

CASE REPORT

SCHWANNOMA OF THE TONGUE - A CASE REPORT

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ABSTRACT: A case report of an 18-year-old young girl presented with a slow-growing, painless swelling on the right side of the tongue since 4 years. This was associated with disturbances in mastication. Examination revealed a 3 cm x 4 cm, globular smooth, mobile mass on right side of the tongue. There was no neurological deficit and no neck nodes palpable. She underwent excision of the mass under general anaesthesia. Complete enucleation with primary closure was carried out. The patient had an uneventful postoperative recovery and histopathological evaluation was consistent with schwannoma. The patient is recurrence free till date.

KEYWORDS: Schwannoma, Neurilemmoma, Tongue, Oral.

INTRODUCTION: Schwannoma or neurilemmoma are benign, slow growing, usually solitary and encapsulated tumor, originating from Schwann cells of the peripheral, autonomic and cranial nerves.¹⁻⁴ First, it was identified by Virchow in 1908.⁵ Approximately 25-45% of all schwannomas occur in the head and neck.⁶ with the parapharyngeal space being the most common site.⁷ Intraoral schwannoma accounts for 1% of all head and neck region tumors.⁸⁻¹⁰ and are commonly seen at the base region of tongue.^{8,11,12} We report a patient with a schwannoma of the anterior part of the tongue, that was excised intraorally.

CASE REPORT: A 18-year-old young girl presented with a slow-growing, painless swelling on the right side of the tongue for 4 years duration. She complained of, disturbance in mastication. There was no pain or bleeding. Examination revealed a 3 cm x 4 cm, globular mobile mass with a smooth surface, on the right lateral border of tongue. The margins were well demarcated (Figure-1 and 2). There was no neurological deficit and no neck nodes palpable. The clinical impression was of a benign tumour of the tongue. FNAC result was benign epithelial tumor of the tongue. Therefore, imaging studies were not performed. She underwent excision of the mass under general anaesthesia via intraoral approach. Incision along the lateral border over swelling given and followed by complete enucleation with primary closure was carried out. Intraoperatively the mass appeared well encapsulated and a good cleavage plane was easily found. The mass was totally excised and the surgical specimen was an ovoid soft tissue mass with a thick capsule. The patient had an uneventful postoperative recovery. The mobility of the tongue was good. On histological examination finding was consistent with schwannoma (Figure-3). At postoperative review there were no stigmata of multiple neurofibromatosis. There was no recurrence after till date follow up.

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Fig. 1: Dorsal aspect of tongue



Fig. 2: Lateral aspect of tongue

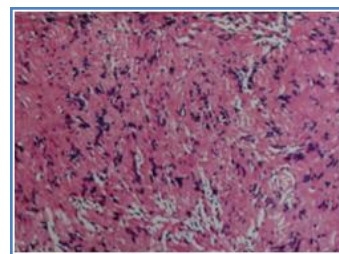


Figure. 3

DISCUSSION: Schwannoma or neurilemmoma are benign, slow growing, usually solitary and encapsulated tumor, originating from Schwann cells of the peripheral, autonomic and cranial nerves.¹⁻⁴ First, it was identified by Virchow in 1908.⁵ Approximately 25–45% of all schwannomas occur in the head and neck.⁶ with the parapharyngeal space being the most common site.⁷ Intraoral schwannoma accounts for 1% of all head and neck region tumors⁸⁻¹⁰ and are commonly seen at the base region of tongue.^{8,11,12}

Identification of the originating nerve may be difficult. In more than 50% of intraoral lesions, it is not possible to differentiate between tumors of the lingual, hypoglossal and glossopharyngeal nerves.¹³

Etiology is still unknown and the disease is generally asymptomatic.¹⁴ Schwannomas usually present as a solitary lesion. When multiple, however, they can be associated with neurofibromatosis. The differentiation between schwannoma and neurofibroma is essential because an apparently “solitary” neurofibroma may be a manifestation of neurofibromatosis.¹⁵ Approximately 15% of patients with neurofibromatosis will have malignant transformation in one or more lesion, which is in marked contrast to the typical behavior of a schwannoma.¹⁶

Histopathologically, the tumor tissue consists of so called Antoni A and B type cells. Type A tissue shows densely packed, elongated spindle cells, while type B tissue has more myxoid consistency. In addition, haemorrhage from adjacent tissue, necrosis, hyalinization and cystic degeneration, may also occur.¹⁷

Magnetic resonance imaging (MRI) is superior to other imaging modalities, for examination of the base of tongue. On MRI, a schwannoma is smooth and well demarcated. This tumor is isointense to the muscle on T₁ – weighted images and homogeneously hypointense on T₂- weighted images.¹⁸

The differential diagnosis of lingual schwannoma, benign lesions like granular cell tumors, salivary gland tumors, leiomyomas, rhabdomyomas, lymphangiomas, haemangiomas, dermoid cysts, lipomas, inflammatory lesions and lingual thyroid and malignant lesions like squamous cell carcinoma, sarcomas.¹⁹

Schwannomas of the tongue have been treated by surgical excision. The most common approach was the transoral route. This is an obvious choice for approaching these tumors since most are easily accessible via this route. Several other approaches have also been reported to have success including submandibular¹¹, suprahyoid pharyngotomy²⁰, and transhyoid²¹ approaches. All of these approaches were used for base of tongue schwannomas that were deemed difficult to approach by the transoral route. More recently, the use of CO₂ laser for excision of a base of tongue schwannoma has also been reported.²² The goal of surgical therapy is to complete resection. If this is accomplished, recurrence is rare.²¹

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Radiation therapy is not indicated because schwannomas exhibit a high degree of radioresistance.²³ Prognosis is excellent as malignant transformation of schwannoma is an exceptionally rare event and can safely be disregarded.

CONCLUSION: Although the incidence of schwannoma in the tongue is low, it should still be kept in mind when making a diagnosis. They are most often diagnosed in adults but can also occur in younger age group although not that often. Schwannoma of the tongue is a relatively rare tumor of the head and neck. Transoral resection allows for removal of this tumor in a manner that precludes recurrence, avoids causing morbidity of tongue function, and remains the standard approach for treatment of the vast majority of these tumors. The chance of malignant transformation of these tumors is exceedingly unlikely.

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