



Fibrolipoma of tongue: A rare case report

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Abstract

Lipomas are the most common soft tissue neoplasm that originate in mature adipose cells, representing 0.1 to 5% of all benign tumors of the mouth. The etiology of intraoral lipoma remains unclear, but the suggested pathogenic mechanisms include the "hypertrophy theory" which states that obesity and inadvertent growth of adipose tissue may contribute to formation of these oral lesions. Here, we present a case of fibrolipoma of tongue in 65-year-old female patient with a painless mass on the left lateral border of the tongue.

Key Words: Benign tumors, Fibrolipoma, Intraoral lipoma.

Introduction

Lipoma are the most common benign neoplasm out of which oral lipomas comprise only 1 to 4% of cases.^[1] About 15- 20% of the lipomas occur in the head and neck region.^[2] The etiology and pathogenesis of intraoral lipoma remains unclear, although mechanical, endocrine and inflammatory influences have been reported.^[3] Lipomas are commonly present as slow growing asymptomatic lesion with characteristic yellowish color and soft consistency. This condition is mostly occurred in adults.^[4] Intraoral Lipomas particularly occur in the areas of fat accumulation, especially the cheek, followed by the tongue, floor of the mouth, buccal sulcus and vestibule, lip, palate and gingiva.^[5] According to their histopathologic aspects, benign tumors of adipose tissue can be characterized as classic lipoma, fibrolipoma, intramuscular lipoma, spindle-cells lipoma, angioliipoma, salivary gland lipoma (sialoliipoma) pleomorphic lipoma, myxoid lipomas and atypical lipomas.^[6] Differentiating it from other benign tumors of adipose tissue is mandatory as it plays a major role in treatment plan and diagnosis.

Fibrolipoma rarely occurs in the oral and maxillofacial region and is classified as a variant of conventional lipoma by the WHO. Fibrolipoma of the oral cavity has been infrequently reported.^[7] Here, we present a rare case of fibrolipoma of tongue in a 65-year-old female patient with a painless mass on the left lateral border of the tongue.



Case report:

A 65-year-old female patient reported with chief complaint of painless mass on the left lateral border of the tongue since last 6 years. History of presenting illness revealed growth started 6 years back. It was initially small and has grown to the present size. The swelling was painless. Occasionally, the patient complained of discomfort while chewing food. On intraoral examination, a single, dome shaped, sessile growth was noted on the left lateral border of the tongue, whose size was approximately 1.5×1.5 cm in diameter, which was well circumscribed, smooth surfaced. The colour of the growth was normal to that of the adjacent mucosa. On palpation, the nature of the swelling was mobile, firm and nontender with slippery borders. Based on clinical examination, provisional diagnosis of a fibroma was given, and a first differential diagnosis of a lipoma was given, because of its consistency and slippery borders. Excision biopsy was planned under local anaesthesia. Excised specimen was 1.3 × 1.2 cm in size and was sent for histopathological examination. Histopathological picture revealed encapsulated fibrous connective tissue stroma showing bundles of collagen fibres arranged in haphazard manner having large number of adipose cells with eccentrically placed nuclei divided by fibrous septa. The overlying epithelium is parakeratinized-stratified squamous epithelium. By correlating both the above clinical and histological findings, a final diagnosis of an intraoral fibrolipoma was made.

Fig 1: Intraoral photograph showing swelling on the left lateral border of the tongue



Fig 2: Gross examination reveals single tissue bit measuring 1.3X1.2 cm, brownish white in color and firm in consistency





Fig 3: Photomicrograph reveals parakeratinized stratified squamous epithelium showing bundles of collagen fibres arranged in haphazard manner (4X)

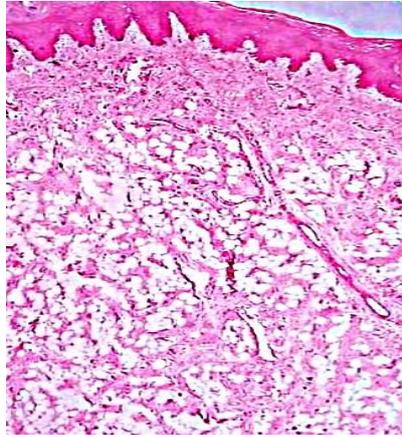


Fig 4 Photomicrograph reveals encapsulated fibrous connective tissue stroma showing large number of adipose cells (10X)

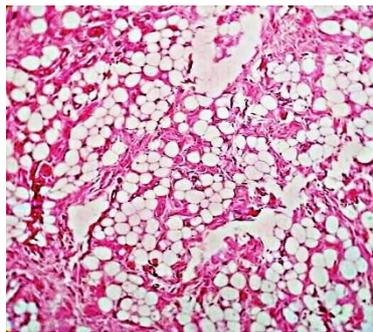
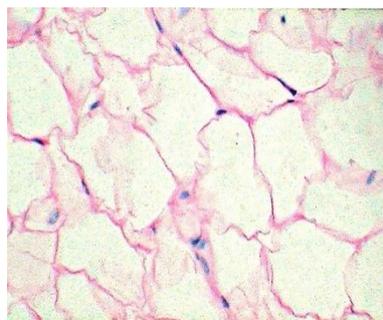


Fig 5: Photomicrograph showing adipose cells with eccentrically placed nuclei (40X)





Discussion:

Lipomas are benign mesenchymal tumors that originate in mature fat cells, relatively rare in the oral cavity compared with other lesions. Generally, are well-circumscribed nodule and encapsulated may be present in any region of oral cavity, however the buccal mucosa is the most prevalent followed by the tongue, lower lip and mouth floor.^[8] Lipoma was first described by Roux in 1848 in a review of alveolar masses, where he referred it as 'yellow epulis'. The pathogenesis of lipoma is uncertain but they appear to be more common in obese people.^[6] Furlong et al. found only 125 cases of oral lipomas over a period of 20 years, which again shows the rarity of this oral tumours.^[9] Very few reported cases of intra oral lipomas have shown rearrangements of 12q, 13q, and 6p chromosomes. Clinically, these are painless, mobile, sub-mucosal nodules, which have a yellowish colour. They can be sessile or pedunculated, and the consistency varies from soft to firm.^[10] Oral fibrolipoma are very rare; only a few cases documented so far. Since the proliferative activity of fibrolipoma is greater than the other variants, the need for accurate diagnosis is important.^[8] To the best of our knowledge, only about 43 cases of fibrolipoma of the oral cavity are described in the English literature. The site-frequency distribution is given in Table 1.^[7] Lipomas can occur in various anatomic sites, including major salivary glands and various parts of the mouth. The most common site of oral lipomas is the buccal mucosa, a region rich in fatty tissue, followed by the tongue, lips, floor of the mouth, palate and gingival. This pattern corresponds to the quantity of fat deposits in the oral cavity.^[11] Lipomas have the principal differential diagnosis of fibromas, which is composed of fibrous tissue and much more firm.^[8] In view of their similar clinical features, other tumors, such as thyroglossal duct cysts, ectopic thyroid tissue, pleomorphic adenoma, mucoepidermoid carcinoma, oral dermoid and lymphoepithelial cysts should also be included in the differential diagnosis.^[11] MRI scans are very useful in the diagnosis which CT scans and ultrasonography are less reliable. The histopathology remains the gold standard in the diagnosis of lipoma.^[8] Surgical resection is the treatment of choice for this tumor.^[12]

Table 1: Site distribution of oral fibrolipoma

Site	Number of cases reported
Buccal mucosa	18
Alveolus (including retro molar area)	3
Lateral border of tongue	5
Floor of mouth	4
Gingiva	2
Vestibular region	2
Palate	4
Lower lip and upper lip	3
Tonsil	1
Intra osseous lesion	1



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