CASE REPORT

"Glossofibrolipoma" : An Unusual Presentation of Multiple Fibrolipomas on the Tongue

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ABSTRACT

Lipomas are slow-developing benign tumours composed of adipose cells depicted as "yellow epulis" by Roux in 1848. Lipoma occurrence is uncommon in oral cavity but even more rare in the tongue region. They present as yellowish, painless mass that may occasionally lead to functional and aesthetic complications. This paper describes a 55-year-old female having multiple tongue lumps that causes mastication difficulties. The lumps were excised in total from its base. The postoperative recovery was uneventful, and no complications were noted. The lumps were histopathologically identified as fibrolipoma which is a variant of lipoma. Histologically fibrolipoma shows infiltrative feature onto adjacent tissue, creating confusion in differential diagnosis. Thus, it is imperative that a careful histological assessment coupled with regular follow-ups are done especially considering the unusual development of fibrolipoma on the tongue.

INTRODUCTION

Lipomas are benign mesenchymal tumors consisting of adipose tissue commonly encountered at various parts of human body, though it is rare in oral cavity. Lipomas are named as "yellow epulis" by Roux in 1848 and are usually asymptomatic unless they reach a considerable size during which time they exert "mass-effect" upon nearby structures, causing complications. Lipomas usually present as painless, well-circumscribed, slow-growing lesions. Although they are encountered throughout the body, their prevalence in the oral region is rare. Previously cited studies have reported oral lipomas incidence rate ranging from 1% to 4.4%.[1,2]

Specifically, prevalence of lipoma on the tongue region is even rarer. Lipomas have several variants described by its histological features, encapsulation as well as local tissue invasion. The variable histological patterns of intraoral lipomas are categorized as simple lipoma, fibrolipoma, spindle cell lipoma, osteolipoma, sialolipoma, chondrolipoma, angiolipoma and intraosseous lipoma.[3] Compared to conventional lipoma, the other variants are rare particularly fibrolipoma that has dubious histological characteristics leading to possible diagnostic doubts. This paper endeavours to report a rare case of multiple fibrolipomas on the tongue.

CASE REPORT

A 55-year-old Malay lady was referred to the Dental and Maxillofacial Clinic, Sultan Ahmad Shah Medical Centre to consult regarding a gradually enlarging non-tender mass on her tongue for the past 2 years. One month prior to consultation, she had noticed another similar mass adjacent to the existing one. She denied any history of trauma, discharge or pain at the site but noted discomfort during mastication. She also denied similar swellings elsewhere on her body. There was no hoarseness of voice, no difficulty in swallowing nor constitutional symptoms. The patient is diagnosed with hypertension, diabetes mellitus type II, dyslipidaemia and gout for which she received treatment as well as regular follow-ups at primary healthcare clinic. The patient's family history and social history were unremarkable.

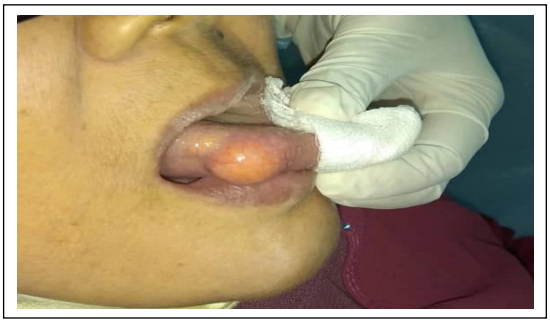

Figure 1: Two yellowish ovoid submucosal masses on the right lateral border of the tongue.

Intraorally, we noted a yellowish, smooth, sessile mass on the right lateral border of the tongue measuring about 2cm x 1.5cm x 1.5cm in size (Figure 1). Upon palpation, the mass was non-tender, non-pulsatile and was slip sign positive. Another similar featured lesion measuring 0.5cm at its longest dimension was identified posterior to the original mass. There was no generalized ulceration, bleeding, restriction in tongue movement, neurosensorial disturbances, facial swelling or regional lymphadenopathy. She was partially edentulous, retaining only two lower posterior teeth and does not use dentures. Our initial clinical impression was lipoma and an intraoral biopsy under local anaesthesia was planned. The procedure was performed by administering 2.2 ml Mepivacaine 2% with epinephrine 1:100,000 as local field block followed by a longitudinal incision at the lateral tongue edge (Figure 2).

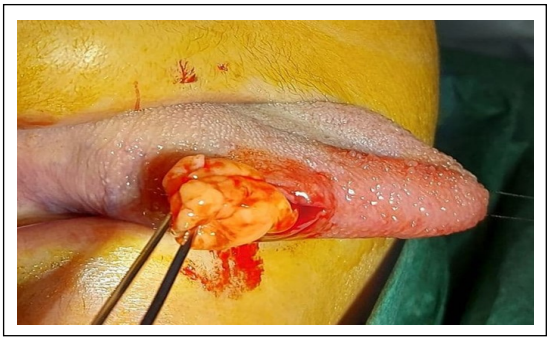

Figure 2: Total excision of lipoma under local anaesthesia.

Macroscopic examination indicated three independent well -encapsulated, smooth, yellowish lesions that were non-adherent to surrounding structures. The largest lesion measured 2cm x 1.5cm x 1.2cm as seen in Figure 3 while others measured 1 to 1.4 cm in its largest dimension. The lesions were excised completely, and specimens were sent for histopathological examination. The mucosa were reapproximated and closed using resorbable sutures. The postoperative recovery was rapid and uneventful. Histological examination of the specimen sections showed numerous well-circumscribed, mature adipose lobules intermixed with a prominent amount of fibrous connective tissues and scattered blood vessels (Figure 4) that was confirmed to be fibrolipoma. Regular post-operative review showed no signs of potential recurrence in the past 2 years.

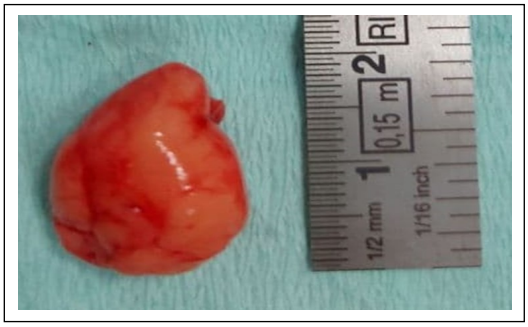

Figure 3: Gross specimen appears smooth surfaced, yellowish and well-encapsulated mass.

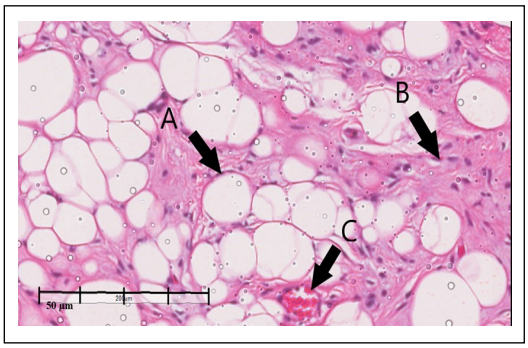

Figure 4: Histology of specimen depicting well-circumscribed, mature adipose lobules (A) intermixed with a prominent amount of fibrous connective tissues (B) and scattered blood vessels (C).

DISCUSSION

Fibrolipoma is a rare histological variant of lipoma described as mature adipocytes interlaced by stands of fibrous tissue and the fibrous component is markedly apparent even in the macroscopic analysis.[4] The abundant fibrous connective tissue coupled with potential ulceration and atrophic changes, implies that fibrolipoma may mimic infiltrative malignant lesion such as liposarcoma leading to possible doubts regarding diagnosis.[4] Recent systematic review stated that only 12% of intraoral fibrolipoma arises from tongue, the remainder originates from lip, buccal mucosa, buccal sulcus, floor of mouth , palate, and retromolar region.[5] Generally, lipomas are present in tissues with high adipose concentration; which does not

coincide with tongue tissue. Furthermore, occurrence of multiple fibrolipomas in the tongue is also very low making it even rare.

The exact etiopathogenesis of intraoral fibrolipomas remains elusive, but hypothesis includes sequalae of endocrinal imbalance, degeneration of fibromatous tumour or maturation of lipoblastomatosis.[6] Recent study suggests possible factors such as trauma, chromosomal abnormalities, chronic irritation, hormonal imbalance and metabolic conditions as well.[5] Additionally, peak incidence of oral lipomas ranges between 40 to 60 years which is consistent with our case presentation.[5] The same study stated that oral lipoma has no significant gender predilection which has generally been the consensus amongst most studies.

Clinically, tongue fibrolipomas are typically asymptomatic unless they enlarge to become space occupying lesion that leads to complications involving swallowing, speech and others.[4] The mainstay treatment for fibrolipoma usually entails surgical excision and the recurrence of such lesions afterwards are very low.[7] From the histopathological view point; due to greater composition of collagenous fibrous bands, fibrolipoma may exhibit pseudo-infiltration characteristics onto adjacent tissue resembling a malignant infiltrating lesion.[4] It is therefore essential to perform a proper histological evaluation to differentiate malignant form of lipoma from fibrolipoma. Additionally, the need for accurate histological diagnosis is relevant since fibrolipoma have greater proliferation rate compared to other simple lipoma variants.[4,6] It is the gist of this case report, to present the awareness to all regarding this variant of lipoma which can histologically mimic malignant features.

CONCLUSION

Lipoma of the tongue is quite a rare pathological occurrence; and it is further exceptionally uncommon if its variant is a fibrolipoma. It is necessary that the histological features of these lesions should be well scrutinized to prevent a misdiagnosis of malignancy. Surgical excision is still the treatment of choice and coupled with thorough examination, differential diagnosis, accurate histopathologic analysis and careful follow-up, such lesions can be managed well.

CONFLICT OF INTEREST

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