

Surgical treatment of Schwannoma in lower lip: Case Report

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Abstract:

Introduction: Of unknown aetiology, the schwannoma is a benign tumor that originates from the Schwann cells of the peripheral nerves. Around 25% to 45% of these tumors affect the head and neck region and are rare when affect the oral cavity. Presents itself as a lump of smooth surface, soft consistency and sessile. Histologically presents two standards, being the first known as Antoni A and the second, called Antoni B. **Objective:** To present a case of schwannoma in lower lip. **Case report:** Male patient sought specialized care of a maxillofacial surgeon due to volume increase painless in lower lip. An incisional biopsy was performed and the diagnosis was of schwannoma. The lesion was removed in your entirety, the patient is well and no signs of recurrence. **Conclusion:** The schwannomas occur infrequently in head and neck region, and it is rare when the lip is the site of involvement. The treatment of choice is surgical excision.

Keywords: Schwann Cells; Lip; Neurilemmoma

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INTRODUCTION

First described in 1910 with the nomenclature of Neurilemmoma, schwannoma, as it is also called, is a benign tumor that originates from the Schwann cells of the peripheral nerves¹. Slow growing, this tumor is well encapsulated and can occur in any cranial nerve, which contains Schwann cells, except the olfactory nerves and optical are extensions of cerebral white matter².

When the head and neck region, the schwannomas occur around 25% to 45%. Although your occurrence is rare in intraoral region, when it happens, tongue, palate and buccal floor are, respectively, the sites preferably³.

Although some authors consider the local trauma as cause of your injury, the aetiology remains unknown^{3,4}. Commonly, the schwannoma demonstrates himself as a lump of smooth surface, soft consistency, sessile base, where growth is slow and the size can be variable⁴. The histopathological study of the lesion to be classified as two types, in which the cell pattern is organized in the form of Palisade is the kind Antoni A; While, in the second type, called Antoni B, cells are disorganized in a myxoid tissue⁵.

Just as in the histopathological finding, the schwannomas can be presented in two forms, namely: peripheral, in which the lesion is found in soft tissue and, where the tumor is found inside the bones and is considered the rarest form of the disease⁶.

Although they can occur in any age group and, as much as I have no fondness for genre, the schwannomas occur more frequently patients between the second and fifth decades of life, presenting a slight preference for the female gender, with a ratio of 1.6:1 when compared to male¹.

CASE REPORT

Male patient with 63 years, sought dental office complaining about the appearance of a nodular lesion on the lower lip. Patient ex-smoker and hypertension using Somalgin Cardio, Olmetec HCT and Amlodipine Besylate, denied other comorbidities, medications and allergies.

The examination showed firm nodule, smooth surface, color similar to mucosa, painless, no bleeding, measuring in your greatest extent 1 cm in midline region of the lower lip (Figure 1). The patient denied history of trauma in the region, didn't know inform with accuracy the time of injury evolution, only that it showed slow growth. An incisional biopsy was then held and the pathological result of neuroma in encapsulated palisade was obtained (Figure 2).



Figure 1. Presence of lump in the midline region of the lower lip.

In a second surgical time, excisional biopsy was performed in lower lip. The procedure was performed under local anesthesia and consisted of a large wedge-shaped incision, which was sutured with Mononylon 4.0 using sutures in the region of skin and mucosa region in points and lip with Vicryl 4.0 (Figure 3). The lump was removed, because it was wrapped, which made it easy to your removal (Figure 4).

The final diagnosis was schwannoma. The patient is well, without motor and sensory deficit in the lower lip. Follow up of ten months ago and, so far, no sign of recurrence of injury (Figure 5).

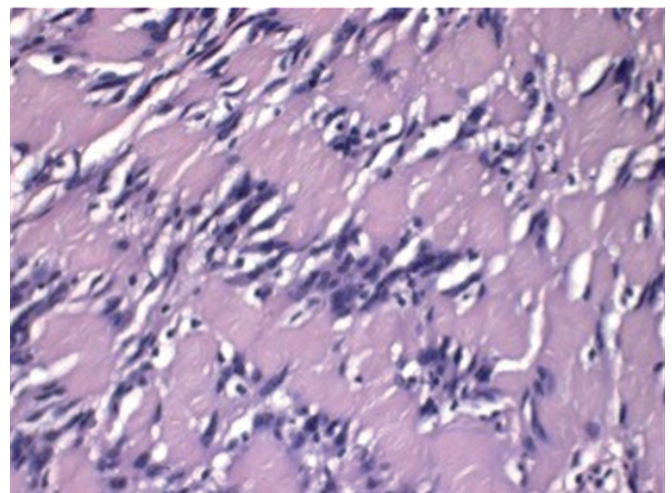


Figure 2. Photomicrograph showing injury default Antoni A the showing beams arranged and acellular areas.



Figure 3. Perioperative image during excision of the lesion. Suture for tissue approximation after excision of the lesion.



Figure 4. Image showing the encapsulated lump.



Figure 5. Ten months after lesion removal, with no signs of recurrence.

DISCUSSION

The schwannomas are benign neoplasms, encapsulated, they receive also the nomenclature of Neurilemmoma⁷. Prasanna Kumar et al.¹ added two more names as synonyms of the injury, being called neurinoma and perineural fibroblastoma. In your vast majority, the schwannomas do not cause damage to the neurological structures and have a predilection for the peripheral region of the cranial nerves, except the pairs I and II, since these are absent of Schwann cells^{3,7}.

This neural tumor is usually asymptomatic and may appear at any age, however, is found between the second and third decades of life¹. Raikwar et al.⁸ verified in their study that the age range is wider and the peak incidence varies between the third and sixth decades. On the other hand, Bhalerao et al.⁹ stated that the schwannoma can occur in any age group, however, when present in the oral cavity, the adults are more committed to the children. Which corroborates the present study.

According to Rathore et al.¹⁰, sites of involvement are, respectively, jugal mucosa tongue, soft palate, gums and lips. Bhalerao et al.⁹ cited also the involvement of the buccal floor, salivary glands and mental nerve region. The present study shows the involvement of the lower lip, which makes the schwannoma in this region a rare benign neoplasm, once the lip is made up of connective tissue, fat and skin, as well as blood vessels, nerves and salivary glands, soon, the lesions most commonly found in this region are fibroma, fibrous inflammatory hyperplasia, tumors of the salivary glands and mucocoele¹¹.

Although some authors suggest that the local trauma can be the triggering agent of injury, the etiology is still considered unknown^{3,4}. There's a slight predilection for female gender^{1,9}. In our study the affected patient is male. Intraosseous schwannomas are even more rare when compared to those that occur in the oral cavity. The posterior region of the mandible, being the intraosseous route of the inferior alveolar nerve, is the site of prevalence¹². Gadipudi et al.¹² showed that the radiographically neurilemmomas may show a wide variation of unilocular radiolucency for multilocular, with clearly defined limits and cortical bone expansion.

Clinically, the neural tumor presents as a solitary mass, of slow growth, smooth surface, usually asymptomatic. On palpation, the schwannoma can range from floating to solid cyst⁵. In the present work, the lesion was solid and with evolution time of slow growth. According to Laviv et al.¹³, schwannoma has a very characteristic histological pattern and your degree of cellularity is divided into two patterns: Antoni A and Antoni B. 1 presents the default cell organized in the form of Palisade; While the second type, the cells are disorganized in a myxoid tissue^{5,7,13}.

Schwannomas in the head and neck region constitute approximately 25% of the extracranial tumors being the vagus nerve and the cervical sympathetic chain places of greatest involvement. However only 1% presents intraoral source. The tumor can occur in peripheral or intracranial nerves. These, when involved, have greater predilection to occur along the acoustic nerve^{5,8}.

The differential diagnosis must be established with schwannoma in neurofibroma, lipoma, hemangioma, granuloma, leiomyoma and linfagioma¹⁴. When the tumor occurs in the lip, fibroma, fibrous inflammatory hyperplasia and mucocele are also part of the differential diagnosis¹¹. In this study, were established, lipoma, fibroma and fibrous inflammatory hyperplasia, mucocele as diagnostic hypotheses.

The treatment of choice is given by surgical excision and, when the tumor is not in the form required an encapsulated margin of normal tissue and careful separation of the nerve involved for preservation even function^{14,15}. The immunohistochemical analysis can complement the diagnosis, being positive marking for S-100 protein¹⁶. When performed the surgical excision of correct form, the prognosis is favorable, there is no relapse¹⁴⁻¹⁶. In the present work, the patient is well

with no signs of injury recurrence. The malignant transformation is rare, although some cases have been reported in the literature^{15,16}.

CONCLUSION

The schwannoma is a benign tumor that originates from the Schwann cells of the peripheral nerves. Occur infrequently in the oral cavity, being rare when they involve the lips. Despite the literature present a discrete predilection for female gender, men can also be affected. It's a tumor with low potential for malignant transformation, whose surgical excision is the treatment of choice. The professional must be prepared in front of the differential diagnosis and the correct treatment form, since the nerve involved should be held unharmed to preserve your function.

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