Case Report

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Fibrolipoma: Report of Two Intraoral Cases

Dentistry Section

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ABSTRACT

Fibrolipoma, a benign tumour, is classified as a variant of conventional lipoma. It usually presents as a soft, smooth – surfaced nodular masses that can be sessile or pedunculated. Most of them are less than 3 cm in size, but it can become much larger. The buccal mucosa and buccal vestibule are the most common intra-oral sites.

Here, we present two cases of fibrolipoma, one on buccal mucosa and the other on the lateral border of tongue.

Key Words: Buccal Mucosa, Fibrolipoma, Lateral Border of Tongue, Pedunculated

INTRODUCTION

Fibrolipoma is an uncommon histological variant of the classic lipoma, in which neoplastic fat cells are embedded within dense collagen [1]. Most patients are 40-years of age or older.

Lipoma is a benign mesenchymal soft tissue neoplasm of mature adipose tissue [2,3]. They are relatively rare in the oral cavity, accounting for 1%–4.4% of all benign tumors [4,5]. Their aetiology and pathogenesis remain unclear, although mechanical, endocrine and inflammatory influences have been reported [6]. Histologically, lipomas are classified as simple lipoma or variants such as fibrolipoma, spindle cell lipoma, intramuscular or infiltrating lipoma, angiolipoma, salivary gland lipoma (sialolipoma), pleomorphic lipoma, myxoid and atypical lipomas [1].

Fibrolipoma of the oral cavity has been infrequently reported. It can occur in various anatomic sites including the buccal mucosa, lips, tongue, palate, buccal vestibule, floor of the mouth, and retromolar area [5]. Fibrolipomas have also been reported in the extra-oral sites such as esophagus, pharynx, colon, trachea, larynx and other locations [7,8]. They are well-circumscribed, slow-growing, long standing, painless soft tissue tumours that may be superficially or more deeply located and covered by normal mucosa [2,3,5,6,9].

They are usually slow growing and rarely recur after surgical treatment. Hence, the prognosis of these benign tumours is considered good [10,11]. Here, we present two cases of fibrolipoma, one on buccal mucosa and the other on the lateral border of tongue.

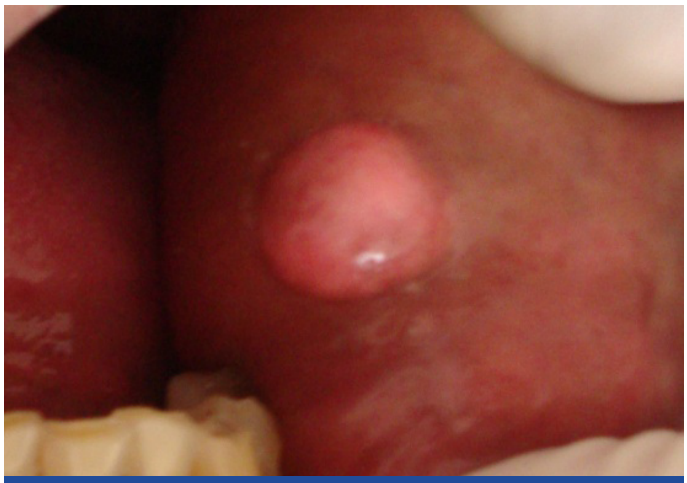
CASE REPORT

Case 1

A 71-year-old male patient reported to the Department of Periodontology with the chief complaint of swelling in the right cheek since 6 years. The swelling was asymptomatic and the patient had not undergone any treatment for the same.

Patient first noticed the swelling 6 years back which was small in size and slowly increased to the present size.

Patient gave a medical history of being hypertensive and diabetic since 21-years and was on medication for the same. Both hypertension and diabetes was found to be under control. There was no other relevant medical history. The patient was a known smoker and an occasional alcoholic.



[Table/Fig-1]: Case 1: Intra-oral swelling measuring 10 mm in diameter on left buccal mucosa

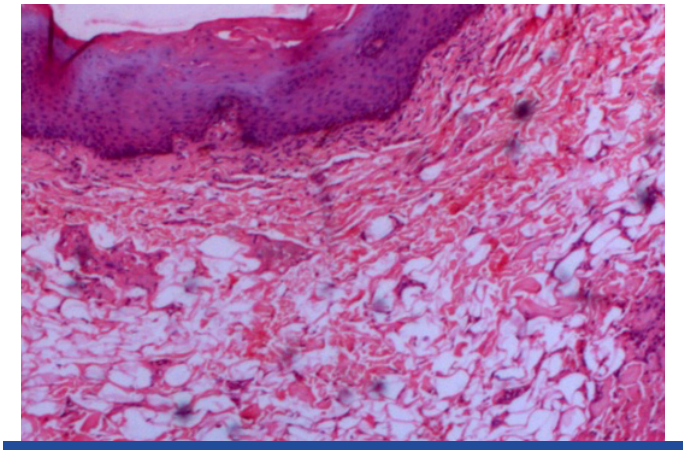
On intra-oral examination, the oral hygiene status was found to be fair with a plaque and gingival index of < 2. There was a soft swelling measuring 10 mm in diameter noted on the right buccal mucosa. The lesion was well-circumscribed, pedunculated and had normal mucosal color. On palpation, it was non-tender, soft in consistency and had a smooth surface. There was no bleeding on provocation in the same area [Table/Fig-1].

Case 2

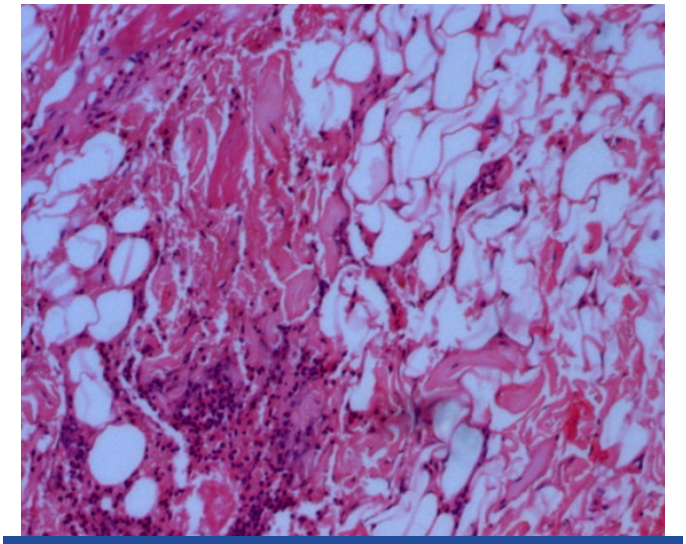
A 47-year-old male patient reported with the chief complaint of swelling in the right lateral border of tongue since 3 years. The swelling was asymptomatic and patient had not undergone any treatment for the same.

Patient first noticed with swelling 3 years back which was small in size and slowly increased to the present size. There was no other relevant medical history.

On intra-oral examination, the oral hygiene status was found to be fair with a plaque and gingival index of < 2. There was a soft swelling



[Table/Fig-2]: Case 1: Histological picture showing overlying epithelium and mature adipocytes, collagen bundles and inflammatory cells in connective tissue stroma (H & E. original magnification x 4)



[Table/Fig-3]: Case 1: Histological picture showing mature adipocytes, collagen bundles and inflammatory cells in connective tissue stroma (H & E. original magnification x 40)

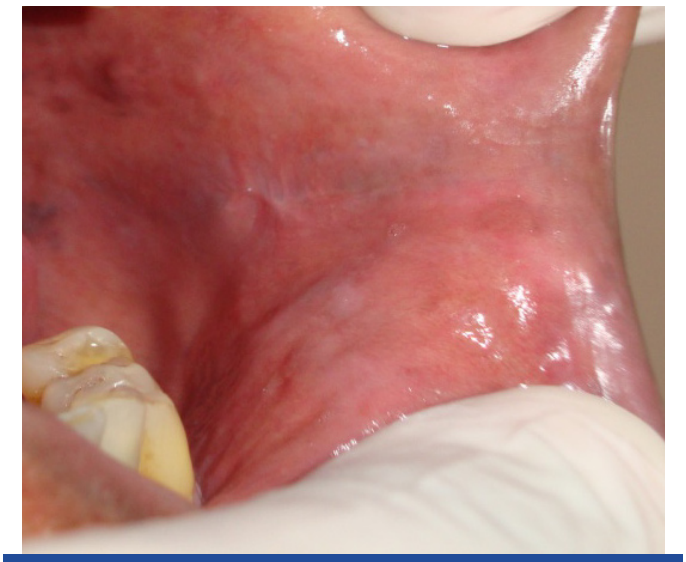
measuring 5 mm in diameter noted on the right lateral border of tongue. The lesion was well-circumscribed, pedunculated and yellow in color. On palpation, it was non-tender, soft in consistency and had smooth surface. There was no bleeding on provocation in the same area.

In both the cases, a clinical diagnosis of lipoma/benign salivary gland tumour/fibroma was given. Routine haematological investigations were uneventful.

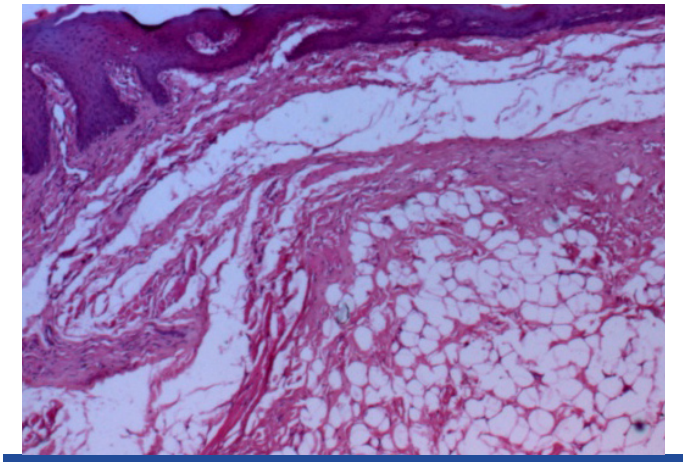
The patients were called for phase I therapy and on the following visit, the swelling was excised surgically and sent for histopathological examination. Post-op instructions were given and patients were kept on antibiotic and analgesic coverage.

Histologically, both the cases revealed connective tissue stroma consisting of dense collagen bundles, fibroblasts and mature adipocytes without any cellular atypia. Few chronic inflammatory cells and blood vessels could also be seen in the stroma. Stratified squamous epithelium was found covering the surface of the lesion [Table/Fig-2,3 & 5]. Based on these findings, a diagnosis of fibrolipoma was given in both the case.

Patients were recalled after a week and the healing was found to be satisfactory [Table/Fig-4]. Follow up of the patient for the past 6 months in case 1 and 6 years in case 2 has not shown any recurrence.



[Table/Fig-4]: Case 1: Intra-oral picture showing complete healing post-operatively



[Table/Fig-5]: Case 2: Histological picture showing overlying epithelium and mature adipocytes, collagen bundles and inflammatory cells in connective tissue stroma (H & E. original magnification x 4)

DISCUSSION

Benign lipomas are the most common mesenchymal tumours of soft tissue, but are relatively uncommon in the oral and maxillofacial region [2].

The first description of this oral lesion was provided in 1848 by Roux in a review of alveolar masses; he referred to it as a “yellow epulis”. While most lesions are developmental anomalies, those which occur in the maxillofacial region usually arise late in life and are presumed to be neoplasms of adipocytes, occasionally associated with trauma. Few lipomas show rearrangement of 12q, 13q, 6p chromosomes [1,12].

Fibrolipoma, a benign tumour, is classified as a variant of conventional lipoma by the WHO [1]. Oral lipomas are usually soft, smooth – surfaced nodular masses that can be sessile or pedunculated. Most of the lesions are less than 3 cm in size, but occasional lesions can become much larger. The buccal mucosa and buccal vestibule are the most common intra-oral sites and account for 50% of all cases. Less common sites include the tongue, floor of the mouth and lips. In our cases, the tumors were in buccal mucosa and on lateral border of tongue. Most patients are 40-years of age or older [1]. In our case, the lesion was found in 71-year and 47-year old male patients.

It has been suggested that fibrolipoma arise from the maturation of the lipoblastomatosis, which is an infiltrative type of benign neoplasm

with lobules of immature fat cells separated by connective tissue septa and areas of loose myxoid matrix. Further, maturation of both adipose and fibrous tissue results in mature strands of collagen separating fat cells into lobules [9].

Histologically, classic lipomas are composed of mature adipose tissue with true lipoblasts showing no cellular atypia. Adipose tissues can be admixed with other mature benign mesenchymal tissues, thus necessitating sub-classification [12]. Several variants of lipoma have been described, such as fibrolipoma, spindle cell lipoma, intramuscular or infiltrating lipoma, angiolipoma, salivary gland lipoma (sialolipoma), pleomorphic lipoma, myxoid and atypical lipomas [1]. In our cases, the diagnosis of fibrolipoma was given based on the presence of mature adipocytes interspersed with dense collagen fiber bundles.

Fibrolipoma should be differentiated from spindle cell lipomas which are composed of mature lipocytes and uniform spindle cells in a mucinous and fibrous background. On occasions, fibrolipoma can be confused with herniated buccal pad of fat but the characteristic well –circumscribed nature and lack of history of trauma will help in differentiating it [1].

The treatment of lipomas including fibrolipoma is usually surgical excision and the recurrence is rare. The asymptomatic course will allow the lesion to grow in most cases and only a cosmetic or functional problem will prompt the patient to seek dental assistance, as in our present cases [10,11].

Though reported complications of fibrolipoma are usually irrelevant, this tumour can be life threatening because of obstruction of upper airway by virtue of its size, as sudden asphyxial death has been reported in a case of oesophageal fibrolipoma [13].

Liposarcoma can occur in long standing cases.

CONCLUSION

In literature, only few cases of fibrolipoma have been documented and the occurrence of fibrolipoma is very rare in the oral cavity. Hence, we have made an attempt to explain the clinical features and histopathology of this lesion. Many lesions show similar clinical findings but the histopathological examination help us to arrive at confirmative diagnosis. The diagnosis is very much essential for accurate and successful treatment, so that it can prevent further complications or malignant transformation, though rare.

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