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Fibrolipoma of the Mandibular Buccal Vestibule: A Rare Presentation of an Uncommon Oral Neoplasm

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Abstract: *Fibrolipoma, a benign soft tissue adipose tumor, is a histological variant of lipoma. Clinically, it presents as a painless slow growing mass, indistinguishable from other benign soft tissue tumors. In the oral cavity, it is mainly encountered in the buccal mucosa. In this article, we describe a case of fibrolipoma in the mandibular buccal vestibule of a 49 year old female, who presented with an asymptomatic sessile mass, characterized by a normal color and smooth surface. The lesion was excised, and histopathological study revealed a fibrolipoma. Since fibrolipoma presents clinical similarities with other benign soft tissue neoplasms, a thorough clinical examination and histopathological analysis are essential for obtaining diagnosis.*

Key Word*: : Fibrolipoma, Buccal vestibule, surgical excision*

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I. Introduction

Lipoma is a benign mesenchymal soft-tissue neoplasm of mature adipocytes which accounts for only 4%–5% of all benign tumors in the body. Involvement of the oral cavity is rare with only 1%–4% of cases[1,2]. Usually presenting as painless, well circumscribed, slow growing submucosal masses or superficial lesions, the common site of occurrence in oral cavity is the buccal mucosa[2]. Oral lipomas were first reported and described by Roux in 1848 referring to it as 'yellow Epulis'[3]. Among the many histologic variants of lipoma, fibrolipoma of oral cavity is a rare histological variant accounting for 1.6% of all lipomas [4]. The treatment is surgical excision, with the capsule. The overall recurrence rate is very low[3]. This is a case report on fibrolipoma on buccal vestibule.

II. Case Report

A 49 year old female patient reported to the Department of Oral Medicine and Radiology with chief complaint of a swelling on gums in relation to her lower left back teeth since 1 year. Swelling was initially small in size. Over the last 4 months, she started experiencing discomfort while speaking with a sudden increase in size of the swelling. No history of pain or evidence of any bleeding or pus discharge were reported. Medical history of the patient was non contributory.

Patient was apparently normal. Extraorally, level Ib lymph nodes were palpable, movable and mildly tender on left side. Intraoral examination revealed a soft smooth surfaced swelling of size approximately 2.5cm x 1.5cm with colour same as adjacent normal mucosa obliterating left buccal vestibule extending from mesial aspect of 33 to mesial aspect of 37. Swelling was found to slip on pressure and was slightly tender on palpation. Other dental findings included clinically missing 14, 24, 36 and 46 and deep dentinal caries on 28 and 38.

Panoramic imaging lacked any relevant finding with respect to the swelling. Flattening of right condylar head and reduction of left temporomandibular joint space were noted. Ultrasonographic examination of the swelling showed a well circumscribed mixed echoic mass of size approximately 2.33cm x 1.28cm with no internal vascularity. With these findings, a provisional diagnosis of benign soft tissue neoplasm was made.

CECT Mandible was advised which revealed a well defined smooth marginated fat attenuating lesion of size approximately 1.05cm x 2.8cm x 2cm closely abutting the outer cortex of body of mandible likely to be lipoma.

Excisional biopsy was done under local anesthesia and the specimen was sent for histopathologic evaluation. H & E stained sections showed connective tissue stroma which is partially encapsulated having polygonal cells with completely washed out cytoplasm and peripherally placed nucleus resembling adipocytes. Muscle fibres were also noted in some areas of connective tissue and adipocytes were seen between the muscle fibres. Minimal inflammatory cell infiltrate and vascularity were noted. Histopathologic features were suggestive of Fibrolipoma.

Figure 1:Extraoral photograph

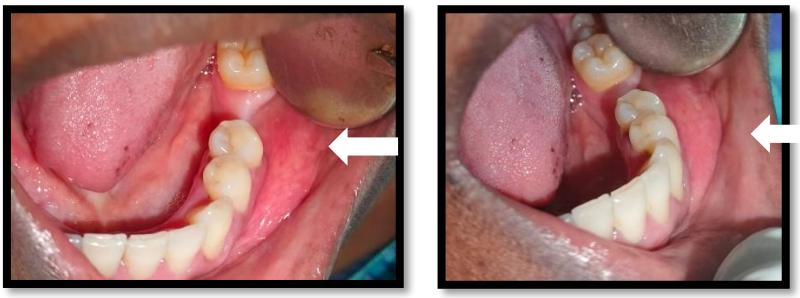

Figure 2: Intraoral photographs

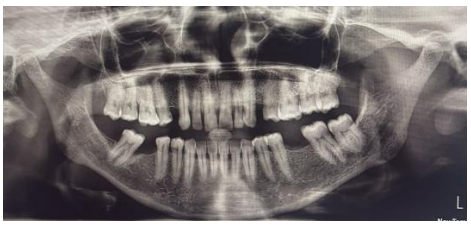

Figure 3 : Panoramic image

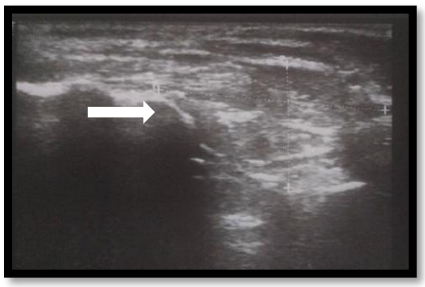

Figure 4 : USG evaluation

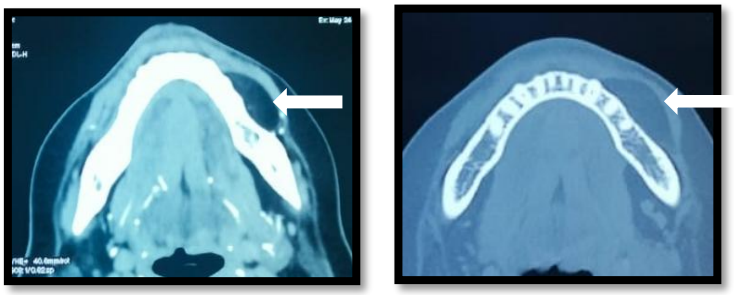

Figure 4: CECT sections

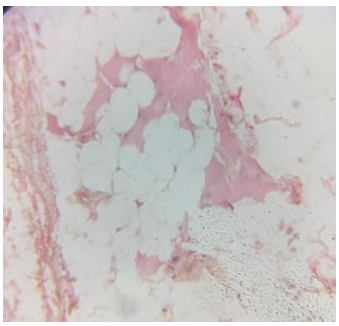

Figure 5: Photomicrograph

III. Discussion

Oral lipoma is a benign tumor of the mesenchymal tissue. Morphologically intraoral lipomas can be classified as diffuse form affecting the deeper tissues, superficial form, and encapsulated form[5].

Classically, adipose lesions appear yellowish in color; however, this color is usually only observed in 16.3% of intraoral lipomas since most of them are covered by normal colored mucosa as reported in the present case, and therefore, it is difficult to consider lipoma in the clinical differential diagnosis[4].

Histological variants of lipoma include angiolipoma, fibrolipoma, chondroid lipoma, myolipoma, spindle cell/pleomorphic lipoma, diffuse lipomatous proliferations (lipomatosis), and hibernoma. Fibrolipoma of oral cavity is a rare histologic variant[6].

The mean age of occurrence of fibrolipoma is 34 years with a range reported from 3 to 56 years[7]. The tumor has been reported to be more frequently occurring in the buccal mucosa and buccal vestibule and it also shows a slight predominance in females[8]. All these were positive findings in our case report.

However, various studies have revealed a rare occurrence of fibrolipoma in the vestibular region[9,10]. So our case presenting in the buccal vestibule could be considered a rare clinical entity as well.

Clinically, they present as soft and compressible masses with doughy consistency which are well defined clinically and radiologically similar to our case. Multiple head and neck lipomas have been observed in neurofibromatosis, Gardner's syndrome, encephalocraniocutaneous lipomatosis, multiple familial lipomatosis, and Proteus syndrome[1].

Microscopically, fibrolipomas contains an evident fibrous component interspersed with adipocytes which was also observed in the present case[11].

Liposarcoma, although rare, cannot be distinguished from fibrolipoma clinically. An accurate histological examination is mandatory to rule out the malignant variety. Other differential diagnosis includes pyogenic granuloma, lymphangioma, and schwannoma[12].

Standard management of lipomas is surgical excision, and sometimes diffuse lipomas pose a challenge to the operating surgeon in terms of adjacent vital structures. However, recurrence is infrequent in these benign neoplasms. Surgical excision was performed in the present case and patient is under follow up[13].

IV. Conclusion

Fibrolipoma represents a distinct clinicopathologic entity with an increased potential for increasing size and with a low recurrence rate. The clinical course is usually asymptomatic and sometimes it may appear as infiltrating adjacent tissues and may cause doubts for differential diagnosis with malignant infiltrating lesions such as liposarcoma. Surgical excision is the mainstay of treatment. An accurate differential diagnosis, postsurgical histological examination, and careful follow up are therefore required.

References

[1]. Phulari R, Soni V, Talegaon T, Bakutra G. Oral fibrolipoma: A report of two cases and review of literature. Indian J Dent Res. 2018;29(4):513. doi:10.4103/ijdr.IJDR_730_16

[2]. Fregnani ER, Pires FR, Falzoni R, Lopes MA, Vargas PA. Lipomas of the oral cavity: clinical findings, histological classification and proliferative activity of 46 cases. Int J Oral Maxillofac Surg. 2003 Feb;32(1):49–53. doi:10.1054/ijom.2002.0317 PubMed PMID: 12653233.

[3]. Verma O, Shah SP, Kothari JV. Oral fibrolipoma: An uncommon occurrence. A case report. J Oral Med Oral Surg Oral Pathol Oral Radiol. 2023 Dec 28;9(4):233–5. doi:10.18231/j.jooo.2023.049

[4]. Flores-Alvarado SA, Olguín-Villarreal LM, Rumayor-Piña A, Vargas-Segura AI, Flores-Flores DA. Fibrolipoma of the hard palate: an uncommon location. Case report. In. 2022 [cited 2026 Aug 16].

[5]. Oral Fibrolipoma: A Rare Histological Variant [Internet]. [cited 2026 Aug 17]. Available from: https://www.researchgate.net/publication/334250636_Oral_Fibrolipoma_A_Rare_Histological_Variant

[6]. CDM F, JA B, PCW H, F M. WHO Classification of Tumours of Soft Tissue and Bone [Internet]. [cited 2026 Aug 17]. Available from: https://publications.iarc.who.int/Book-And-Report-Series/Who-Classification-Of-Tumours/WHO-Classification-Of-Tumours-Of-Soft-Tissue-And-Bone-2013

[7]. Oral fibrolipoma : Indian Journal of Dental Research [Internet]. [cited 2026 Aug 17]. Available from: https://www.ovid.com/jnls/ijdr/fulltext/10.4103/0970-9290.147123~oral-fibrolipoma-a-rare-histological-variant

[8]. Epivatianos A, Markopoulos AK, Papanayotou P. Benign tumors of adipose tissue of the oral cavity: a clinicopathologic study of 13 cases. J Oral Maxillofac Surg Off J Am Assoc Oral Maxillofac Surg. 2000 Oct;58(10):1113–7; discussion 1118. doi:10.1053/joms.2000.9568 PubMed PMID: 11021705.

[9]. Manor E, Sion-Vardy N, Joshua BZ, Bodner L. Oral lipoma: analysis of 58 new cases and review of the literature. Ann Diagn Pathol. 2011 Aug;15(4):257–61. doi:10.1016/j.anndiagpath.2011.01.003

[10]. Furlong MA, Fanburg-Smith JC, Childers ELB. Lipoma of the oral and maxillofacial region: Site and subclassification of 125 cases. Oral Surg Oral Med Oral Pathol Oral Radiol Endodontology. 2004 Oct;98(4):441–50. doi:10.1016/j.tripleo.2004.02.071

[11]. Keerthana D, Angadi P. Fibrolipoma of the buccal mucosa: A rare case report. Indian J Health Sci Biomed Res KLEU. 2023;16(1):171. doi:10.4103/kleuhsj.kleuhsj_580_22

[12]. ResearchGate [Internet]. 2026 [cited 2026 Aug 17]. (PDF) Oral Fibrolipoma: A Rare Histological Variant. doi:10.5005/jp-journals-10037-1102

[13]. Azzouz Y, Abidi S, Zidane FZ, Chbicheb S. An unusual intraoral lipoma: case report and review of the literature. Pan Afr Med J. 2022 Apr 26;41:336. doi:10.11604/pamj.2022.41.336.34808 PubMed PMID: 35865836; PubMed Central PMCID: PMC9268315.