SCHWANNOMA OF THE FLOOR OF MOUTH

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Schwannoma of the oral cavity is a rare clinical condition. We are presenting a case of 22 year old female with schwannoma of the floor of mouth which was excised transorally.

Keywords: schwannoma, floor of mouth.

INTRODUCTION:

Schwannoma, also known as neurilemmoma or neurinoma is an uncommon, usually solitary, slow growing, benign encapsulated neural tumor arising from the nerve sheath schwann cells of the peripheral, cranial or autonomic nerves. In the head and neck region, tongue is the most common site, followed by palate, floor of mouth, buccal mucosa, lips and jaws. It does not recur and malignant transformation is rare. Numerous diseases come in the differential diagnosis of benign tumor of floor of mouth. We present a rare case of schwannoma of the floor of mouth.

CASE REPORT:

A 22 years old female presented to our Out Patient Department with complains of painless, progressive swelling on the floor of mouth for 2 years. There was no history of trauma, systemic illnesses or any local infections. On examination, there was a pinkish, spherical, well defined, smooth, non tender, mobile swelling in the right anterior floor of mouth, measuring 3x3cm in size. The swelling was extending anteriorly from the level of right lower alveolus posteriorly till the level of right lower second premolar tooth and medially up to the frenulum of the tongue, not crossing the midline (fig.1). The overlying mucosa along with the adjacent structures was free. The swelling was non-compressible, non-reducible and non fluctuant. The adjacent oral mucosa revealed no abnormalities. Tongue mobility was normal. Simple gustatory testing to sweet, sour and salt yielded normal results. Fine needle aspiration was inconclusive, suggestive of vascular origin. The mass was excised by transoral approach (fig. 2,3). There was a well encapsulated, single, pinkish mass involving the right side of the floor of mouth. The cut section showed heterogenous, 3x3cm mass containing thick brownish material (fig. 4). The specimen was sent for histopathological examination. Histopathological examination of the mass was suggestive of schwannoma. It showed encapsulated mass with spindle cells dispersed in loose fibrillary matrix, hyalinised areas and myxoid material. There was no necrosis and mitosis. Typical Verrocay bodies were not seen. The patient's recovery was uneventful.

Fig. 1: Showing the swelling on the floor of mouth

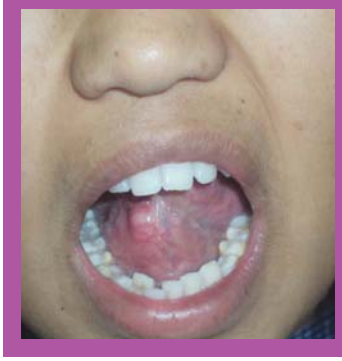


Fig. 2 : Showing excision of mass transorally

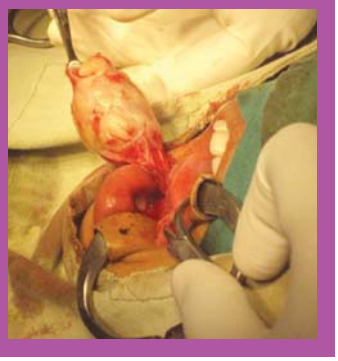
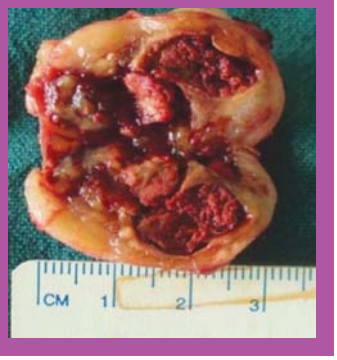


Fig. 3 : Showing the floor of mouth after removal of mass

Fig. 4 : Showing the cut section of mass



DISCUSSION:

Benign peripheral nerve sheath tumours rarely occur in the oral cavity and include schwannoma, neurofibroma, traumatic neuroma and palisaded encapsulated neuroma. Approximately 25% of the reported cases of schwannoma originate from the head and neck region.[1] In the oral cavity it is relatively uncommon, being found principally in the tongue, more frequently in the anterior portion.[1] The floor of mouth involvement as in our case is a rarity.[2] There are cases reported of schwannoma arising from the sublingual gland[2], mylohyoid nerve[3] or hypoglossal nerve.[4] In our case the tumour origin was not well

defined. Schwannoma can occur at any age, although when present in the oral cavity it tends to occur more often in adults than in children. These are typically slow-growing, solitary tumors.[1] The preoperative diagnosis is quite difficult because this is an infrequent tumor and is not usually suspected in the oral cavity.[5] Fine needle aspiration biopsy usually gives negative results.[5] In our case also the preoperative FNAC finding was inconclusive.

Schwannoma appears as a well-defined tumor. Classically two histological patterns are defined, Antoni A (with hypercellularity) and Antoni B (with hypocellularity).[1,5] The first type formed by fusiform cells with elongated nuclei arranged in a well-organized palisading pattern. Groups of fusiform nuclei, known as Verocay bodies, can frequently be seen. Antoni B tissue shows a disordered arrangement of cells distributed in a loose fibrillar matrix with areas described as microcysts. The immunohistochemical tests reveal the schwannoma cells to be positive for the protein S-100, a marker for the tumour of neural origin.[1,5,6] Surgical excision is the treatment of choice. The encapsulated form is enucleated easily, whereas the nonencapsulated requires normal tissue margins to avoid relapse.[1] If the nerve of origin is visualized, an attempt should be made to separate carefully to preserve function, although this is sometimes not possible.[3,4] In our case the connection with the nerve could not be seen. The prognosis is very good since it does not usually recur,[6] and malignant transformation is rare.

CONCLUSION:

Schwannoma represents a lesion not often encountered in clinical practice. The lesion is usually indistinguishable from other benign neoplasms. The final diagnosis should be done after histopathological examination and in some cases after immunohistochemical analysis. Schwannomas are managed by complete surgical excision, but wide excision is not recommended because it rarely show recurrence after surgery. Malignant transformation of schwannoma is an exceptionally rare event and can be safely disregarded.

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