



Fibrolipoma: A Rare Histological Variant at an Unusual Site In Oral Cavity.

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ABSTRACT:

lipomas are benign tumors of adipocytes. According to WHO there are 13 histological variants of lipoma. Fibrolipoma is an uncommon histological variant of lipoma which has a rare occurrence in Oral Cavity. Around 50 cases have been reported in literature and the review revealed lingual gingival lesions are infrequent. The lesions are usually asymptomatic and clinical features are similar to other benign lesions hence diagnosis is established on histopathological examination. The proliferative activity of fibrolipoma is greater than the other variants therefore the need for accurate diagnosis is important. Here, we present a case of fibrolipoma which appeared clinically as tumor like growth arising from lingual aspect of right mandibular molar area.

Key Words: Fibrolipoma, gingiva, lipoma, fibroma

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INTRODUCTION:

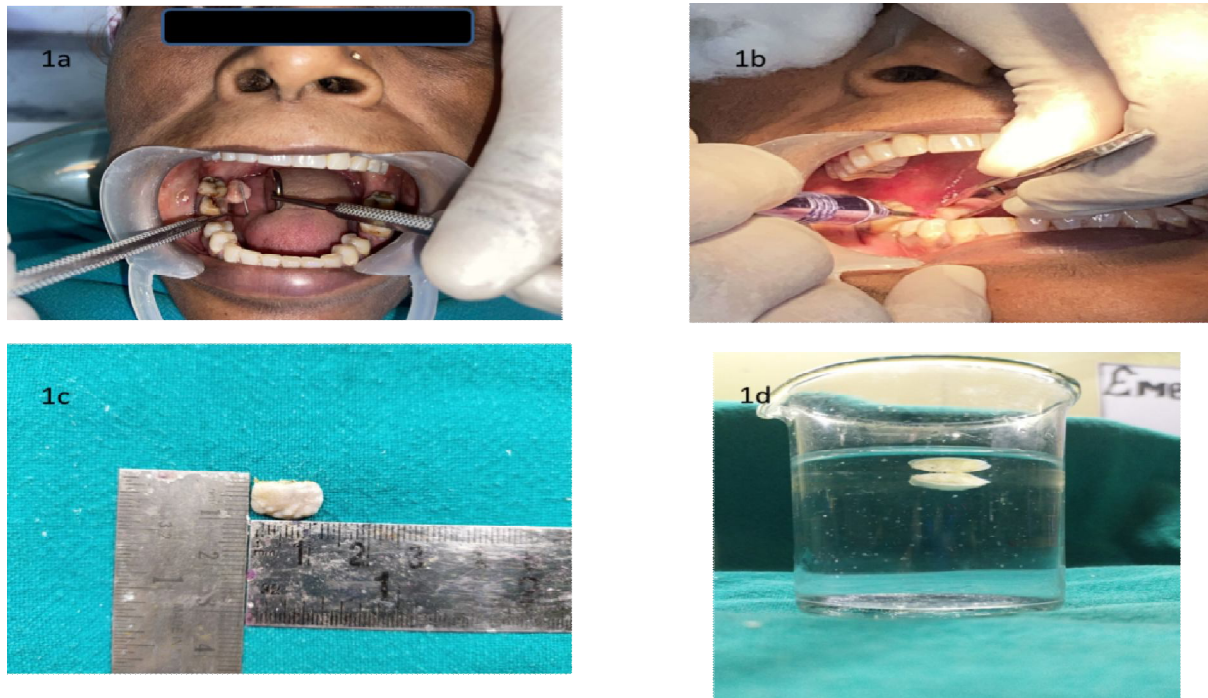
Lipomas are soft tissue mass commonly encountered by clinicians and accounts for 4-5% of all benign tumors of the body [1]. They are often seen in the upper part of body, shoulders, back, head and neck. Oral cavity accounts for just 1-4% of all the reported cases [2,3]. On clinical evaluation they are slow growing asymptomatic, soft to firm palpable growth which is often ignored till it reach a size that interferes with normal functioning, or aesthetics. These features are similar to other benign lesions and also with well differentiated liposarcomas. Fibrolipoma is one of the various histological subtypes of lipoma which have greater proliferative capacity compared to other variants. Incisional or excisional biopsy followed by subsequent microscopic evaluation helps in accurate diagnosis.

Case Report:

A 48 years old female patient reported to SGT Dental College with a chief complaint of pain in lower right back tooth since 1 month. On the extra oral examination nothing abnormal was detected. Intraoral examination revealed deep caries in relation to 45, 47, 35 and missing 38 26, 36, 46. A small painless oval growth was also noticed arising from the lingual alveolar mucosa in relation to 47 and 48 with no pus discharge or bleeding. [Figure 1a] Patient gave history that this swelling started 10 years back and has gradually increased to the present size. It has been asymptomatic with no difficulty in mastication. There was no surface ulceration and overlying mucosa was normal in colour. On palpation swelling was firm and non-fluctuant. Patient did not have any habit of tobacco or alcohol use. Past medical history was non-significant and there was no history of trauma or any denture wear.

Based on the above findings a provisional diagnosis of fibroma was given. Informed consent was taken and the lesion was excised under local anesthesia. On macroscopic examination and the tissue was 1x1.3cm [Figure 2] in dimensions and immediately floated to the surface in a container with formalin [Figure 3]. The H & E stained sections revealed shows epithelium and connective tissue stroma. Epithelium is parakeratinized stratified squamous with flattened epithelium and connective tissue junction. The underlying connective tissue exhibited dense collagen fibers along with areas of mature fat cells. There was no evidence of any dysplastic features and thus diagnosis of Fibrolipoma was given. On follow-up no recurrence was reported after 9 months.

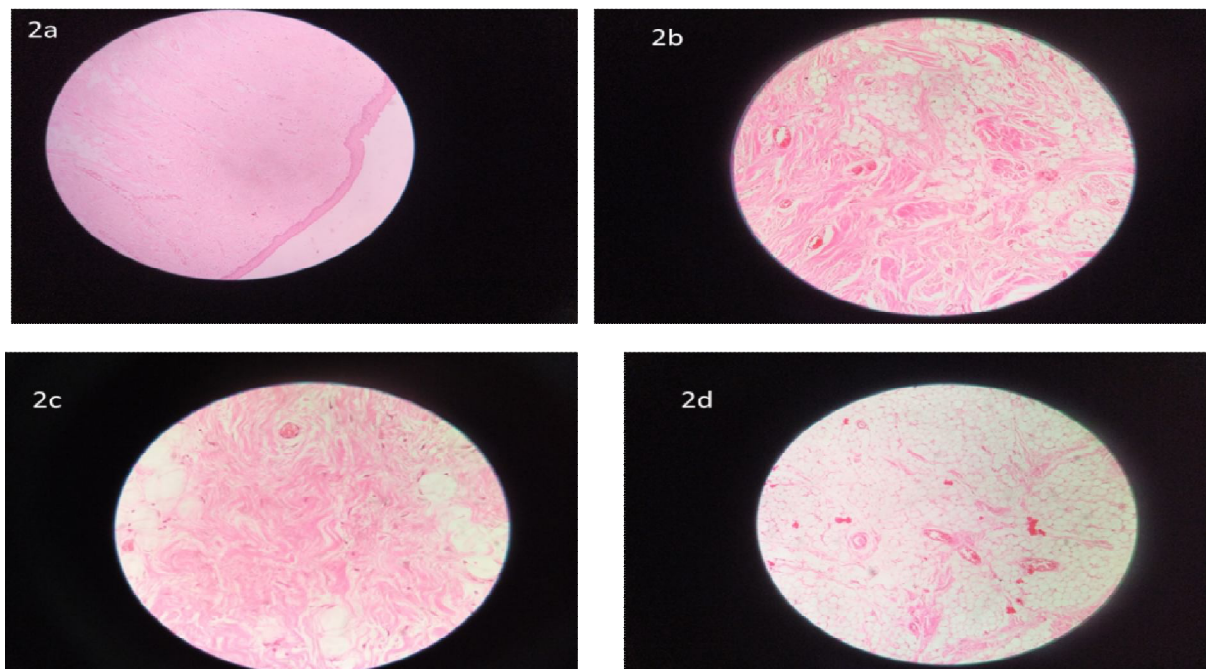
Figure 1



Legends

- 1a: 28 year old female with a painless, long standing roughly oval growth on lingual aspect of 47&48
- 1b: Surgical excision of the lesion carried out under Local Anesthesia
- 1c: Gross picture of excised lesion.
- 1d: Excised tissue in container with formalin.

Figure 2



- Figure 2a: H & E-stained tissue section revealed atrophic stratified squamous epithelium with underlying connective tissue demonstrating abundant collagen fibers intermixed with lobules of fat cells. (20x)
- 2b: H & E-stained tissue section revealed Fibrous component intermixed with fat cells (20x)
- 2c: H & E-stained tissue section revealed dense collagenous network. (20x)
- 2d: H & E-stained tissue section revealed Lobules of mature mature fat cells and fibrovascular septae. (20x)

DISCUSSION:

Lipoma usually occurs in 4th to 6th decade of life and has an equal predilection for genders.[4]. Slow growing and asymptomatic behaviour are the two main reasons they remain under diagnosed for long. Patient complains only when they start causing functional or esthetic problem. In the present case report also the main complaint of patient was pain in the tooth.

Fibrolipomas have been classified as an uncommon histological variant of conventional lipoma by WHO because of presence of both adipose and fibrous tissue in connective tissue stroma.[5]. Less than 50 cases of oral fibrolipoma has been reported till now and most of the cases are reported on buccal mucosa, tongue being the second common site. Gingival involvement is unusual as there is absence of fat in normal gingiva and to the best of our knowledge only 2 cases have been reported in literature. [6]

Others histopathological variants include *conventional lipoma* (composed of mature adipocytes) , *osteolipoma* (presence of bone with the adipose tissue) , *chondrolipoma* (areas of cartilage within the fatty tissue) , *infiltrating lipoma* (fat cells infiltrating the muscle) , *Angiolipoma* (fat cells with numerous proliferating blood vessels), *Myolipoma* (smooth muscle fascicle within adipocytes) *Angiomyolipoma* (fat cells along with varying amount of blood vessels and muscle) , *Spindle cell lipoma* (adipocytes with spindle cells and collagen fibers and mast cells) *Pleomorphic lipoma*(multinucleated giant cells containing radially arranged nuclei in a “floret-like” pattern. *Myxolipoma* (adipose cells with mucoid material), *Sialolipoma* (lipoma with glandular areas) and a newly added entity *Atypical spindle cell* (Atypical spindle cells, adipocytes, lipoblasts, pleomorphic cells, myxoid to collagenous extracellular matrix). [7,8]

The pathogenesis remains uncertain and many theories have been put forward like endocrinal disorder due to genetic cause. Recent studies have shown that in more than 60% of lipomas HMG2 abnormality is observed. [9] Continuous mild irritation has also been attributed to one of the reasons that triggers proliferation of fibrous and adipose tissue. [10] The clinical features of fibrolipoma are very similar to liposarcoma specially the well differentiated as both grows slowly and does not infiltrate the adjacent tissue hence histopathological evaluation is warranted to rule out malignancy. In fibrolipoma fat cells are normal round with eccentric nuclei and clear cytoplasm. Lobules of adipose tissue are seen along with fibrous component. In liposarcoma there will be presence of immature adipocyte or lipoblast cells and atypical cells with vacuolated cytoplasm and hyperchromatic indented nuclei. Area of degeneration is also evident. Treatment of choice is surgical excision and recurrence is rare.

CONCLUSION : Fibrolipoma are uncommon in gingiva and share characteristics similar to other benign lesions as well as well differentiated fibrosarcoma therefore histopathological evaluation and follow up of it is essential.

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