



NASAL SEPTAL SCHWANNOMA MASQUERADING AS AN AMBIGUOUS MASS

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ABSTRACT

Background: Schwannoma is a benign and slow growing tumour originating from the schwann cells of peripheral nerve sheath. Schwannomas involving nasal septum are quite rare. **Case Report:** A 40-year old female presented with 2 month history of bilateral progressive nasal obstruction. On examination there was bilateral smooth swelling noted in nasal septum. Contrast enhanced computed tomography showed homogenous soft tissue density in nasal cavity arising from anterior two third of nasal septum. The patient underwent open rhinoplasty + endoscopic excision of tumour. Histopathological examination of the resected specimen showed nerve sheath tumour with Antoni A and Antoni-B pattern with S-100 positivity on immunohistochemistry. **Discussion:** Nose and paranasal sinus schwannomas are most commonly seen in adults aged 40-60 years. A nasal septal schwannoma may present with nasal blockage, discharge. Surgical excision is the treatment of choice.

KEYWORDS

Schwannoma, nasal septum, sinonasal

INTRODUCTION

Schwannoma is a benign slow growing tumour originating from the schwann cells of peripheral nerve sheath. Sinonasal schwannomas constitute 4% of head and neck nerve sheath tumour, however schwannomas involving nasal septum are quite rare and diagnosis is based on histopathological findings due to lack of characteristic radiological features.^[1] The first case of septal schwannoma was first described by Bogdasian and Stoutin in 1943.^[2] We describe our experience in managing one such rare case of septal schwannoma

Case Report

A 40-year old female presented with 2 month history of bilateral progressive nasal obstruction. The patient history was negative for epistaxis, nasal discharge, headache, smell disturbances. Patient had broadening of dorsum of nose (Fig. 1). On anterior rhinoscopy and diagnostic nasal endoscopy, bilateral smooth swelling involving the nasal septum was noted. On palpation with finger / probe, swelling was firm in consistency and doesn't bleed on touch.



Fig. 1 Septal schwannoma with broadening of dorsum of nose

Contrast enhanced computed tomography (CECT) and magnetic resonance imaging (MRI) showed homogenous soft tissue density (35x22x19mm) in nasal cavity arising from anterior two third of nasal septum (Fig. 2). The patient underwent combined open rhinoplasty and endoscopic excision of the tumour under general anaesthesia (Fig. 3). The cuff of the surrounding mucoperichondrium at the site of attachment over the cartilaginous septum was also resected along with the excised mass.



Fig. 2 CECT & MRI showing homogenous mass in anterior part of nasal septum



Fig. 3 Open rhinoplasty approach showing tumour mass in nasal septum

Histopathological examination (HPE) of the resected mass showed nerve sheath tumour with Antoni A and Antoni-B pattern with S-100 positivity on immunohistochemistry. Patient is on follow-up since 6 months and doesn't have any new symptoms or recurrence.

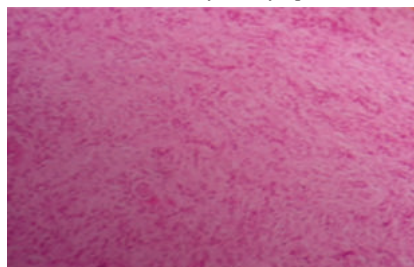


Fig. 4 HPE showing Antoni A & B cells

DISCUSSION

Only 4% of schwannomas seen in the head and neck region arise from the nose and paranasal sinuses and they may arise from branches of the trigeminal nerve (ophthalmic or maxillary) or from the autonomic nervous system. They do not arise from optic or olfactory nerves as these nerves lack sheaths that contain Schwann cells.^[3] The diagnosis of a nasal schwannoma is usually only histopathological due to the lack of radiological characteristic features.^[4] They are most commonly seen in adults aged 40-60 years and without gender or racial predilection. They are often asymptomatic, till they attain a large size. A nasal septal schwannoma may present with nasal blockage, nasal discharge, smell disturbances, deformity of nose, headache, epistaxis. It rarely undergoes malignant transformation.^[5]

The location, site, extent of the tumour defines the surgical approach and extent of resection. Schwannomas are often encapsulated, well circumscribed. Their histopathology exhibits Antoni A and Antoni B and immunohistochemistry staining S-100 protein expression is diagnostic.^[5] In our case, tumour was involving entire part of anterior 1/3rd of nasal septum. Hence combined approach was required for complete excision of the tumour.

CONCLUSION

Schwannomas should be considered in the differential diagnosis whenever a benign-looking soft tissue mass is seen inside the nasal cavity. Surgical excision is treatment of choice and postoperative recurrence is rare.

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