Case report

Lipoma of Tongue: a case report

Sikder MA[1], Mohibullah[2], Sultana N[3]

Abstract:
Lipoma is the benign tumor occurring at any anatomical site where fat is present. It may be evident for 1 to 5 percent of the entire benign tumor of the oral cavity. Lipoma of the tongue is extremely rare because tongue is totally devoid of fat cell. In this case study we report a case of lipoma of tongue. A 45 years old Bangladeshi female patient presented with this benign tumor at the left lateral border with dorsal and ventral surface of the tongue for which complete tumor excision was done.

Keywords: *lipoma; benign; tongue*

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Introduction:

Lipoma is the commonest benign fatty tumor composed of adult fat cells that are subdivided into lobules by septae of fibrous connective tissue.[1] In oral cavity and oropharyngeal region it is relatively uncommon neoplasm.[1] An intramuscular lipoma is a slow growing painless tumor commonly arises in the muscular region of the extremities, usually by diffuse infiltration of the striated muscle fibers but it is exceedingly rare in the tongue. [2]

We hereby report a case of intramuscular lipoma of the tongue, describing the clinical and histopathological characteristics.

Case Presentation:

A 45 years old Bangladeshi female was referred to Oral and Maxillofacial Surgery department of Bangabandhu Sheikh Mujib Medical University hospital, Dhaka presented with a history of a painless swelling in the left lateral border of the tongue. The patient noticed a swelling about 2 years back which

Fig:1/A : Pre-operative (lipoma of tongue)

Fig:2/A: Peroperative (Exposed Lipoma)

1. Dr.Morshed Asadullah Sikder, Medical Officer, Oral & Maxillofacial Surgery
2. Dr.Mohibullah, Honorary Medical Officer, Oral & Maxillofacial Surgery
3. Dr.Nahida Sultana , Honorary Medical Officer, Oral & Maxillofacial Surgery
Bangabandhu Sheikh Mujib Medical University Hospital, Dhaka, Bangladesh.

Corresponds to: Dr.Morshed Asadullah Sikder, Medical Officer, Oral & Maxillofacial Surgery, Bangabandhu Sheikh Mujib Medical University Hospital, Dhaka, Bangladesh. Email: drmatanvir@yahoo.com

Fig: 2/B : Peroperative excised mass (3 ×2 square cm)

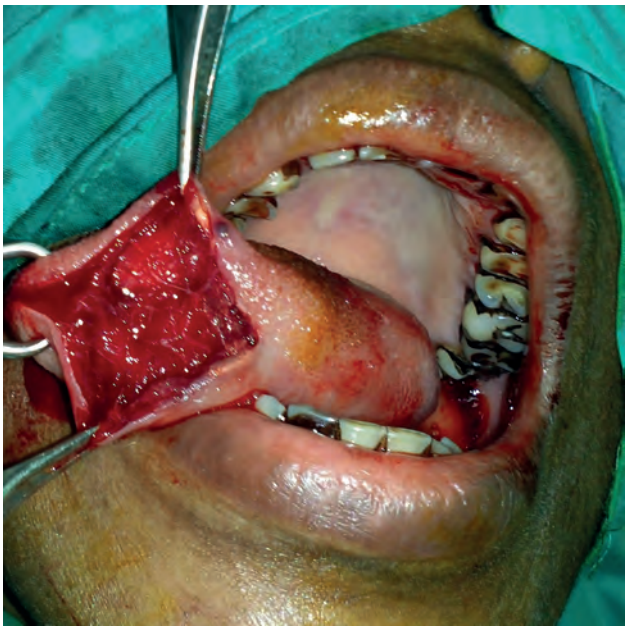

Fig: 2/C : Peroperative-After excision of mass

Fig: 3/A : After excision and healing

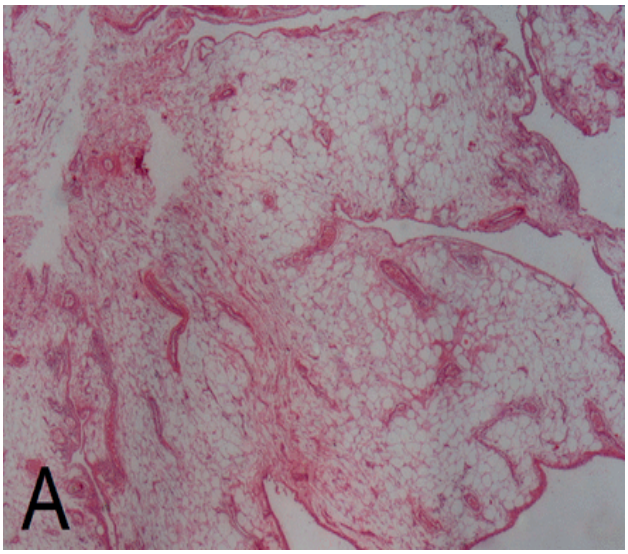

Fig: 4/A: Microphotograph showing mature fat cells with nuclei located peripherally, diffusely infiltrating the skeletal muscle fibres (H and E, 100×)

was progressively increasing in size. She was not initially alarmed but 6 month s later she observed difficulties in speech and taking of food.

There was no history of other tumor masses. Her medical condition was good, hematologic and biochemical parameters were within normal limits.

A clinical examination revealed a non tender, soft rubbery, not fluctuant, spherical mass on left anterior site of the tongue, measuring 3 ×2 square cm in diameter and was intending left lateral border, dorsal and ventral surface with tip of the tongue, which was suggestive of a benign growth. Her speech was not very clear due to bulkiness of the mass. To confirm our diagnosis, Fine Needle Aspiration Cytology was performed that suggested Lipoma.

With all aseptic precautions, under local anesthesia excisional biopsy of the tumor was performed. An incision was made through left lateral border of tongue. During dissection, the tumor was firmly attached and base infiltrated into the underlying tongue muscle. It was partially encapsulated with uniform fatty yellow appearance. The tumor was excised completely. The specimen was fixed in 10% buffered formalin and embedded in paraffin

stained with haematoxilin and eosin for histological examination.

Microscopic examination showed an unencapsulated lipomatous tumor composed of mature adipocytes (fatty tissue) with squamous epithelium diffusely infiltrating striated muscles fibers of tongue. Lipoblast, cytologic atypia, mitoses or necrosis were not observed. After excision the patient is well with no local recurrence after a 12 month follow up period.

Discussions:

According to World Health Organization classification of Lipoma recognizes as conventional Lipoma , benign lipoblastona , fibrolipoma, angiolipoma, Spindle cell / pleomorphic lipoma, myxolipoma,Chondroid Lipoma, osteolipoma, myolipoma, lipomatosis, lipomatosis of nerve, lipoblastoma and hibernoma.[3] It is indistinguishable from normal adipose tissue. Different studies evident only 4% of the tumors in oral cavity.[4] In this region buccal mucosa is the most common site. But tongue is the unusual site.[5-7]

Clinically it represents well circumscribed painless, solitary, rubbery, submucosal swelling. [5]

In our case report, patient complained painful swelling may be due to compression, traumatic movement of tongue and tongue bit. That's why a small portion at the tip of the tongue shows mild ulceration.

Lipoma is composed of mature adiposities commonly surrounded by a thin fibrous capsule that originated in mature fat cell.[8] The metabolism of the lipoma differs from that of the normal adipose tissue. The fat of lipoma is not used for energy production during starvation periods as happens with normal adipose tissue.[1]

In the ground of diagnostic imaging some author's advocated for CT scan and MRI. On CT scan, lipoma shows high density from 83 to 143 Hamsfield units with ill defined margin. The MRI shows, the strikingly high intensity signals on both T1 and T2 weighted images.[9] But considering patient's economic status we have confirmed preoperative diagnosis by clinical findings and FNAC. After excision of tumor we reconfirmed by histopathology.

The recurrence of lipoma should be noted if not excised adequately. However it rarely recurs in the oral cavity after complete excision.[10]

In our case no future recurrence is expected as the excision was complete.

Consent:

Written informed consent was taken from the patient and attendant for surgery and publication of this case report and images.

Competing interest: No competing interest.

Publication of this case report got approval from Ethics Committee of BSMMU

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