

A Rare Occurrence of Fibrolipoma in Oral Buccal Vestibule

C SEETHALAKSHMI¹, N ARAVINDHA BABU², P SRI NEERAJA³

(CC) BY-NC-ND

Keywords: Adipose tissue, Benign tumour, Lipoma, Oral mucosa

A 62-year-old man reported to the Outpatient Department (OPD) with the chief complaint of a skin growth in the lower left back tooth region for the past three years. He complained that the growth was initially small and gradually increased in size. He had no history of tenderness but had discomfort on mastication. Medical history was non significant, and his dental history revealed that the patient underwent restorations in the past and had his teeth extracted. Upon clinical examination, no extraoral abnormalities were detected [Table/Fig-1].



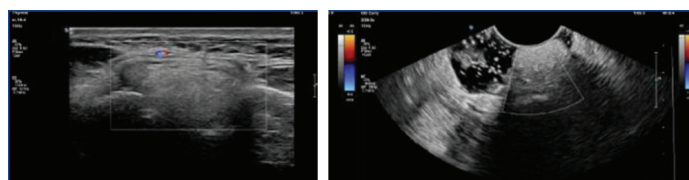
[Table/Fig-1]: Extraoral image of the patient with no asymmetry.

During intraoral examination, a localised tissue growth was evident on the left buccal vestibule, measuring approximately 2×3 cm in size. The overlying mucosa appeared smooth, non ulcerated, and slightly yellowish in colour compared to the adjacent normal mucosa. When palpated, the growth was pedunculated, non tender, and soft in consistency. The transillumination test was negative. The patient had generalised attrition and a vertical fracture in relation to 36 ({Federation Dentaire Internationale (FDI)} teeth numbering system), and 37 was found to be missing [Table/Fig-2a-c].



[Table/Fig-2]: a,b) Intraoral images showing lipoma on the left buccal mucosa measuring 2×3 cm, pedunculated, non tender, and soft in consistency; c) Negative transillumination test.

Intraoral ultrasonography was done which, revealing a lesion measuring 2.8×1.2×2.5 cm (4.7 cc in volume). The lesion appeared homogeneously hyperechoic, well-defined, with a hypoechoic capsule, and a narrow pedicle measuring 0.6 cm in width. No calcifications, necrosis, phleboliths, or minimal to no internal vascularity were observed. It was concluded to be a benign, pedunculated, hypovascular lesion. Biopsy was recommended for further evaluation [Table/Fig-3].



[Table/Fig-3]: Ultrasound images showing a homogenous hyperechoic lesion with a narrow pedicle and hypoechoic capsule measuring about 2.8×1.2×2.5 cm.

Preoperative blood investigations were conducted and found to be within the normal range. Complete surgical excision of the lesion was performed under local anaesthesia, and the specimen was sent for histopathological examination [Table/Fig-4]. The 36 was also extracted.



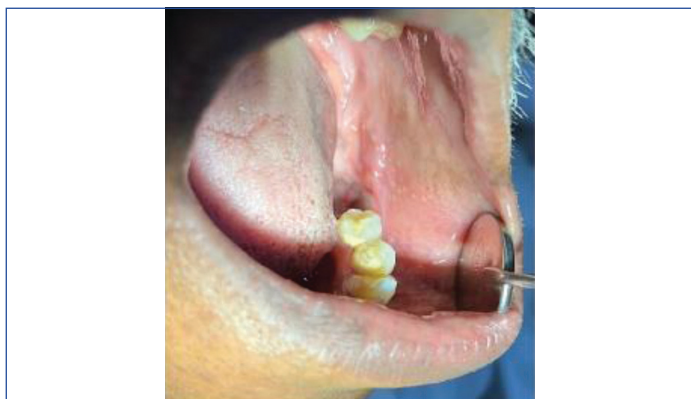
[Table/Fig-4]: Excised lipoma.

The histopathological report states that the Haematoxylin and Eosin (H&E) stained histopathological section of the specimen showed parakeratotic stratified squamous epithelium with underlying connective tissue stroma. The epithelium was atrophic in a few areas, and the fibrous connective tissue showed numerous fat cells admixed with collagenous streaks. The connective tissue exhibited moderate cellularity, and numerous endothelial-lined blood vessels were seen. A final diagnosis of fibrolipoma was given [Table/Fig-5].



[Table/Fig-5]: Histopathological image showing the fibrous connective tissue stroma with numerous fat cells (H&E stain 10X). (Arrow pointing to the adipocytes).

After one week, suture removal was performed, and the excised site had healed, with the patient experiencing no discomfort [Table/Fig-6].



[Table/Fig-6]: Intraoral image showing the excised site being healed after one week.

Lipoma is a benign tumour of adipose tissue, composed of mature fat cells that are typically slow-growing and asymptomatic. An uncommon variant of lipoma is fibrolipoma. These are rare in the oral and oropharyngeal region, with a prevalence rate of 1-4%, affecting only 1 in 5,000 adults [1]. Oral lipomas are soft, smooth-surfaced nodular masses, which can be sessile or pedunculated. Consistency can vary from soft to firm due to the depth of the tumour and the distribution and amount of fibrous tissue [2]. The aetiology of oral lipoma is unclear.

The cells of the lipoma differ metabolically from normal fat cells, but they are histologically similar [3]. There are many histological types of lipoma, such as simple lipoma, osteolipoma, chondrolipoma, infiltrating lipoma, angioliipoma, myoliipoma, angiomyoliipoma, spindle cell lipoma, pleomorphic lipoma, myxoliipoma, and sialoliipoma [4].

In fibrolipoma, there is an intermixing of mature adipose tissues with connective tissue. Lipomas can be easily identified due to their yellowish colour. The buccal mucosa, tongue, and floor of the mouth are common locations, although fibrolipoma rarely occurs in the buccal vestibule. They are well circumscribed with thin capsules and have also been reported in the oesophagus, pharynx, colon, trachea, and larynx. They occur equally in males and females [5].

The diameter can range from 0.2 to 1.5 cm; however, tumours in the cheek as big as 50 mm have been documented. Fullness and discomfort are possible signs and symptoms. Additionally, functional issues with speech, mastication, and dysphagia have been documented in relation to large sublingual lipomas [6].

Computed Tomography (CT) and Magnetic Resonance Imaging (MRI) can easily detect the lipoma. Ultrasound imaging can also help to detect the lipoma. Due to increased fat cells, the ultrasonographic images are hyperechoic due to the acoustic impedance with respect to the surrounding tissues [3].

The differential diagnosis for intraoral lipoma include oral dermoid and epidermoid cysts, oral lymphoepithelial cysts, benign salivary gland tumours, mucocoeles, and ranula [5].

The gold standard in the diagnosis of lipomas is said to be histopathology. Steroid injections are used in the medical management of lipomas to cause localised fat atrophy, which reduces the size of the tumour. They are typically performed in cases of lipomas that are <1 inch in diameter [7].

Early diagnosis and management can provide a better prognosis and improve the patient's comfort. The lesion in present case was surgically excised without any complications. The primary goal of presenting present case is to raise awareness of this uncommon clinical entity, which may at times resemble a cancerous growth.

REFERENCES

- [1] Dehghani N, Razmara F, Padeganeh T, Mahmoudi X. Oral lipoma: Case report and review of literature. *Clin Case Rep*. 2019;7(4):809-15.
- [2] Rezazadeh F, Jaafari-Ashkavandi Z, Afshari A, Tarjan A. Rare fibrolipoma of attached gingiva: A case report and review of the literature. *Clin Case Rep*. 2022;10(11):e06643.
- [3] Wu YH, Kuo YS, Lin PY, Chiang CP. Oral fibrolipoma- Case report. *J Dent Sci*. 2020;15(2):227-29.
- [4] Phulari RG, Soni V, Talegaon TP, Bakutra G. Oral fibrolipoma: A report of two cases and review of literature. *Indian J Dent Res*. 2018;29(4):513-16.
- [5] Karakosta P, Matiakis A, Anagnostou E, Kolototronis A. Oral lipoma located at the left lower vestibule-Report of a case and a brief review of the literature. *Balkan J of Dent Med*. 2018;22(1):49-52.
- [6] Park BG, Choi DJ, Park JW, Kim JS. Oral cavity lipoma: A case report. *J Korean Assoc Oral Maxillofac Surg*. 2015;41(4):213-16.
- [7] Kumar LK, Kurien NM, Raghavan VB, Menon PV, Khalam SA. Intraoral lipoma: A case report. *Case Rep Med*. 2014;2014:480130.

PARTICULARS OF CONTRIBUTORS:

1. Reader, Department of Oral Medicine and Radiology, Sree Balaji Dental College and Hospital, Bharath Institute of Higher Education and Research, Chennai, Tamil Nadu, India.
2. Professor and Head, Department of Oral and Maxillofacial Pathology and Oral Microbiology, Sree Balaji Dental College and Hospital, Bharath Institute of Higher Education and Research, Chennai, Tamil Nadu, India.
3. Third Year Postgraduate, Department of Oral Medicine and Radiology, Sree Balaji Dental College and Hospital, Bharath Institute of Higher Education and Research, Chennai, Tamil Nadu, India.

NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR:

Dr. C Seethalakshmi,
Reader, Department of Oral Medicine and Radiology, Sree Balaji Dental College and Hospital, Bharath Institute of Higher Education and Research, Velachery Road, Narayanapuram, Pallikaranai, Chennai-600100, Tamil Nadu, India.
E-mail: seethamds@gmail.com

AUTHOR DECLARATION:

- Financial or Other Competing Interests: None
- Was Ethics Committee Approval obtained for this study? No
- Was informed consent obtained from the subjects involved in the study? Yes
- For any images presented appropriate consent has been obtained from the subjects. Yes

PLAGIARISM CHECKING METHODS: [Jain H et al.]

- Plagiarism X-checker: Jul 13, 2023
- Manual Googling: Oct 20, 2023
- iThenticate Software: Dec 15, 2023 (1%)

ETYMOLOGY: Author Origin

EMENDATIONS: 7

Date of Submission: Jul 12, 2023
Date of Peer Review: Sep 12, 2023
Date of Acceptance: Dec 19, 2023
Date of Publishing: Mar 01, 2024