

# Schwannoma Of Oral Tongue: A Rare Benign Neoplasm.

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## Abstract

A rare case of schwannoma of tongue in a 28-year-old female is reported here. The patient presented with a slowly progressive mass over the dorsum of tongue without any impairment of tongue movement. Complete surgical excision of the tumour was performed and the histological evaluation of the excised specimen was consistent with schwannoma. A brief discussion of the case along with the differential diagnosis of such lesions is discussed.

## INTRODUCTION

A schwannoma is a benign neoplasm of schwann cell origin. It usually presents as a slow growing encapsulated mass that is typically asymptomatic <sup>1</sup>. Extracranially, about 25% of all schwannomas are located in the head and neck, of which only 1% show an intraoral origin. In the oral cavity, these tumours may arise from the tongue, palate, buccal mucosa, lip and gingivae <sup>2</sup>. Thus, oral cavity being an unusual site for occurrence of these tumours prompted us to report this case.

## CASE REPORT

A 28-year-old female presented to us with a slowly growing, painless swelling on right side of the tongue of 3 months duration. There was no history of any trauma, fever, and difficulty in movements of tongue or taste disturbances.

Examination revealed a 1cm X 1 cm in size, firm, non-tender, submucosal, non-ulcerated mass involving the dorsum of oral tongue on the right side (Figure 1).

## Figure 1

Figure 1: Showing lesion on right dorsum of oral tongue

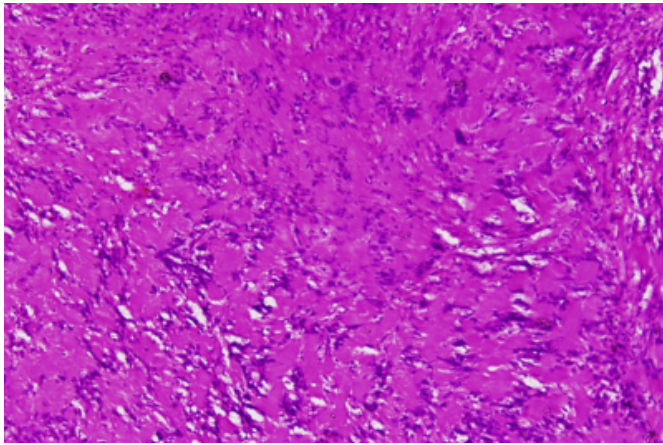


Tongue movements were apparently normal and the rest of the oral cavity was found to be normal on examination. There was no cervical lymphadenopathy and the general condition of the patient was normal.

The routine blood and urine investigations were within normal limits and ELISA for HIV was non-reactive. Patient underwent excision of the mass under general anaesthesia. The per- and postoperative period was uneventful. The histopathological evaluation of the excised specimen revealed a schwannoma (Figure 2).

**Figure 2**

Figure 2: Microphotograph showing palisading cells with eosinophilic cytoplasm and fusiform nuclei. H & E Staining, 150 X.



The patient was regularly followed up and was last seen 15 months following the surgery without any evidence of recurrence.

**DISCUSSION**

Schwannomas of the hypoglossal nerve are rare tumours, mostly arising from the intracranial part or are dumb-bell shaped with both intracranial and extracranial components<sup>34</sup>. Schwannomas arising from the peripheral segment of hypoglossal nerve are still rarer with a very few cases reported in the literature<sup>567</sup>.

Schwannomas show no gender predilection, and may arise at any age. However, the peak incidence is between the third and sixth decades<sup>56</sup>. Our patient was a 28-year-old female. These lesions usually present as slow growing masses in the sublingual region or the ventral or dorsal aspect of tongue. Neurological weakness of the tongue may or may not be present<sup>23</sup>. Our patient had no neurological weakness of the tongue.

The diagnosis is based on the histopathological evaluation, which shows two characteristic patterns. In Antoni type A, there is an orderly arrangement of parallel cells with dark-staining fusiform nuclei arranged in bundles separated from each other by areas of relatively acellular fibrous tissue. In the more common Antoni type B, or reticular pattern, there is a looser reticular arrangement with a fewer cellular elements and a more disorderly arrangement of nuclei. Areas of degeneration may be seen. The tumour also shows pale cells with foamy appearance containing lipid, which are responsible for the yellow colour of the tumour<sup>89</sup>. These

tumours must be differentiated from neurofibromas, which are more frequently associated with neurological weakness and have a much stronger tendency for malignant transformation<sup>9</sup>. Other tumours which may resemble a schwannoma are granular cell tumours, irritation fibroma, hemangioma, lipoma, pyogenic granuloma, leiomyoma, adenoma and lymphangioma<sup>16</sup>. These tumours can be easily distinguished from a schwannoma on the basis of the characteristic histological appearance of the latter.

A complete surgical excision with an attempt to preserve the nerve (wherever applicable) is the treatment of choice for these tumours. These tumours do not respond to radiotherapy<sup>3</sup>. Recurrences are not seen after complete removal<sup>1</sup>. Our patient was also managed similarly with complete excision of the tumour.

In conclusion, schwannomas of the hypoglossal nerve, although rare, should be included in the differential diagnosis of well-circumscribed tongue masses. The definitive diagnosis requires a histopathological evaluation. A complete surgical excision is usually curative in such lesions.

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