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"FIBROLIPOMA OF BUCCAL MUCOSA: AN ASTOUNDINGLY LARGE BENIGN ORAL TUMOR"

Dentistry

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ABSTRACT

Rationale: This case report showcases an incidence of fibrolipoma of oral cavity which is extremely rare and to consider in the differential diagnosis of the mesenchymal tumours of oral cavity. **Patient Concern:** 46 years old male patient reported to our department with a complaint of swelling i.r.t left buccal mucosa for the past 4 months associated with discomfort. **Diagnosis:** A diagnosis of fibrolipoma of buccal mucosa was made with the clinical and cytopathological examination. **Treatment:** An excisional biopsy of the mass was done under local anaesthesia. **Outcome:** Healing was uneventful following the surgical management and patient was kept on follow up. **Take Away Lesson:** Primary aim of this particular case is mostly meant to increase awareness of this rare clinical condition, which can sometimes mimic a malignant tumor.

KEYWORDS

Fibrolipoma, buccal mucosa, mesenchymal tumour, case report.

INTRODUCTION:

Common benign neoplasms that originate from adipose tissue are called lipomas. It's unclear what triggers lipomas. They primarily impact the neck, upper arms, shoulders, and trunk area. Oral cavity lipomas are uncommon, making roughly 1–4% of benign oral tissue tumors **[1]** and is extremely uncommon; just 35 cases have been documented in the literature.**[2]** This rare histological variation of the classic lipoma involves the embedding of neoplastic fat cells in thick collagen. The majority of patients are at least 40 years old. Despite reports of mechanical, endocrine, and inflammatory impacts, their etiology and pathophysiology are still unknown.**[3]** Angiolipoma, fibrolipoma, chondroid lipoma, myolipoma, spindle cell or pleomorphic lipoma, diffuse lipomatous proliferation (lipomatosis), and hibernoma are among the histologically identified variations of lipoma. Despite being benign in origin, the tumor's size can impair with speaking and mastication as it grows. Here, we present a 46-year-old male patient with fibrolipoma. **[4]**

Case Report:

A 46-year-old man came to our department complaining of swelling in his left cheek that was been there for the past four months. When he first saw the swelling, it was tiny, but it grew over time to reach its current size. The patient claimed to feel heavy and uncomfortable, but there was no accompanying pain, discharge, or bleeding. Patient gives no significant medical and family history.

A general physical check-up revealed no anomalies. An intraoral examination revealed a distinct, 3 x 1cm sessile oval swelling in the left buccal mucosa, which was located next to the mandibular and maxillary posterior tooth areas. The mucosa that covered the enlargement seemed normal, smooth, and free of any secondary abnormalities. [Fig. 1]

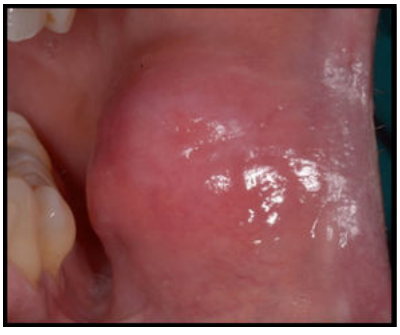

Figure 1. Diffuse swelling seen in the left buccal mucosa

The swelling was soft and non-tender to the touch, and the edges slipped under the finger used for palpation. A tentative diagnosis of intraoral lipoma was made based on of the clinical findings. The following differential diagnoses were taken into consideration: liposarcoma, small salivary gland adenoma, mucocele, lymphoepithelial cyst, soft tissue fibroma, and chronic soft tissue abscess.

Patient was further subjected to MRI which showed a well-defined lobular T1/T2 hyper intense lesion in left buccal region abutting left masseter and buccinators muscles indicating Oral lipoma. Furthermore, FNAC of the subjected lesion was performed, which suggest fibrolipoma of buccal mucosa.

Every haematological parameter was within the typical range. Under local anaesthesia, an excisional biopsy of the growth was then performed. The excised specimen was dissected, the mucosal membrane was undermined, revealing a 3.4 × 1.4 cm oval, encapsulated, and lobulated pale yellow mass. [Fig. 2] [Fig. 3] The patient's routine follow-up revealed no recurrence.

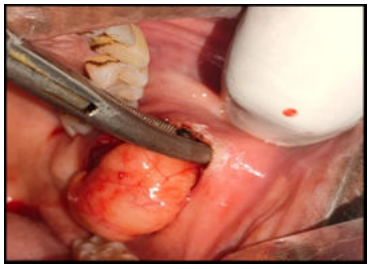

Figure 2: Dissection of oral fibrolipoma of buccal mucosa.

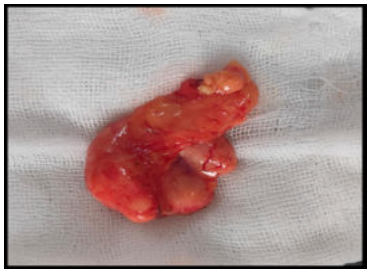

Figure 3: Surgical Gross specimen after excision.

A written informed consent was obtained for the case report and disclosure of photographs and radiographs for scientific purposes. Post-operative biopsy revealed Lipoma with typical mature fat cells, arranged in a well-defined, encapsulated structure. The fat cells were uniform in size and shape, and there was no signs of malignancy. [Fig.4]

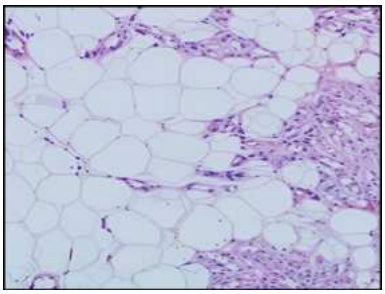

Figure 4: Histopathological view of Lipoma.

DISCUSSION:

Lipomas account for 4%–5% of all benign tumors arising throughout the entire body, while those occurring in the oral region are as sparse as 0.7%–2.2% of all lipomas. [**5]** Oral lipomas and its variants have been reported to occur in all age groups but are most frequently seen in patients ranging in age from 40 to 60 years. 1 Although several theories have been proposed as potential etiopathologies for lipomas, none of them have been supported by sufficient scientific data. These theories include genetics, fatty degeneration, trauma, hormones and their effects, infection, infarction, and chronic irritation of a lipoblastic embryonic cell nest origin. [**1]** A fibrolipoma can also develop as a result of fibrous degeneration of a lipoma, and this may have happened in this instance as there is a history of trauma. [**6]**

In our case, the 3.5 cm × 1.5 cm lesion was located in the buccal mucosa. Usually, these lesions don't get large enough, as the patient has trouble speaking, eating, and swallowing, so they seek early treatment. It's interesting to note that in our situation, the lesion did not sustain any acute insult from the teeth while reaching a substantial size, which is likely why the patient disregarded early evaluation. The most prevalent microscopic form of oral lipomas is fibrolipoma, despite the fact that lipomas have several other histologic variations. A notable fibrous element combined with adipose tissue lobules is a characteristic of fibrolipoma Spindle cell lipoma, intramuscular or infiltrating lipoma, salivary gland lipoma, and myxoid lipoma are among the microscopic forms of lipoma. The depth of the lesion determines the consistency of these tumors and the amount of fibrous tissue, which varies between firm and soft. [**7]**

Clinical signs are the primary basis for diagnosing intraoral lipomas. Nevertheless, magnetic resonance imaging and computed tomography provide an early diagnosis in situations where distinguishing the swelling from nearby tissues is challenging. Despite the availability of all these methods, histopathology is still the most reliable method for making a conclusive diagnosis of lipoma. Under a microscope, mature fat tissue cells are typically seen buried in the connective tissue stroma and encased in a fibrous capsule. However, it should be mentioned that while lipoma and normal adipose tissue share histologic similarities, a definitive diagnosis requires precise clinical and radiographical findings. [**8]** The most common method of treating lipomas, including fibrolipoma, is surgical removal. In our case, the lesion was surgically removed without any issues. Fibrolipoma, because of its size, this tumor may be fatal because it blocks the upper airway; in fact, an oesophageal fibrolipoma case has been recorded to cause abrupt asphyxia death. Although intraoral intramuscular lipomas are not well-limited, they seldom recur if surgically removed. In contrast, lesions beyond the oral cavity may have higher recurrence rates following excision. [**2]**

This case report highlights an occurrence of oral fibrolipoma, which is a very uncommon condition to take into account while making a differential diagnosis for oral mesenchymal tumors thereby a better treatment outcome for the patients can be achieved and it signifies even a benign lesion can resemble a malignant condition and a definite diagnosis should be made before commencing treatment.

CONCLUSION:

Roux first described oral lipomas as yellowish epulis in 1848. Despite their histological similarity, this benign slow-growing tumor differs from normal fat cells in their metabolism. It has also been suggested that trauma and persistent irritation can cause fatty tissue to grow into a benign tumor. [**9]** Lipomas in the oral and maxillofacial area usually grow slowly. They often don't cause any symptoms until they become larger. Most of them form in the layer of fat just under the skin, but sometimes they can also grow in deeper tissues. The knowledge and prompt treatment of tumors in this region is important. Complete resection should be emphasized, which is the key factor to avoid recurrence. **[10]**

Patient Perspective: Patient underwent surgical excision for the fibromatous lesion which was uneventful on the regular follow ups and patient was found to be satisfied on receiving a prompt treatment for the same.

Declaration Of Patient Consent:

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts Of Interest: There are no conflicts of interest.

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