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Case Report

Tonsillar Schwannoma: a rare case report

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ABSTRACT

A Schwannoma is a benign, locally aggressive tumor that occurs due to the proliferation of Schwann cells of the nerve sheath. These tumors may involve any cranial nerve and hence are routinely missed on diagnosis. We report a rare case of a young adult female with unilateral tonsillar fossa mass which was excised by transoral approach, and histopathology reported to be a tonsillar schwannoma. Hence, it is necessary to be aware of these rare benign tumors as they can mimic a tonsillar hypertrophy.

Keywords: Tonsillar fossa, Benign tumour, Schwannoma, Transoral approach

INTRODUCTION

Schwannoma is a tumor of the peripheral nerve system. It's a proliferation of Schwann cells that protects peripheral nerves by encasing them. It can be an idiopathic or genetic disorder such as neurofibromatosis 2 (NF2), Schwannomatosis, or Carney complex.

Head and neck regions are typical for these benign peripheral nerve sheath tumours. In the head and neck region, it occurs most commonly in association with the acoustic nerve within the skull. It is rarely found in the oral cavity, oropharynx, and palatine tonsil.[1]

The tumor may present at the second and fourth decade of life with favoritism to either sex. Here we report a case of tonsillar Schwannoma in a 32-year-old female.

CASE REPORT

A 32-year-old female patient presented in the ENT outpatient department with a history of a slowly growing mass in the left palatine tonsil for 2 years. The patient also complained of difficulty in swallowing and pain during swallowing for last 8 months.

On local examination, a lobulated left tonsillar mass of approximately 3×3 cm in size was observed which was oval in shape with an irregular surface and ill-defined margin extending between the anterior and posterior pillar. There were no dilated veins, visible pulsation, or slough on the mass. The gag reflex was present (Figure 1).

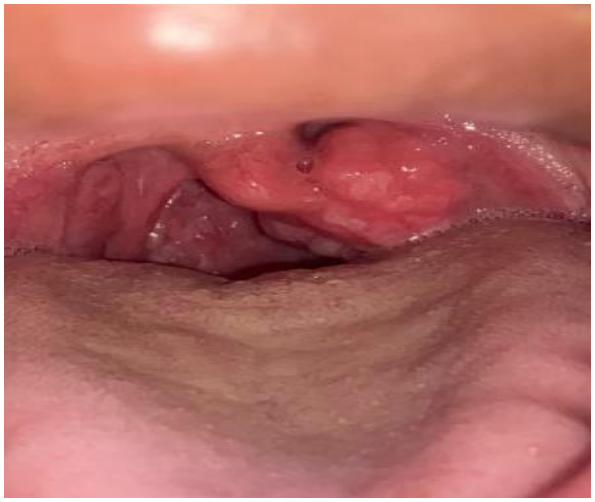

Figure 1: Preoperative oral cavity examination showing left-sided tonsillar fossa mass.

On palpation, all inspection findings were confirmed; the mass was non-tender and firm in consistency. The base of the tongue was normal.

No cervical or any other lymphadenopathy was palpated.

Contrast-enhanced magnetic resonance imaging neck revealed a left tonsillar fossa mass with loss of fat planes within the left medial pterygoid, left lateral wall of the oropharynx, and left longus colli muscle (Figure 2).

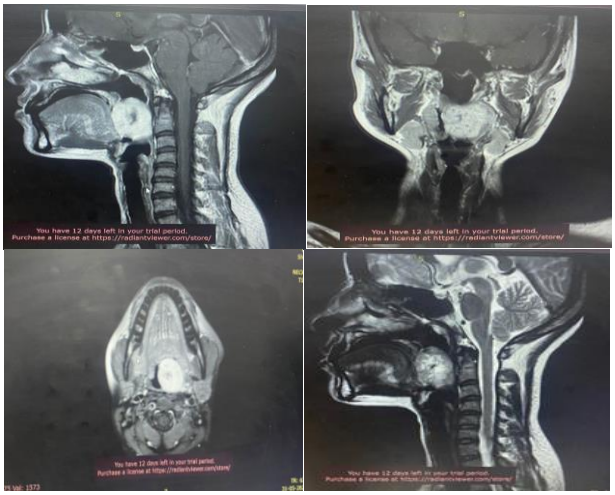

Figure 2: Contrast-enhanced magnetic resonance imaging neck revealed a left tonsillar fossa mass with loss of fat planes with the left medial pterygoid, left lateral wall of the oropharynx, and left longus colli muscle.

Based on the patient's long history of symptomatic difficulties, a surgical management plan by transoral excision was undertaken.

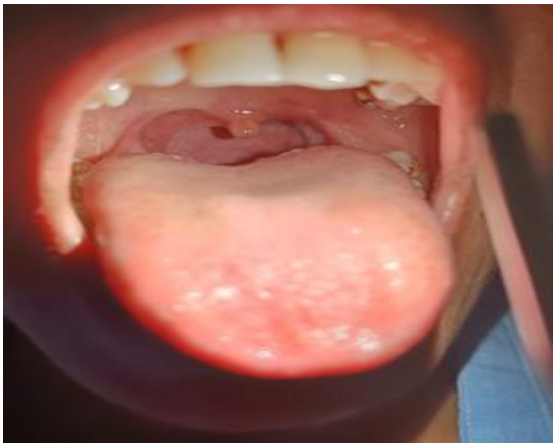

Figure 3: On subsequent post-operative follow-up upto 1 year, the patient recovered completely with no recurrence.

Post-operatively histopathology revealed the gross appearance was a well-encapsulated soft mass. A cut section revealed greyish yellow soft to cystic with hemorrhagic areas. Microscopy revealed a capsulated spindle cell tumor with features suggestive of benign peripheral nerve sheath tumor Schwannoma. Immunohistochemistry-S100- immunoreactive, score 4+ lesion cells. On subsequent post-operative follow-up upto 1 year, the patient recovered completely with no recurrence (Figure 3).

DISCUSSION

In 1908, Verocay first described schwannoma or neurilemma, a primarily benign tumor arising from the Schwann cell of the nerve sheath covering myelinated nerve fiber. The nerve sheath tumors which originate from peripheral nerves are of two types, neurofibroma and Schwannoma.[2]

Around 25–48% of Schwannomas favor the head and neck region, with only 1% having an intra-oral origin.[3]

Although the onset age ranges from 1 to 89 years, the tumors are usually seen in the fourth decade of life.[8]

Histologically, the schwannomas typically exhibit a biphasic histological pattern of Antoni A and Antoni B areas.[10] The Antoni A areas are regions of high cellularity with spindle-shaped cells. Groups of compact parallel nuclei known as Verocay bodies are also seen. Antoni B tissues exhibit considerable cell pleomorphism in a loosely arranged reticulum network. Schwannoma usually shows intense immunostaining for S-100 (particularly Antoni A areas), which may help to distinguish peripheral nerve sheath neoplasms from other tumors in the head and neck region; 2–10% of schwannomas have been shown to be malignant, emphasizing the need for excision.

Head and neck Schwannomas generally involve the vestibulocochlear nerve, with only 1% occurring in the oral cavity, and only five cases involving the palatine tonsil are reported in the global literature.[4]

Symptoms arise due to a mass effect exerted by the tumor on surrounding structures. The treatment of choice for benign schwannoma is surgical enucleation.[5]

The prognosis of schwannoma is good, with conservative surgical excision as the treatment of choice. No recurrence should be expected once complete excision is done.[5]

CONCLUSION

Schwannoma is a rare entity in the tonsil, and it's challenging to diagnose a unilateral tonsillar mass as very few cases have been reported so far for the same. A complete surgical excision will suffice, and recurrence can be avoided in long-term follow-up.

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