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≅LINGUAL SCHWANNOMA: OUR EXPERIENCE

ABSTRACT

Schwannomas are benign tumors of nerve sheath and quite uncommon in oral cavity. The case of a 15 yr old male is presented who had a 4 months history of swelling on right lateral border of tongue associated with disturbance in mastication. Examination revealed a 2x2 cm globular and smooth swelling on right lateral border of tongue. Complete excision with primary closure was carried out. Histopathological examination of the surgical specimen was consistent with schwannoma.

INTRODUCTION

A Schwannoma is a benign, encapsulated, slow growing tumor arising from the neural sheath's Schwann cells of the peripheral, cranial or autonomic nerves.[1]It was first identified by Virchow in 1908.[2] About 25-40% of these tumors occur in head and neck region. A rare site for schwannoma is the oral cavity, it accounts for only 1% of all head and neck region tumors.[3]

A 15 yr old male patient (fig.1) presented with 4 months history of a slowly progressive painless swelling on right lateral border of tongue associated with disturbance in mastication without any pain or bleeding.

Examination of the oral cavity showed a swelling of 2x2cm on right lateral border of tongue. The swelling was non tender with a smooth surface and well demarcated margins. Examination of the rest of oral cavity revealed no other lesion. No regional lymphadenitis was detected. The patients' medical history was unremarkable.

Results of routine laboratory tests were within normal limits. MRI of the tongue (fig2) and oral cavity was performed and revealed a well-defined lobulated mass lesion exhibiting isointense signal on T_1 and hyper intense on T_2 images along the lateral border of the tongue. Other structures of the tongue and oral cavity were without pathomorphological signs. Fine needle aspiration cytology of the mass was suggestive of the lingual schwannoma.

Excision if the swelling was planned under general anaesthesia. The lesion was completely excised by intraoral approach(fig3) and surgical defect was closed. The patient had an uneventful postoperative recovery. Histopathological examination of the surgical specimen was suggestive of schwannoma.

DISCUSSION

Schwannomas or neurilemmomas are benign slow growing solitary and encapsulated tumors originating from Schwann cells of the nerve sheath[1].Schwannoma usually occurs in adults and although they can involve children but are not commonly seen in younger age group. There is no gender preference[4].The presenting feature of a tongue schwannoma is usually a tumour mass. Other symptoms include dyspnoea or dysphagia and depend on the location and size of the tumor.[5]

Schwannomas in the head and neck regions constitute 25% of all extracranial schwannomas but only 1% show intraoral origin[6,7].The intraoral lesions have a predilection for the tongue followed by the palate, floor of mouth, buccal mucosa and mandible[8].In the tongue, base of tongue is commonly affected[3] and the tip is least affected part.[9]

Identification of the originating nerve may be difficult. In more than 50% of intraoral lesions, it is not possible to differentiate between tumors of the lingual, hypoglossal and glossopharyngeal nerves.[10]

Diagnostic investigations include ultrasound scan, computerised tomography, magnetic resonance imaging and fine needle aspiration cytology. MRI is best choice in detecting the extent of the tumour and correlates well with operative findings.[11] Diagnosis is confirmed by histopathology showing the presence of Antoni A and Antoni B cells, nuclear palisading, whorling of cells and verocay bodies. Malignant lesions such as squamous cell carcinomas and sarcoma and benign lesions such as granular cell tumors, salivary gland tumours, leiomyoma, rhabdomyomas, lymphangiomas, haemangioma, dermoid cysts, lipomas, inflammatory lesions and lingual thyroid are the differential diagnosis of this entity.[12]

Treatment is always surgical and usually requires only an excision or enucleation of the tumor.[9] Radiation therapy is not indicated because schwannomas exhibit a high degree of radioresistance.[13] Prognosis is excellent as malignant transformation of schwannoma is an exceptionally rare event and can safely be disregarded.

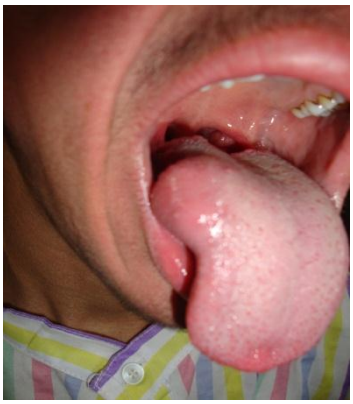

Figure 1

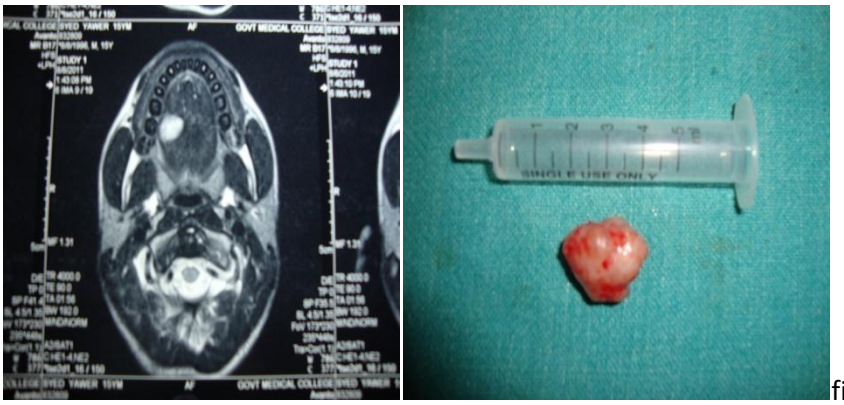 fig3

Figure 2

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