

# Schwannoma of Tongue an Unusual and Rare Entity

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## Case Report

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## Abstract

**Introduction:** Schwannoma, also called neurilemmoma, was first described by Verocay in 1908. It is a slow growing benign tumor arising from the schwann cells of nerve sheath. Approximately 25-45% of all schwannomas occur in the head and neck region. In the head and neck region only 1% occur intraorally.

**Case report:** We report the rare case of schwannoma of tongue in 17 year-old male patient who presented with progressive swelling of tongue since last 1 year. Local examination revealed 2x3 cm circumscribed mucosal covered swelling on the right lateral border of mobile tongue with no other significant findings. It was excised completely via peroral approach. Histopathological examination confirmed it to be schwannoma of tongue.

**Conclusion:** Schwannoma should be considered as possible differential diagnosis of any progressive intraoral painless swelling irrespective of age and sex.

**Keywords:** Schwannoma; Neurilemmoma; Neurofibroma; Neurogenic tumor; Tongue schwannoma

## Introduction

Schwannoma, also called neurilemmoma, was first described by Verocay in 1908 [1,2]. It is a slow growing benign tumor arising from the schwann cells of nerve sheath. It is a solitary and encapsulated tumor which can arise from any nerve with two notable exceptions, the optic and olfactory nerves both of which lack Schwann cell encasement hence are not involved [3]. Approximately 25–45% of all schwannomas occur in the head and neck region [4]. The most commonly affected nerve by schwannoma is the vestibulocochlear (VIII) nerve (acoustic neurinomas) [2,5,6]. Schwannomas are rarely found perorally (only 1%) with tongue being the most common peroral structure involved [3,7,8]. It has no predilection for sex or race and it is usually seen

between the third and sixth decades of life [9]. Schwannoma tongue usually appear as a painless and slowly enlarging mass, but when it grows to a certain size it may lead to dysphagia, voice changes, and breathing difficulties [10]. Given the close proximity of hypoglossal, glossopharyngeal and lingual nerves in tongue it is difficult to know the exact origin of Schwannoma [9]. Though the malignant transformation of head and neck schwannomas is rare several cases have been reported [11,12] in the literature, including one occurrence in the tongue [13]. The goal of treatment is complete excision of the tumor, which results in low rates of recurrence [14]. The most common approach used is transoral approach, with a very low rate of morbidity and recurrence even in

the large lesions [15]. Recently CO<sub>2</sub> laser has also been used for excision of a base of tongue schwannoma [16].

### Case report

We report a rare and unusual case of schwannoma of tongue in a young male. A non smoker and non alcoholic male patient of 17 years age presented with history of swelling of tongue from last 1 year. It was slowly progressive and painless with no other significant history. There was no significant past medical or surgical history. Local examination revealed 2x3 cm circumscribed mucosal covered swelling on the right lateral border of mobile tongue, which was firm in consistency and non tender as shown in (Figure 1) below. The base of tongue, floor of mouth, retromolar trigone were free and apparently normal. No restriction of tongue movements was seen nor was any cervical lymphadenopathy felt. All the blood investigations were normal. Fine needle aspiration of the swelling was done which revealed benign mesenchymal nature of the lesion, with possibility of neurogenic tumor. The tumor was excised perorally en mass, shown in (Figure 2). The sample was sent for histopathological examination which revealed the presence of elongated tumor cells arranged in eosinophilic cords and compact ovoid bodies (verocay bodies) with palisading, confirming the diagnosis of Schwannoma as shown in (Figure 3).



Figure 1: Pre operative picture showing mucosal lined swelling on lateral border of tongue right side.



Figure 2: Intraoperative picture of peroral excision of the tumour showing the shiny and encapsulated surface.

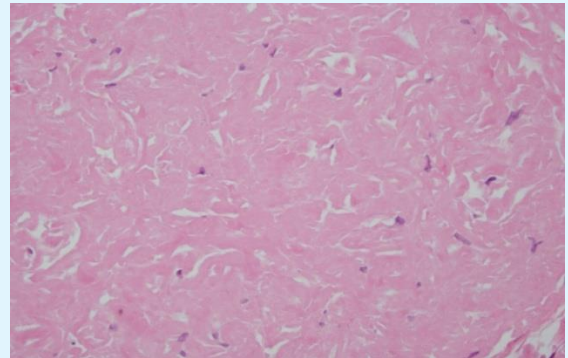


Figure 3: Histopathology of schwannoma, showing eosinophilic cords and compact ovoid bodies (verocay bodies) with palisading.

### Discussion

Schwannoma is a slow growing benign tumor arising from the schwann cells of nerve sheath. Approximately 25-45% of all schwannomas occur in the head and neck region [4]. An intraoral site is rare, constituting only about 1% [7]. The peak incidence of Schwannoma is between the third and sixth decades of life, with no predilection for sex or race [10]. In our case it was young male of 17 years of age only. Although the tongue is the most common site of intraoral schwannoma there are, only 44 cases of schwannoma of tongue reported in the English literature in the last 20 years [17]. Clinically, schwannomas may be indistinguishable from other encapsulated benign tumors, like lipoma, haemangioma, fibroma, lingual thyroid, benign salivary gland tumors, rhabdomyoma, leiomyoma and lymphangioma, so biopsy and histological examination are essential for correct diagnosis.

### Conclusion

Schwannoma should be considered as possible differential diagnosis of any progressive intraoral painless swelling irrespective of sex and age. Complete excision forms the main treatment modality with low rate of recurrence.

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