

CASE REPORT

Swelling of the Upper Lip...Not always a Mucous Retention Cyst!!

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Abstract:

Schwannoma, also known as neurilemmoma, is a solitary benign tumour arising from the Schwann cells. Oral schwannomas are rare and upper lip is an uncommon site. The diagnosis of schwannoma is typically made on histopathology and surgical resection is the treatment of choice. We report a case of swelling of the upper lip in a 26 year old male which was clinically diagnosed as mucous retention cyst and on histopathological examination, a diagnosis of schwannoma was offered.

Keywords: Neurilemmoma, Oral Cavity, Verocay bodies

Introduction:

Schwannoma also known as neurilemmoma/neurinoma is a benign Peripheral Nerve Sheath Tumour (PNST). The most common PNST include neurofibroma, schwannoma, palisaded encapsulated neuroma, traumatic neuroma and others [1]. Schwannoma most commonly affects middle-aged adults, and shows no gender predilection [2]. Head and neck region, accounts for 25 to 45% of all cases out of which only 1% of cases are located in the oral cavity, particularly in the tongue, followed by the palate, buccal mucosa, lip and gingiva [3]. Schwannomas are generally solitary; however, they can be multiple when associated with neurofibromatosis [4].

Here, we report a case of swelling of the upper lip which was clinically diagnosed as mucous retention cyst. Later, on histopathological examination a final diagnosis of schwannoma was made.

Case Report:

A 26 year old male patient, presented with swelling of the upper lip since 5 years which was painless and slow growing. On examination, the swelling was firm, measuring 2 x 2cm, with a glistening surface. The overlying mucosa showed slight redness. With a clinical diagnosis of mucous retention cyst, an excision of the lesion was done and the specimen was sent for histopathological examination. Postoperative period was uneventful. The specimen received showed a well encapsulated, circumscribed, pearly white nodule measuring 2 x 1.5 x 0.5cm and firm in consistency (Fig. 1). On cut section it was solid, pale white and homogenous (Fig. 2). Areas of necrosis, haemorrhage or cystic change were not seen. Microscopic examination showed an encapsulated tumour tissue comprised predominantly of hypercellular (Antoni A) and hypocellular (Antoni B) areas (Fig. 3). Hyper cellular areas were composed of spindle cells. The nuclei of these spindle cells were arranged in palisading fashion leading to formation of Verocay bodies (Fig. 4). Few dilated and congested blood vessels were also noted. There was no evidence of necrosis and atypical mitosis, so final diagnosis of schwannoma was offered.



Fig.1: Gross Photograph showed Well Encapsulated, Circumscribed, Glistening, Pearly White Nodule.



Fig.2: Cut Surface showed Solid, Pale White and Homogenous Areas

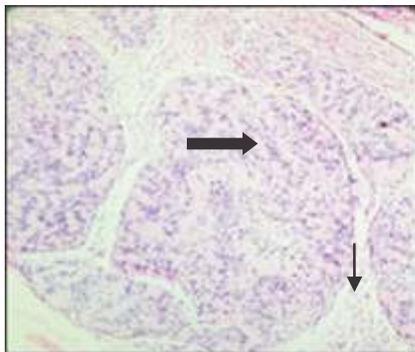


Fig.3: Photomicrograph showed Hypercellular (Thick Arrow) and Hypocellular (Thin Arrow) Areas. (H&E, 200X)

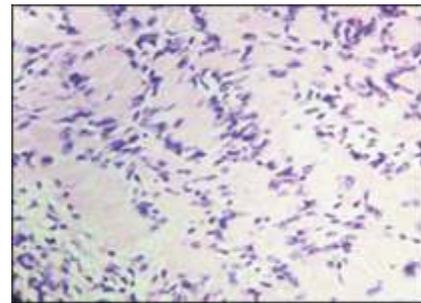


Fig 4: Photomicrograph showed Verocay Bodies (Central Acellular Eosinophilic Material with Peripheral Palisading of Nuclei). (H&E, 400X)

Discussion:

Verocay first described a group of neurogenic tumours in 1910, and named them as neurinomas [4]. Later, in 1935, another term which was proposed for these tumours was neurilemmomas/schwannoma. In the head and neck region, schwannomas mostly arise from glossopharyngeal, vagus, accessory and hypoglossal nerves, or the sympathetic chain and at times from the cervical or brachial plexus. In general, any nerve which has a Schwann cell sheath, may give rise to schwannomas [5].

Clinically, schwannomas are often asymptomatic presenting as a solitary, slow-growing, encapsulated nodule. Definitive diagnosis requires biopsy and microscopic examination. When associated with the upper lip, the main differential diagnosis includes fibroma, inflammatory fibrous dysplasia, neurofibroma, lipoma, mucous retention cyst, leiomyoma and benign tumors of salivary gland [2].

Schwannomas generally cannot be diagnosed preoperatively, unless the patient has a family history of the other neural lesions. For majority of the cases, oral schwannomas are located in the tongue. These lesions are primarily solitary,

however, localized multiple neurilemmomas in association with neurofibroma is seen in Von Recklinghausen's disease (neurofibromatosis I) and schwannomatosis [4].

On histopathological examination, schwannoma and neurofibroma show elongated cells with elongated nuclei located among bundles of collagen fibres. Neurofibroma is unencapsulated and is comprised of a mixture of Schwann cells, endoneural fibroblasts and perineural cells [3]. Schwannoma is an encapsulated tumor comprised of alternating hypercellular (Antoni A) and hypocellular (Antoni B) regions. Antoni A region consists of spindle shaped cells having pointed basophilic nuclei and poorly defined eosinophilic cytoplasm. This region also shows Verocay bodies which are made up of palisading spindle shaped cells around eosinophilic fibrils [6]. The indexed case also showed Antoni A and Antoni B areas with presence of Verocay bodies, hence a diagnosis of schwannoma was offered.

S-100 and lev-7 antigen reactivity on immunohistochemistry proves the Schwann cell nature of these tumours and confirms the diagnosis. Other markers like vimentin and glial fibrillary acid protein may also be helpful [7].

The treatment of choice for schwannoma includes conservative surgical removal [8]. As the prognosis is good and recurrence is rare, wide excision is not recommended [6].

Conclusion:

Oral schwannoma is a rare entity although, should always be kept as a differential diagnosis for any well circumscribed, painless nodule. In indexed case, clinical diagnosis was mucous retention cyst and only on histopathological examination the diagnosis of schwannoma was made.

Schwannomas have a very good prognosis and its treatment is almost curative with a simple complete excision.

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