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TONGUE SCHWANNOMAS: A RARE CASE REPORT

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ABSTRACT

Schwannomas commonly occur in the head and neck but infrequently involve the oral cavity and rarely affect the tongue. Here we are presenting clinical and histopathological feature of 36-year-old female presenting to our OPD (outpatient department) with tongue lesion. The lesion was asymptomatic. We had done local excision of the lesion and sample sent for histopathological examination. On histopathological examination reveals a circumscribed submucosal lesion comprising alternate hypocellular (Antoni A) and cellular (Antoni B) zones. The Antoni B areas shows plenty of verocay bodies in the form of nuclear palisading along acellular materials confirmed it was schwannoma of tongue. No recurrences were observed on clinical follow-up. Schwannoma of the tongue, although rare, should be separated from other types of lingual nerve sheath proliferations and tumors.

KEYWORDS: Schwannoma, Tongue neoplasms, Antoni A, Antoni B, oral cavity.

INTRODUCTION

Peripheral nerve sheath tumors commonly occur in the head and neck region but are rarely encountered in the oral cavity. The reported frequency of oral peripheral nerve sheath tumors among all lesions affecting the oral cavity is approximately 0.2%, the majority of which are neurofibromas.[1,2,3]

Schwannomas seldom involve the oral region. Among intraoral sites, the tongue is the most commonly affected location, but overall lingual examples of schwannoma remain infrequent.[1,4]

In this case report, the clinical and pathological characteristics of the uncommon case of schwannoma of tongue evaluated.

CASE REPORT

A 36-year-old female came to outpatient department with complaining of lesion over anterior two third of dorsal surface of tongue since 6 months .she was apparently all right 6 months back when she noticed a swelling over the dorsum of tongue. It was insidious in onset and gradually progressive in nature. she had negative history of trauma or oral bleed. Not giving any history related to odynophagia, dysphagia, change in voice or any sign related to aspiration. She did not have any comorbidity like Diabetes mellitus, Hypertension, Tuberculosis or Bronchial asthma. Family and Medical history was not significant.

General examination was normal

Ear and Nose examination shows normal findings.

Intraoral examination shows the lesion over dorsal surface of tongue which was approximately 2.5cm×2cm×1.5cm in size. On palpation the surface of lesion was smooth, firm in consistency and adherent to the dorsal surface near the left lateral border of tongue with no any pulsations. (Fig 1.) It was non tender and does not bleed on touch.

Based on history and clinical examination differential diagnosis of lesion could be pyogenic granuloma, traumatic ulcer, aphthous ulcer, tuberculosis ,dermoid cyst, fibroepithelial polyp, fibromas, lipomas, leiomyoma, rhabdomyomas, haemangiomas, schwannoma.

After all haematological and serological work up the lesion was excised in toto under local anaesthesia with bipolar cautery and sent for histopathological reporting.

RESULT

The histopathological report of the tongue lesion shows a circumscribed submucosal lesion comprising alternate hypocellular (Antoni A) and cellular (Antoni B) zones. Fig (3). The Antoni B areas shows plenty of verocay bodies in the form of nuclear palisading along acellular materials confirmed it was schwannoma of tongue. No recurrences were observed on clinical follow-up of the patient for 6 months. (fig 2)

Fig. 1: Clinical picture showing lesion over dorsum of tongue.

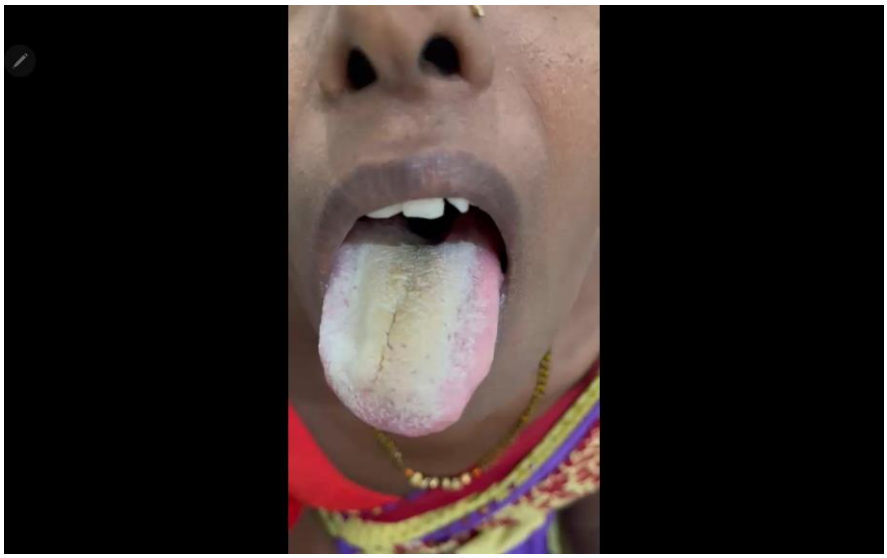

Fig. 2: Post operative picture showing completed resolution of lesion.

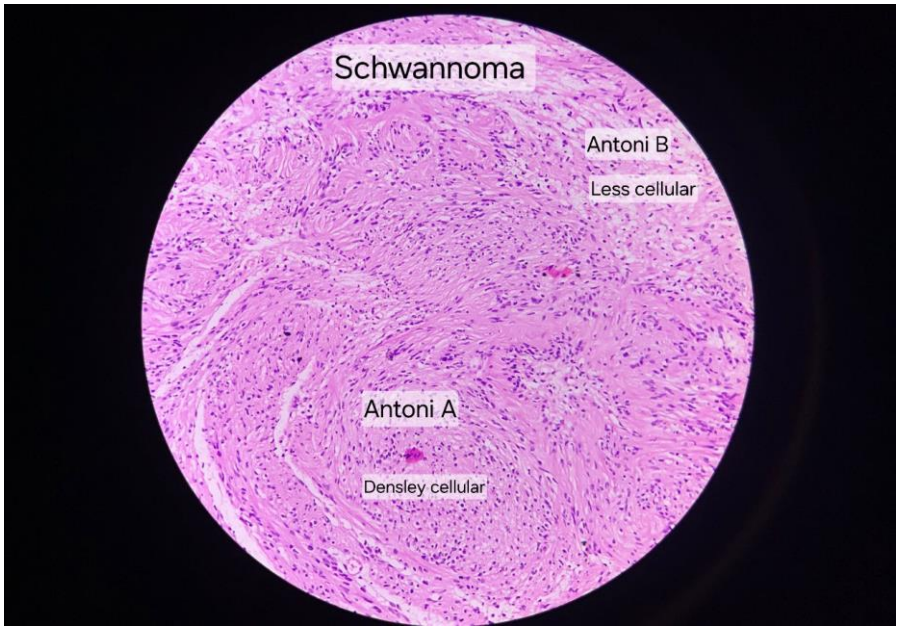

Fig. 3: Microscopic picture of schwannoma showing Antoni A and Antoni B zones.

DISCUSSION

Schwannoma (neurilemmoma) is a benign tumour of nerve sheath origin, apparently derived from the Schwann cells, that may arise from any myelinated nerve fibre. Approximately 25-45% of schwannomas arise in the head and neck region[5] but only 1% have an intraoral origin.[6] The intraoral lesions have a predilection for the tongue, followed by the palate, floor of mouth, buccal mucosa, and mandible.[7] These are the articles showing similarity with our case report. Schwannomas may occur at any age. However, most reports suggest that the majority of tumors located in the oral cavity arise between the age of 10 and 40 years.[8]

There were no known predisposing factors in our case. However, Quintarelli[9] believes that trauma may be the cause, which would explain why schwannomas are frequently located in an easily traumatized area, such as the tongue and especially the tongue tip.

In our case, clinically the tumour appears as a smooth-surfaced, well-circumscribed, and encapsulated mass which was non tender. Similarly, In study done by Yao - Chung Hsu et al, shows the presenting symptoms and signs in patients with oral cavity schwannomas depend on the size and location of the tumour. Pain and neurologic deficit may be absent, and a visible or palpable mass is frequently the only presenting sign. Patients with schwannomas of the base of tongue tended to present with dysphagia or a feeling of a lump in the throat.[10]

In our case histopathological report is confirmatory which is similar with different studies showing same report. In study done by Enzinger FM et al **t**he differential diagnosis of lingual tumor includes neurofibroma, fibroepithelial polyp, fibromas, lipomas, leiomyoma's, rhabdomyomas, hemangiomas, lymphangiomas, benign salivary gland tumors, and malignancy. It is difficult to make a diagnosis from the gross finding; therefore, the definite diagnosis of a schwannoma is often made histopathologically, not clinically. Microscopically, schwannomas are easily distinguishable from other tumor types in routine sections by virtue of their classic histological features and diagnosis is confirmed by the strong immunostaining of the S-100 protein.[11] Two microscopic patterns of schwannoma are known to coexist: Antoni A and B. In the Antoni A pattern, elongated cells with cytoplasmic processes are arranged in fascicles in areas of moderate to high cellularity, with little stromal matrix. Spindle-shaped nuclei are aligned in parallel rows forming a typical palisading pattern. When two rows of palisading nuclei have enclosed between them a space filled with amorphous collagen, this arrangement is called a Verocay body. In the Antoni B pattern, the tumor is less densely cellular and composed of very loosely arranged Schwann cells set in a meshwork of reticulum fibres and microcytes. As indicated earlier, the neural crest marker antigen S-100 is common to supporting cells of the peripheral and central nervous systems. Immunostaining is particularly strong in the Antoni A areas,[11] while expression of the antigen is reduced in Antoni B areas or malignant tissue.[12] The S-100 protein was useful in our series for confirming the diagnosis of schwannoma and distinguishing it from neurofibroma and other neural lesions.

The therapeutic option for schwannomas is surgical resection. The surgical approach can be trans oral or trans hyoid resection, the choice of which is based on tumor size and location. The primary objective is complete resection. Radiation therapy is not indicated because schwannomas exhibit a high degree of radio-resistance.[13] Recurrence is rare unless the resection of the tumor is incomplete. Malignant transformation is exceedingly rare, although malignant transformation of a benign solitary schwannoma has been reported by some authors.[8] However no malignant changes develop in our case. Patient remained tumor-free after complete excision.

CONCLUSION: Tongue base schwannoma, though a benign condition, can be challenging for an otolaryngologist. They pose a significant threat to airway, therefore early diagnosis and treatment are vital. Thus, it must be considered as one of the differential diagnosis in benign tumors of tongue base.

Following complete resection, complications are rare and the prognosis is good.

Conflicts of interest: None

REFERENCES

1. Tongue Schwannoma: A Clinicopathologic Study of 19 CasesLester D. R. Thompson,Stephen S. Koh,Sean K. Lau Head and Neck Pathology, 2020; 14: 571–576.
2. Salla JT, Johann AC, Garcia BG, Aguiar MC, Mesquita RA.Retrospective analysis of oral peripheral nerve sheath tumors inBrazilians. Braz Oral Res., 2009; 23: 43-8.
3. Alotaiby FM, Fitzpatrick S, Upadhyaya J, Islam MN, Cohen D, Bhattacharyya I. Demographic, clinical and histopathological features of oral neural neoplasms: a retrospective study. Head NeckPathol, 2019; 13: 208–14.
4. Cherrick HM, Eversole LR. Benign neural sheath neoplasm of theoral cavity. Report of thirty-seven cases. Oral Surg Oral Med OralPathol, 1971; 32: 900-9.
5. WilsonJA, McLaren K, McIntyre MA, von Haacke NP, Maran AG. Nerve-sheath tumors of the head and neck. Ear Nose Throat J, 1988; 67: 103-110
6. Lopez JI, Ballestein C. Intraoral schwannoma. A Clinicopathologic and immunohistochemical study of nine cases. Arch Anat cytol pathol, 1993; 41: 18-23
7. Krolls SO, MacGinnis JP, Quon D. Multinodular versus plexiform neurilemmoma of the hard palate. Report of a case. Oral Surg Oral Med Oral Pathol, 1994; 77: 154-7.
8. Barbosa J, Hansen LS. Solitary multilobular. Schwannoma of the oral cavity. J Oral Med, 1984; 39: 232-5.
9. Quintarelli G. Contributo allo studio dei neurinomi del cavo orale. Acta Stomatol Patav, 1956; 3: 1-16.
10. Schwannoma (neurilemmoma) of the tongue Yao-Chung Hsu,Chung-Feng Hwang,Ruey-Fen Hsu,Fang-Ying Kuo and Chih-Yen Chien Acta Oto-Laryngologica, 2006; 126: 862-865
11. Enzinger FM, Weiss SW. Soft tissue tumors, 2nd edn.St Louis: CV Mosby Co; 1988; 719-57.
12. Hood IC, Qizilbash AH, Young JE, Archibald SD. Needle aspiration cytology of a benign and malignant schwannoma. Acta Cytol, 1984; 28: 157-64.
13. Gallo WJ, Moss M, Spapiro DN, Gaul JV. Neurilemmoma: review of the literature and report of five cases. J Oral Surg, 1977; 35: 235-6.