromas, neurinomas, perineural fibromas , neurofibromas , perineural fibroblastomas .We present a case report of a 40 year female complaining of nasal obstruction since 4 months and epistaxis since 2 months.On CT scan and histopathology a diagnosis of schwannoma arising from lateral wall of left nostril extending to the orbit was made and the tumour was excised by endoscopic assisted microdebrider approach. The rarity of occurrence of this tumour especially in the nasal region has prompted us to report the case.

Key Words: *Nasal Schwannoma, Lamina Paperecia, Nasopharyngeal Extension, Endoscopic Approach*

INTRODUCTION
Schwannomas being benign neoplasms arising from the sheath of myelinated nerves are very in the nose and paranasal sinus (Sharma and Tyagi 1998) . 25-45 % are found in the head and neck whereas nose and paranasal schwannomas account for 4% of these tumours. They arise most commonly in the ethmoid and maxillary sinuses with two cases reported in sphenoid sinus and no reported case of frontal sinus (Shugar, 1992-91). Common symptoms include nasal obstruction, epistemic, rhinorrhoea, anosmia, facial swelling, headache and facial pain. Magnetic resonance imaging and CT scanning are invaluable diagnostic tools to assess these tumours. Due to obscure anatomical location and late onset of symptoms, tumours are discovered late in the clinical course (Ross, 1998).

CASES
A 40 year old female presented with complaints of nasal obstruction on the left side and intermittent epistaxis since 4 months. She had no complaints of headache and periorbital pain. Clinical examination revealed a large soft tissue mass smooth, nontender and bleeds on touch in the left nostril on anterior rhinos copy. On nasal endoscopic examination we could locate a smooth mass in the left nostril and the endoscope could not be passed beyond the mass. There was no sinus tenderness on PNS examination. Eyeball movements were normal.

a **b**

Figure 1a-b: (CT Scan showing mass arising from the lateral wall of left nostril extending into the orbit through lamina papericia)

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CT scan revealed a large well defined soft tissue density mass in the left nostril arising from lateral wall and extending to the orbit through lamina paperecia (figure 1). All sinuses were normal and no intracranial or nasopharyngeal extension of tumour noted. The patient was posted for surgery and complete excision of the mass achieved by endoscopic approach with the help of microdebrider.

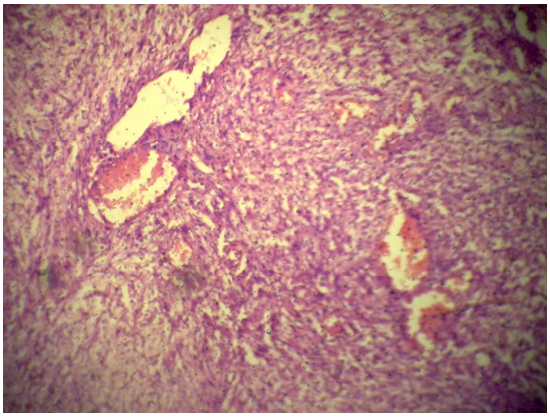

Figure 2: Foamy cells and vascularity within the tumour

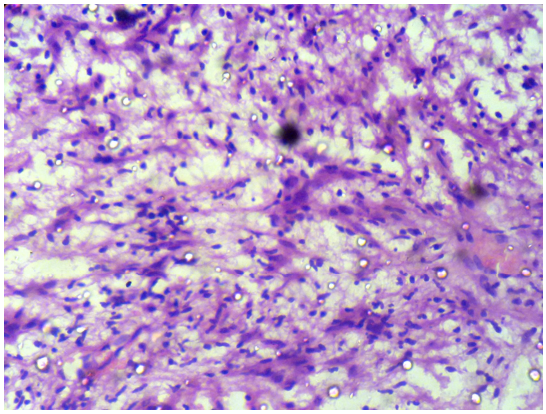

Figure 3: Spindle cells showing typical nuclear palisading pattern (verrocay bodies)

Histopathological slides showed large portions of benign nerve sheath tumour charecterised by antoni A and antoni B areas with nuclear palisading (verrocay bodies on high power) and engorged vessels within the tumour which indicated a schwannoma of the nasal cavity (Figures 2-3).
Follow up after 2 months showed no recurrence in the nose or any other complaints

DISCUSSION

Schwannomas are slow growing but can become very large expanding eroding the bone by pressure (Hill, 1986). Just 40 cases have been reported in literatures of schwannomas involving the paranasal sinuses. Common symptoms include nasal obstruction, epistaxis,rhinorrhoea,anosmia,facial swelling,headache and serous otitis media. Lesions involving the paranasal sinus leads to pain in the frontal or orbital area.Those with intracranial extension can cause visual disturbances (Perzin, 1992).
They are usually solitary lesions, localized masses in the nasal cavity. Nasal endoscopy, MRI and CT scanning help in preoperative evaluation of the tumour.Biopsies should be avoided due to the risk of bleeding.
For most cases lateral rhinotomy affords best access to the nasal cavity. Alternative procedures include Caldwell-Luc approach for maxillary sinus with additional ethmoidectomy in case of involvement (Donnelly,1992).Skull based surgery may be required for sphenoidal sinuses.More advanced lesions,for tumour extending through the cribriform plate areotomy should be done.
Our case was unique due to the large size of the tumour, its rare location *i.e.*, lateral wall of the nose and penetration into the orbit through lamina papericia. We preferred an endoscopic approach with the help of debrider in place of lateral rhinotomy which provided a complete removal, minimal blood loss and was also cosmetically friendly.

CONCLUSION

Nasal schwannomas are rare tumours but should be kept in mind for differential diagnosis of nasal masses. CT scan, MRI and biopsy are best tools for confirmation of the above diagnosis. Endoscopic approach can be considered for removal of these tumours as it allows a complete removal, is cosmetically friendly and increases the surgeon's satisfaction.

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