**Case Report**

**Tumor of nerve sheath origin: a case report**

Dr Joyce Sequeira, Dr Vijoo Rajkumar  
Dept of Oral and Maxillofacial surgery, Yenepoya dental college, Derlakatte, Mangalore, India

*Corresponding author*  
Dr Vijoo Rajkumar  
Email: vijoo.rajkumar@hotmail.com

**Abstract:** Schwannoma is the non aggressive well encapsulated benign tumor. It can be arises from any nerve which have Schwann cells. It is common in head and neck region. Most common site is the tongue and buccal mucosa. We are presenting a case report in a 55 year old female in which schwannoma was seen on hard palate with the history of slow growing and painless swelling on the hard palate. Schwannoma recurrence is very rare and surgical excision is the choice of treatment.

**Keywords:** schwannoma, hard palate, nerve sheath.

**INTRODUCTION**  
Schwannoma is a benign, painless, well encapsulated, slow growing tumor of head and neck region which is originated and derived from Schwann cell of the nerve sheath [1, 3, 5]. It is also known as neurilemoma, neurinoma and Schwann cell tumour [2,4]. It can arise from any cranial nerves except CN1 and CN2, which doesn’t have Schwann cells, Peripheral nerve, or autonomic nerve that contains Schwann cell [1, 3]. Approximately 25-45% of the lesions are seen in head and neck region in which 80% of the lesions arise from vestibulo cochlear nerve. Intraoral Schwannoma are rare and accounts less than 1% of head and neck region [1, 3, 4]. Most common site for intraoral Schwannoma is tongue followed by buccal mucosa, palate, gingiva and lips [1]. The exact aetiology is not known but cases due to traumatic cause have been reported [5]. The incidence is mainly in 3rd and 4th decade of life but it can occur in any age and both male and female are affected with slight predilection in female [4, 6]. Normally, Schwannoma are solitary lesion but it can be present in multiple if it is associated with neurofibromatosis and intra osseous lesions are very rare [2]. The article represents a case of intra osseous lesion of Schwannoma which is located in the posterior part of the hard palate.

**CASE REPORT**

A 55 years old female reported in our Dept of maxillofacial surgery, yenepoya dental college, Mangalore with the history of swelling over the right posterior part of the hard palate just medial to the upper right 1st and 2nd molar since for 2 Years. Swelling had increased in size gradually with no history of pain or pus discharge or paraesthesia. There was no relevant medical or personal history.

![Fig-1: Clinical examination](image1)

![Fig-2: Radiological examination](image2)
Clinical examination shows rounded swelling measuring 2x2cm at the posterior part of the hard palate. There was no erythematous or ulceration over the lesion. The mucosa over the swelling appeared normal and smooth. (Fig.1) The swelling was non tender and firm in consistency. The intraoral periapical radiograph of the region reveals radiolucency and well demarcated margin. (fig2) The clinical and radiographic findings give the provisional diagnosis of fibroma, minor salivary gland tumor or palatal cyst.

DISCUSSION
Schwannoma is the benign slow growing, painless, well encapsulated tumor originated from nerve sheath which contain Schwann cell. It can be present at any age but it is mainly seen in 3rd and 4th decade of life. The exact etiology of Schwannoma is not known. Schwannoma involved only the nerve sheath which is adjacent to the parental nerve but it can compress the nerve of origin. It can transform into malignancy but it is exceptionally rare [7]. The size of Schwannoma ranges from about 2-20cm in diameter with the smaller tumors appearing white, fusiform, round and firm [10]. The larger tumors are usually irregular, lobulated and grey or yellowish white. It has been distinguished into two types- central and peripheral Schwannoma in which intraosseous lesion is central type and soft tissue lesion is peripheral type [9].

In 1910, Verocay reported the first case of Schwannoma [8]. Cranial nerve 8 (vestibulo cochlear) is the most commonly affected nerve in head and neck region. Intra orally, tongue is the most affect followed
CONCLUSION
Schwannoma is a solitary benign tumor of nerve sheath origin. Schwannoma in Head and neck region is quite rare. Clinical diagnosis is difficult to differentiate from other soft tissue or hard tissue lesion. It should be rule out only with histological examination. Since it is a benign lesion, recurrence is very rare and prognosis is good.

REFERENCES
13. Wright BA, Jackson D; Neurilledenomas located in palate 7 cases, tongue 4 cases, submandibular region or oral floor 3, buccal mucosa 2, mental skin 2, lip 2, gingiva 1, temporal region 1.Chi et al.; [17] has reported that Schwannoma of the jaw occurred in the age range of 8–72 years, with the average age of 64 years, and there is a definite female predilection.

In this case, the lesion was slow growing, non symptomatic, well circumscribed swelling. After clinical and radiographic finding, the swelling mimicked diagnosis of palatal cyst, fibroma or minor salivary gland tumor. Schwannoma at the palatal region is relatively rare comparing to other site of the oral cavity. As in this case, the lesion was located medial to the 1st and 2nd molar of the upper right jaw. Radio graphically, the tumor appears unilocular, well circumscribed and slight sclerotic margin was seen. (fig2) Bony and root resorption, cortical thinning, and peripheral scalloping can be evident [17, 18]. In our case, the lesion was removed and delivered as a whole mass, round, smooth and well demarcated measuring around 2cm in diameter. Fig(4). The bony resorption was appreciated at the site of the lesion. There was no any underlying attached tissue to the lesion.

Histologically, tumor is composed of a mixture of two cellular patterns Antoni A and Antoni B. Antoni A areas are composed of compact spindle cells with twisted nuclei arranged in bundles or fascicles. Antoni B variant is less cellular and less organized, representing degenerated Antoni A areas composed of haphazardly arranged spindle or oval cells within myxoid, loosely textured, hypocellular matrix punctuated by micro cyst, inflammatory cells and delicate collagen fibers [1-18]. Fig-5, 6. Surgical excision is the treatment of choice since the lesion is benign and well encapsulated. The treatment outcome is excellent and the recurrence is extremely rare [1, 3, 4].