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SOFT PALATE SCHWANNOMA: A CASE REPORT

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ABSTRACT

Schwannoma (neurilemmoma) is one of the rare lesions that affect the oral mucosa. It is a benign lesion originated from Schwann cells which form myelin sheath of myelinated nerves. Most of the cases are asymptomatic, but in symptomatic cases, the signs and symptoms depend on its size and location. 25% of the cases of schwannoma occur in the head and neck but the intraoral cases form only 1% of the extracranial head and neck schwannoma. Most of the intraoral schwannoma occur in the tongue, but it can also affect other parts of oral cavity like palatal mucosa, floor of the mouth, cheeks, labial mucosa and jaws. In the following case report, a 28 years old female diagnosed with schwannoma in the soft palate which is extremely a rare case. The tumor was asymptomatic, slowly growing, round in shape, 5mm in diameter but the patient was obsessive from the mass. The lesion was excised by LED laser (epic x, Biolase) and sent immediately to histopathology. The laboratory report showed that the lesion was strongly positive to anti S100 protein. The patient after 10 months of follow up is well controlled and with no recurrence of the tumor.

KEYWORDS: Schwannoma, soft palate, LED laser.

1. INTRODUCTION

Schwannoma (neurilemmoma) is one of the rare lesions that affect the oral mucosa. It is first described in 1910 by Uruguayan neuro-pathologist José Juan Verocay. It is a benign lesion originated from Schwann cells in the myelin sheath of nerves with the exception of the olfactory and optic nerves. [1,2] About 25 to 40% of schwannoma affect head and neck, which is the most commonly affected site of this tumor; but intraoral cases form only 1% of head and neck cases of Schwannoma. Most of the intraoral schwannoma occur in the tongue. It can also affect the palate, floor of mouth, buccal mucosa, lips, and jaws. Most of the cases of schwannoma are asymptomatic unless the size of the tumor is large [5]. Schwannomas varying in size according to the content cystic degeneration. Important histopathological features of schwannoma comprise two phases tumor with regular cellular area called Antoni A that palisades to form Verocay bodies plus irregular myxoid hypocellular area called Antoni B. Additionally, there is intense immunoreactivity for S100 protein which is a marker for peripheral nerve sheath neoplasms. Appropriate investigations, including histopathologic techniques are important to approve the diagnosis of this lesion [6]. Treatment of this tumors is complete excision; the recurrence rate is very low after full removal [7,8].

In the following case report, a 28 years old woman diagnosed with schwannoma in the mucosa of the soft palate which is a very rare case.

2. PRESENTATION OF CASE

A 28 years old female attended oral medicine clinic in Duhuk city, Kudistan region, Iraq, complaining from asymptomatic mass in the soft palate. She observed the mass four months before attendance to the clinic. She tried to treat the mass by antibiotics without medical consultation but there was no benefit. She had no history of smoking or alcoholism but she complained from chronic hypotension and vertigo. No family history of the same problem.

Examination of the oral cavity showed a single, homogenous, pedunculated, soft, round in shape, 5mm in diameter, non-tender mass with smooth margins emerged from the left side of the soft palate just adjacent to the midline (Fig. 1). No regional lymphadenopathy was noticed during examination.

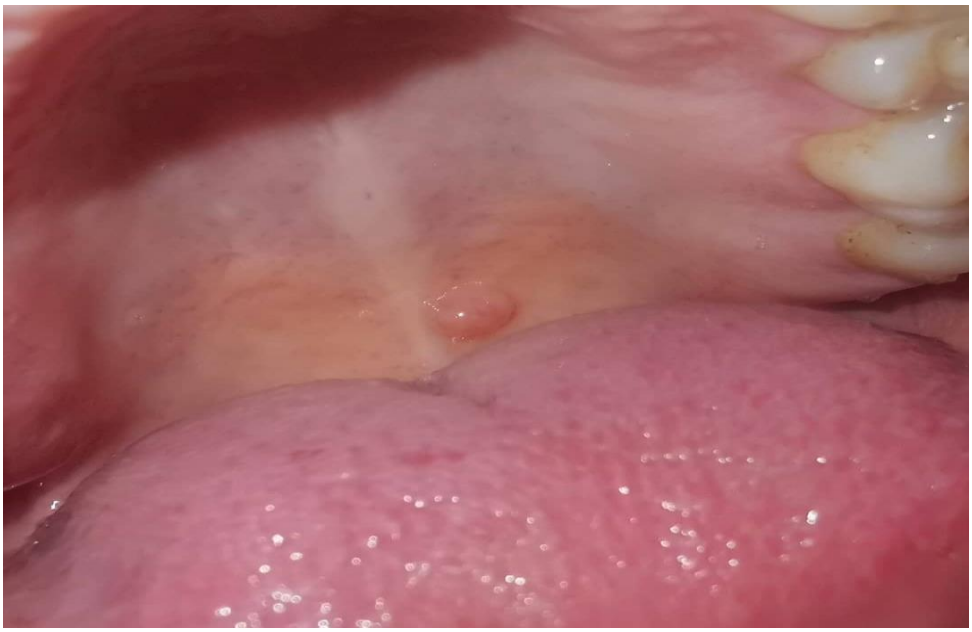

Fig. (1):-painless single soft round tissue lesion on the left side of the soft palate adjacent to the midline.

Treatment plan has been discussed with the patient of complete laser excision under local anesthesia to avoid profuse bleeding and for rapid relief and healing. The procedure explained to the patient. Laboratory investigation needed was also discussed with the patient. In the clinic, the tumor anesthetized with lidocaine and epinephrine (1: 80,000) and then totally removed by LED laser (epic x, Biolase) with a very simple bleeding with no suture need (Fig. 2).

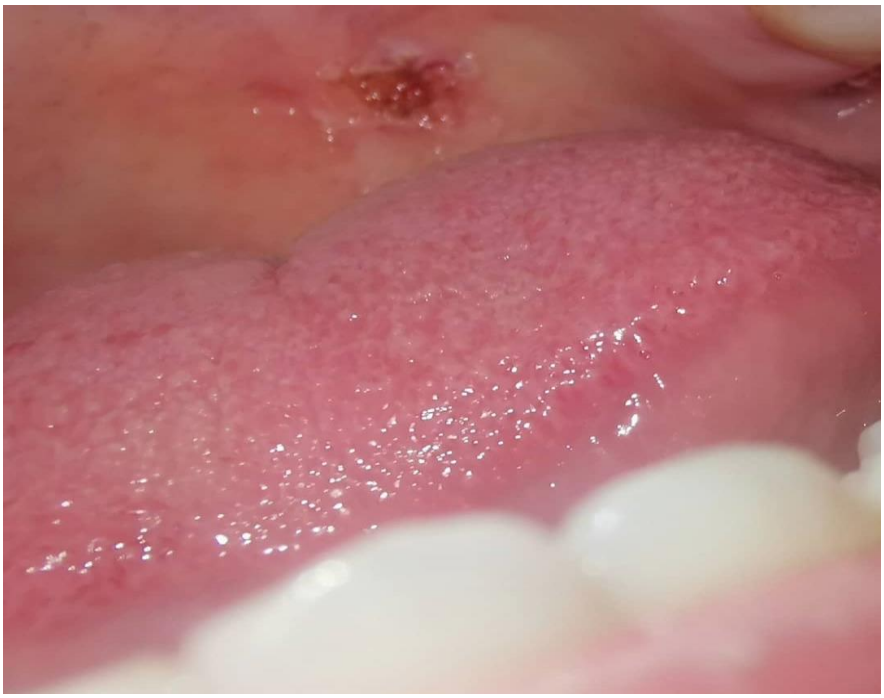

Fig. (2):-Complete laser excision of Schwannoma with simple bleeding and no suture needed.

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Macroscopic description showed a small round piece of tissue, 5mm across (Fig. 3). In microscopic examination, the mass comprised benign looking squamous epithelium with underlying nodule showed benign looking spindle cell proliferation (Antoni A) arranged in a palisading manner (Vercay bodies) with organoid pattern of growth. No malignant features seen. (Fig. 4).

Fig. (3):-Macroscopic appearance of the excised tomur showed a small round piece of tissue, 5mm across.

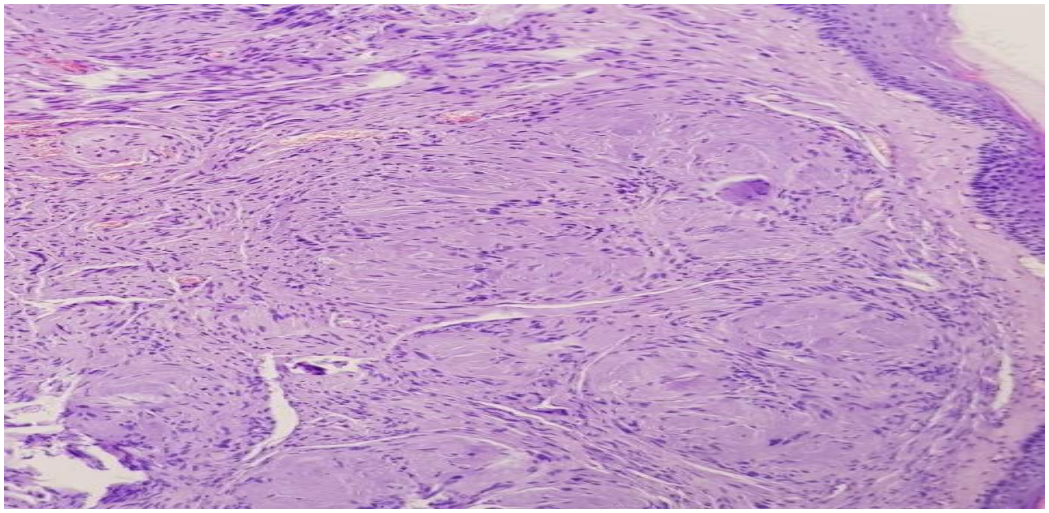

Fig. (4):-benign looking squamous epithelium with underlying nodule showed benign looking spindle cell proliferation (Antoni A) arranged in a palisading manner (Verocay bodies) with organoid pattern of growth.

Immunohistochemical (IHC) technique were used. The lesion showed intense immunoreactivity for S-100 protein (Fig. 5). The appearance was consistent with Schwannoma.

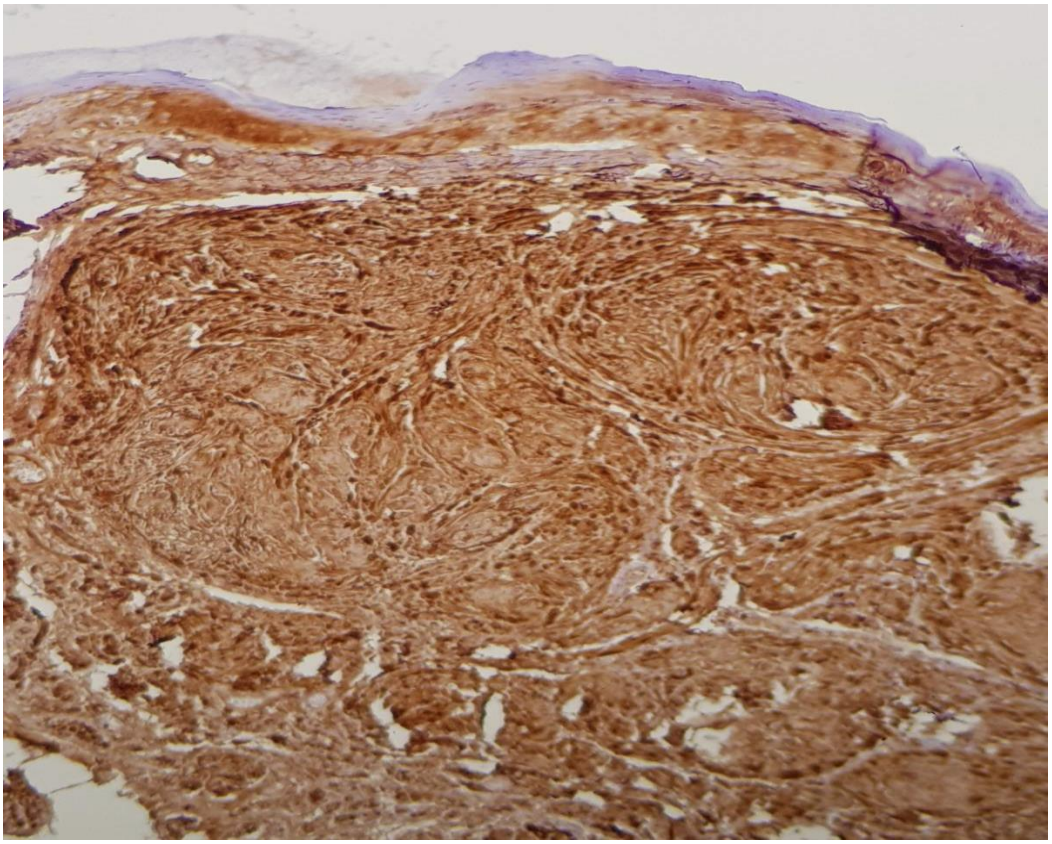

Fig.(5):- Immunohistochemical picture: tumor cells with intense immunoreactivity for S100 (20×).

The definitive diagnosis depending on morphological and immunohistochemical findings, was Schwannoma of the soft palate. Follow up has been done after 10 months in the same clinic, the patient was completely asymptomatic with normal mucosa and no signs of tumor recurrence.

3. CONCLUSION

Appropriate multiple approaches are needed to give the best care in tumors of head and neck. That's why, combination of clinical examination and laboratory investigations are substantial to reach the definitive diagnosis, like in the recent case.

Full surgical removal of the lesion is the gold standard with no recurrence.

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الورم الشفاني في الحنك اللين: تقرير حالة

الخلاصة

الورم الشفاني هو احد الآفات النادرة التي تصيب الغشاء المخاطي الفمي. هو عبارة عن آفه حميدة نشأت من خلايا شوان التي تكون غمد المايلين للاعصاب النخاعية. معظم الحالات هي بدون اعراض, ولكن في الحالات المصحوبة بالاعراض, الاعراض والعلامات تعتمد على حجم الآفة ومكانها. 25% من حالات الورم الشفاني تحدث في الراس والعنق ولكن الحالات داخل الفم تكون فقط 1% من حالات الورم الشفاني خارج القحف في الراس والعنق. معظم الورم الشفاني داخل الفم يحدث في اللسان, ولكن يمكن ان يحدث في اجزاء اخرى من التجويف الفمي مثل الغشاء المخاطي الحنكي, قاع الفم, الخدين, الغشاء المخاطي الشفوي والفكين. في تقرير الحاله التالي, انثى عمرها 28 سنه شخصت مع ورم شفاني في الحنك اللين والتي هي حالة نادرة جدا. الورم كان بدون اعراض, بطى النمو, مستدير الشكل, قطره 5 ملم ولكن المريض مهووسا من الكتلة. تم استئصال الآفة بجهاز الليزر الصمام الثنائي الباعث للضوء (ايبك اكس, بايوليز) وارسلت فورا الى التشريح المرضي. تقرير المختبر اظهر ان الآفة كانت موجبة جدا للبروتين المضاد لل اس 100. المريض بعد 10 اشهر من المتابعة كان مسيطر عليه بشكل جيد ولا تكرار للورم.

الكلمات الدالة: الورم الشفاني, الحنك اللين, ليزر الصمام الثنائي الباعث للضوء.