

International Journal of Medical Science and Innovative Research (IJMSIR)

IJMSIR : A Medical Publication Hub Available Online at: www.ijmsir.com Volume – 7, Issue – 2, April – 2022 , Page No. : 204 - 206

Schwannoma of the palatine tonsil presenting as tonsillitis – A rare case with review of literature

<sup>1</sup>Nanda Patil, Professor, Department of Pathology, Krishna Institute of Medical Sciences Deemed to Be University, Karad, Maharashtra.

<sup>2</sup>Shivangi Mittal, Tutor, Department of Pathology, Krishna Institute of Medical Sciences Deemed to Be University, Karad, Maharashtra.

<sup>2</sup>Devika Borade, Tutor, Department of Pathology, Krishna Institute of Medical Sciences Deemed to Be University, Karad, Maharashtra.

**Corresponding Author:** Shivangi Mittal, Tutor, Department of Pathology, Krishna Institute of Medical Sciences Deemed to Be University, Karad, Maharashtra.

**Citation this Article:** Nanda Patil, Shivangi Mittal, Devika Borade, "Schwannoma of the palatine tonsil presenting as tonsillitis – A rare case with review of literature", IJMSIR- April - 2022, Vol – 7, Issue - 2, P. No. 204 – 206.

Type of Publication: Case Report

**Conflicts of Interest:** Nil

## Abstract

Schwannoma is a benign neoplasm which arises from Schwann cells, commonest site is parapharyngeal space. Occurrence of schwannoma in the oropharynx is extremely rare. We present a case of schwannoma arising from the palatine tonsil in a 80 year old female patient. Clinical presentation of the case was difficulty in and pain on swallowing since 2 months with recent episode of fever since 2 days. The lesion was diagnosed as Right Tonsillar Cyst and was excised. It was sent for histopathological examination post excision.

**Keywords:** Schwannoma, Palatine Tonsil, Benign Tumor.

# Introduction

Nerve sheath Tumors were first described by Vero cay in 1910 (1). About 25 - 45 % of these Tumors arise in the head-neck region mostly occurring in the parapharyngeal space (2,3). Schwannomas are encapsulated Tumors arising from Schwann cells. Two types of neurogenic Tumors should be distinguished: schwannoma and

neurofibroma. Schwannoma arise from perineural Schwann cells and are well encapsulated, growing adjacent to parental nerve but extrinsic to nerve fascicles (3). Neurofibromas are derived from perineural fibrocytes and are unencapsulated, usually intertwined with parental nerve fascicles (3,4). Tonsillar schwannomas are very rare.

## **Case report**

80-year-old female patient presented with difficulty in swallowing and pain while swallowing since 2 months, which was gradual in onset and progressive in nature followed by a recent episode of high grade fever since 2 days. The fever was noted to subside after a course of antibiotics. There was no history of respiratory difficulty. Examination of the oral cavity and oropharynx revealed a tonsillar mass having a smooth external surface approximately measuring 2 x 2 cm arising from the right tonsillar fossa. Shivangi Mittal, et al. International Journal of Medical Sciences and Innovative Research (IJMSIR)

After general physical examination, the patient was taken for further assessment and excision of the tonsillar cyst under general anaesthesia.

#### **Histopathological examination**

Gross examination revealed an encapsulated, grey-white tumor measuring 1.8 x 1.7 x 1.5 cm. Cut section was solid, grey white, gelatinous with cystic change.



Figure 1: Gross features - Encapsulated, grey white, tumor with small cyst.

Microscopy from the tumor revealed a spindle cell neoplasm showing two histological patterns. Antoni A area revealed hypercellular tumor with spindle-shaped neoplastic cells arranged in palisading pattern, while hypocellular areas showed loosely arranged spindle shaped neoplastic cells with hyalinised vessels. Considering the gross and microscopic features, the tumor was diagnosed as Neurilemmoma, arising from right tonsil. Adjacent tissue showed acute on chronic non-specific inflammation.

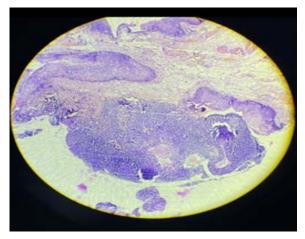


Figure 2: Well circumscribed tumor in the tonsil (40 x H&E)

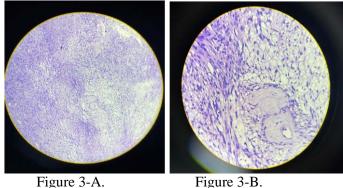


Figure 3-B.

Figure 3-A and 3-B: Tumor showing Antoni A and Antoni B pattern and hyalinized blood vessels.

(A: 100 x H&E), (B: 400 x H&E).

## Discussion

Schwannoma is a solitary, well circumscribed and encapsulated tumor presenting as a slowly growing painless mass. Pain and neurologic deficit are uncommon and suggest malignant nature. Radiological investigations like CT or MRI imaging findings of schwannomas are neurofibromas often similar to and cannot be distinguished. The definitive diagnosis remains histologic (6).

On gross examination, schwannoma of tonsil is sharply demarcated and encapsulated tumor. Sometimes few cystic areas are seen, like in our case. Microscopic features include two patterns, densely packed spindle cells with a palisading pattern (Vero cay bodies) as Antoni A type and loose hypocellular arrangement with hyalinised blood vessels as Antoni B type. Positive reactivity to S100 protein confirms diagnosis (7,8,9).

Schwannoma of tonsil has good prognosis and surgical excision or enucleation is the treatment of choice.

Differentials which should be kept in mind with a tonsillar mass include malignant Tumors such as squamous cell carcinoma, sarcomas and benign Tumors such salivary Tumors, as gland leiomyoma,

rhabdomyoma, hemangiomas and lipomas (10). **Conclusion** 

Tonsillar schwannomas are very rare neoplasms. They are slow growing and found in palatine tonsil. Histopathological examination helps in arriving at definite diagnosis.

## References

1. Vero cay J. Zur Kenntnis der Neurofibroma. Beitar Pathol Anat 1910;48:1-69.

2. Sanghvi V, Lata M, Borges A. Lateral thyrotomy for neurilemmoma of larynx. J Laryngol Otol 1999;113(4):346-48.

3. Anil HT, Gowda BV, Lakshmi S, Niveditha SR. Schwannoma of the palatine tonsil. J Laryngol Otol 2005;119:570-72.

4. Kang GC, Soo KC, Lim DT. Extracranial nonvestibular head and neck schwanomma: A ten-year experience. Ann Accad Med Singapore 2007;36:233-40.

5. Tzagkaroulakis A, Stivaktakis J, Nikolopoulos T, et al. Ancier schwannoma of the true vocal cord. ORL J Otorhinolaryngol Relat Spec 2003;65:310-13.

6. Flickinger FW, Lozano RL, Yuh WT, Sachs MA. Neurilemoma of the tongue: MR findings. J Comput Assist Tomogr 1989; 13: 886-888.

 Van der Wall I, Snow GB. Benign Tumors and tumor-like lesions of the oral cavity and the oropharynx.
In : Cummings CW, Fredrickson JM, Harker LA, Krause CJ, Schuller DE, eds. Otolaryngology Head and Neck surgery. 2<sup>nd</sup> ed. Mosby-Year Book: St. Louis 1993: 1237-47.

 Yang SW, Lin CY. Schwanomma of the upper lip: case report and literature review. Am J Otolaryngol. 2003; 24: 351-54.

9. Kawakami R, Kaneko T, Kadoya M, Matsushita T, Fujinaga Y, Oguchi K, et al. Schwanomma in the

sublingual space. Dentomaxillofac Radiol. 2004; 33: 259-61.

10. Nelson W, Chuprevich T, Galbraith DA, Enlarging tongue mass. J Oral Maxillofac Surg 1998; 56: 224.