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Case Report

Fibrolipoma Of Tongue: A Rare Case Presentation And Review Of Literature

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Abstract

Lipoma is a benign neoplasm of fat tissue, mostly seen on the trunk and proximal portions of the extremities. It's occurrence in the oral cavity is rare, particularly in the tongue. Fibrolipoma, an unusual histological variant account for about 25–40% of all tongue lipomas. On literature search, only 15 cases have been described in which histological diagnosis of fibrolipoma was specifically confirmed. This is a report of a rare case of fibrolipoma on the tongue, treated by means of surgical excision. Clinicians should be aware of these lesions in order to develop better clinical differential diagnosis.

Keywords: Fibrolipoma, Lipoma, Tongue

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INTRODUCTION

Lipomas are the most common benign neoplasms in almost all anatomical sites that present adipose tissue in their structure. But they have been considered very unusual growths in the oral cavity with a prevalence rate of 1/5,000 individuals [1-3]. The first description of oral lipoma was provided in 1848 by Roux in a review of alveolar masses and he referred to it as a 'yellow epulis' [3].

Oral lipoma may occur at various anatomical sites including the buccal mucosa, lips, tongue, palate, gingiva, and floor of the mouth. Although benign in nature, its progressive growth can cause interference with speech and mastication [4]. The etiology and pathogenesis of it is uncertain and most of the time, it represents a developmental anomaly, but they can also arise as a result of trauma. Few lipomas show rearrangement of chromosomes no. 12q, 13q, and 6p [3 & 5].

Histologically, fibrolipoma is one of the rare variants of classic lipoma in which neoplastic fat cells are embedded within dense collagen bundles [6]. We describe the case of a patient with a small fibrolipoma of the tongue.

Case presentation:

A 38-year-old male patient was reported to Narayana Dental College & Hospital, Nellore with a chief complaint of painless growth on the right side of the tongue since 5 years. No history of trauma was given. Initially, the lesion was small in size and had gradually increased to its present size. The growth was asymptomatic except for functional discomfort. His past medical history was non-contributory and his physical condition was good. The extra-oral examination was non-contributory. Intraoral examination revealed an oval-shaped solitary soft pedunculated exophytic growth on the right lateral border of the tongue, measuring approximately 1.5 X 1 cm in size. The surface of the lesion was smooth, pale pinkish in colour without any sign of ulceration. On palpation, it was soft to firm in consistency, compressible, non-tender, non-reducible, non-fluctuant, and non-pulsatile in nature (Figure 1). Routine haematological lab reports were normal.

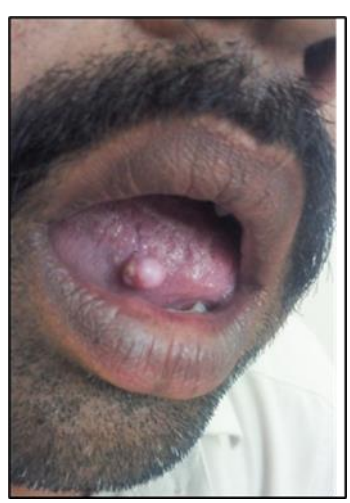

Figure 1: Photomicrograph showing pedunculated exophytic growth on right lateral border of the tongue

A clinical diagnosis of fibroma was given and the patient was advised for surgical excision of the lesion. After obtaining a written informed consent, excision of the lesion was performed under local anaesthesia providing aseptic conditions. The excised tissue was taken for histopathological examination. Microscopic examination of H&E section revealed a nodular mass of tissue surrounded by hyperplastic & atrophic parakeratinized stratified squamous epithelium. The underlying tissue just beneath the epithelium showed dense collagenized parallel bundles of fibrous tissue with minimum cellularity and vascularity. The deeper areas showed groups of mature adipocytes admixed with bundles of collagen fibers (Figures 2 & 3). With the above features, a

confirmatory diagnosis of fibrolipoma was made. Follow-up after one week and subsequent at 1 month revealed complete and uneventful healing. Follow-up of 6 months didn't show any recurrence.

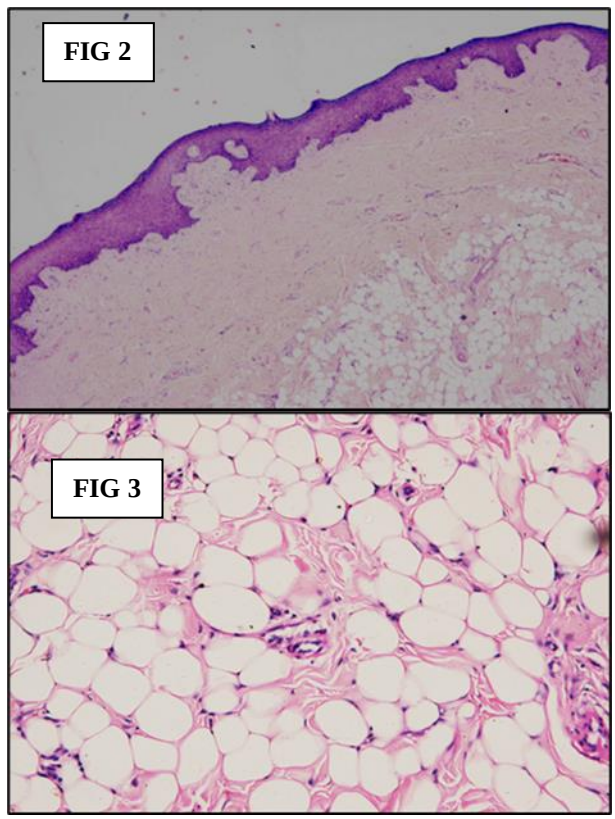

Figure 2: Photomigrograph showing adipose tissue admixed with dense collagen fibers and overlying epithelium (H&E staining, ×10) & Figure 3: Photomigrograph showing mature adipose tissue interspersed by thin bands of collagen fibers (H&E staining, ×40)

Discussion:

Lipomas are the most common benign tumors of fat. They represent 13–20% of head and neck tumors, and 1–5% of neoplasms of the oral cavity. In particular, tongue lipomas are extremely rare and represent 0.3% of all neoplasms of the tongue. Fibrolipoma, an unusual histological variant account for about 25–40% of all tongue lipomas. Only 15 cases of tongue fibrolipoma (including their case) were reported since 1912 and now we are presenting the 16th one [7] (Table 1).

Table 1: List of previous reported fibrolipoma cases of tongue

Author	Number of cases
Horton et al. (1968)	1
Dattilo et al. (1996)	1
Epivatianos et al. (2000)	2
Said-Al-Naief et al. (2001)	3
Fregnani et al. (2003)	1
Juliasse et al. (2010)	1
Manor et al. (2011)	3
Shi et al. (2014)	1
Camacho et al. (2014)	1
Iaconetta et al. (2015)	1

The most common site for fibrolipomas is the buccal mucosa, followed by the tongue. Both sessile and pedunculated fibrolipomas have been described [8]. It has been suggested that oral lipomas are more common in males, whereas oral fibrolipomas are more common in females and are more frequent during the fourth to the sixth decade of life. The present case was reported by a 38-year-old male.

Histologically, WHO classifies lipomas into: conventional lipomas, fibrolipomas, angiolipomas, pleomorphic lipomas, spindle cell lipomas, myxolipomas,chondrolipomas, osteolipomas, myolipomas, lipomatosis, perineural lipomas, lipoblastomas, and hibernomas [7]. Lipoma and fibrolipoma both are usually well-circumscribed and have a thin capsule. Fibrolipoma differs from the classic variant because the mature adipose tissue is interspersed by bands of fibrous tissue [8].

The etiopathogenesis of lipomas and fibrolipomas is still unknown, even though an alteration of the lipidic metabolism or an anomalous localization of fatty-fetal tissue in the tongue have been suggested. Previous study suggested that repeated mild trauma may also triggers fatty tissue proliferation [9].

Though tongue fibrolipoma is generally asymptomatic, may cause difficulty while chewing, swallowing or speech based on size and location of the lesion. Clinically several cases of fibrolipoma were diagnosed as ‘fibroma’, because of their semi-firm consistency. The proliferative activity of lipomas was examined by the expression of PCNA (proliferating cell nuclear antigen) and ki-67. The proliferation rate of fibrolipomas was greater than that of classic lipomas which indicates the need for accurate diagnosis of such variants [10].

Conclusion:

To the best of our knowledge, only 16 cases (including present one) of tongue fibrolipoma were reported in the literature search since 1912. The clinico-pathology of fibro-lipoma is distinct and shows an increased growth potential compared with the classic lipoma. Clinicians should be aware of this unusual variant to

develop better clinical differential diagnosis. Many of the times clinicians thought that it as a simple fibroma, because of its semi-firm consistency. Therefore, we recommend that histopathological examination of excised tissue is a gold standard investigative procedure along with clinical data for correct diagnosis, treatment, and prognosis.

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Nil

Conflicts of interest

There are no conflicts of interest

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