FIBROLIPOMA OF BUCCAL MUCOSA: - A RARE CASE REPORT AND LITERATURE REVIEW

Authors:

Dr. Vinod Kumar R. B.[1]
Dr. Mahesh Narayanan[2]
Dr. Justin Mathew[3]
Dr. Jubin Thomas[4]
Dr. Abina Ashok[5]

Professor[1]
Department of Oral Pathology
Malabar Dental College, Manoor,
Edappal, Kerala

Professor[2]
Department of Periodontics
Malabar Dental College, Manoor,
Edappal, Kerala

Professor[3]
Department of Oral &
Maxillofacial Surgery,
Malabar Dental College, Manoor,
Edappal, Kerala

Reader[4]
Department of Oral Pathology
Malabar Dental College, Manoor,
Edappal, Kerala

House Surgeon[5]
Malabar Dental College,
Manoor, Edappal, Kerala

Address for Correspondence:
Dr. Jubin Thomas
Reader
Department of Oral Pathology
Malabar Dental College,
Manoor, Edappal, Kerala
E mail: drjubin7@gmail.com

ABSTRACT

Lipomas are benign connective tissue tumors characterized histologically by presence of mature adipocytes. Fibrolilpoma is one among the variants of lipoma, which is a rare tumor in the orofacial region. Etiology of this lesion is still controversial. We are reporting a case of fibrolipoma of buccal mucosa with literature review of its clinical and histological features. The diagnosis and differentiation of fibrolipoma with similar lesions is necessary for the accurate treatment.

Key Words: Lipoma, Fibrolipoma

J Odontol Res 2019;7(1)25-9.

INTRODUCTION

Lipomas are benign mesenchymal tumors composed of mature fat tissue and often a contingent finding[1]. This lesion account for 1%-4% of all benign tumorsof oral cavity[2]. Fibrolipoma is an extremely raresubtype which accounts for 1.6% of allfacial lipomas. They can occur anywhere in the body and is titledas "universal tumor" or "ubiquitous tumor."[3] The first description of oral lipoma wasgiven by Roux in 1848 and referred to as "yellow epulis."[4]

This is a case report of a rare variant of lipoma known as fibrolipoma which was treated by surgical excision. The aim of this paper was to recapitulate the clinical, histopathological, and therapeutic features of this type of lesion.

CASE REPORT

A 49 Year old female patient reported with a complaint of small out growth in the oral cavity on left cheek region since 6-8 months. The swelling grows to present size over 6-8months time and there is no change in size noted since last 1-2 months. The lesion was asymptomatic and occasional biting on the enlarged lesion was the only complaint. She didn't have any history of any cheek biting habit. No history of bleeding or discharge noticed associated with growth noticed.

Intraoral examination revealed a solitary pink, sessile, exophytic nodule with a smooth glossy surface on the occlusal line of the left buccal mucosa with respect to 26 and 36 region. It was measuring 1x1x1 cm and the margins were well defined [fig-1]. On palpation the lesion was soft, non-tender, not fixed to the underlying structure. On the basis of clinical history and examination a provisional diagnosis of lipoma and a differential diagnosis of fibroma was established.

Informed consent of the patient was taken and laser excision under local anaesthesia was performed. The tissue was fixed using 10%neutral buffered formalin and send for histopathological examination. The macroscopic examination revealed a small bit of soft tissue, measuring about 1 X 1 X 1cm in diameter, creamish white in colour, firm in consistency and round in shape[fig-2].

Upon microscopic examination the hematoxylin and eosin stained soft tissue section showed epithelium supported by connective tissue. Epithelium is of stratified squamous variety with spongiosis of the superficial cells. The connective tissue exhibited the lobular architecture of adipose cells with significant fibrous component. Artefactualclefting was noted between the epithelium and connective tissue and necrotic tissue towards the deeper border due to laser excision [fig 3&4]. A histopathological diagnosis of fibrolipoma was ingrained.

DISCUSSION

Lipomas are relatively aberrant benign mesenchymaltumors that originate from mature adipocytes.[5] In the head and neck region the occurrence of lipoma is reported to be 15-20% where as in the oral cavity it is only 1-4%[6]. On a histological point of view, lipomas can be classified as classical lipomas and variants, such as fibrolipomas, spindle celllipomas, intramuscular or infiltrating lipomas, angiolipomas, salivary gland lipomas, pleomorphic lipomas, myxoidlipomas, and atypical lipomas. In large case series studies about variants of lipoma of the oral cavity, it was found that fibrolipoma accounted for 8.3%[7]of all variants of lipoma. As the lesion appears as painless and slowly growing on a clinical basis, it was difficult to evaluate the actual incidence of fibrolipoma. Many at a times the patient reports to the clinician only when the lesion become symptomatic or due to functional or aesthetic reason.

The etiopathogeneses of lipoma and fibrolipoma remain unknown. Previous studies suggest that fibrolipoma[8] could be arising due to a congenital abnormality caused by an endocrinal imbalance[9], or arises via the degeneration of a fibromatoustumor[10], or from the maturation of lipoblastomatosis[11]. Mild repeated trauma is also one of the suggested cause which can trigger the proliferation of fatty

tissue[9].Also,few authors suggest that they arise due to rearrangement ofchromosome numbers 12q, 13q, and 6p[12]. We consider that the present case involved a fibrolipoma caused by repeated chewing-related trauma.

Lipomas variants differ from classical form in its clinical presentation as well as in its histological features. Depending on the quantity and distribution of fibrous tissue and the depth of the tumor the fibrolipoma varies from soft to firm[8]. When seen inthe oral cavity, it has been noted on the cheek, lip, palatal mucosaand buccal mucosa being the most common site[13]. Oral lipoma and its variants have been reported tooccur in all age groups but are most frequently seen inpatients ranging in age from 40 to 60 years[7,10].Previous studies have reported that lesions in the oral cavityexhibit a mean diameter of 2 cm[10]. Therefore, the presentcase did not involve any particularly unusual clinical findings.

According to WHO, fibrolipoma was a microscopic variant of lipoma. Characteristic feature of fibrolipoma was of mature adipocytes interspersed with dense connective tissue. The growth rate of fibrolipoma is faster than classic variant. Occur mostly on buccal mucosa and buccal vestibular region with slight female predilection.

Although liposarcoma in the oral cavity is rare, on clinical basis it was difficult to differentiate from its benign counterpart. In order to differentiate liposarcoma from fibrolipoma, histopathological examination is mandatory and the diagnosis can be achieved by lack of lobular architecture, areas of prominent fibrosis and by presence of multiloculated adipose tissue having an intended nucleus in liposarcoma in variable proportion. A recurrent fibrolipoma shouldbe viewed with suspicion and instead, a low-grade liposarcoma should be suspected[14].

Often solitary, but multiple head and neck lipomas are associated with several disease conditions which include multiple familial lipomatosis and proteus syndrome, cowdens syndrome, neurofibromatosis, Gardner syndrome, Multiple Hamartoma syndrome, Encephalocranio cutaneous lipomatosis, Dercum's diseases. Some complications associated with esophageal, fibrolipoma is reported in long lasting cases which include upper airway obstruction leading to esophageal disease.

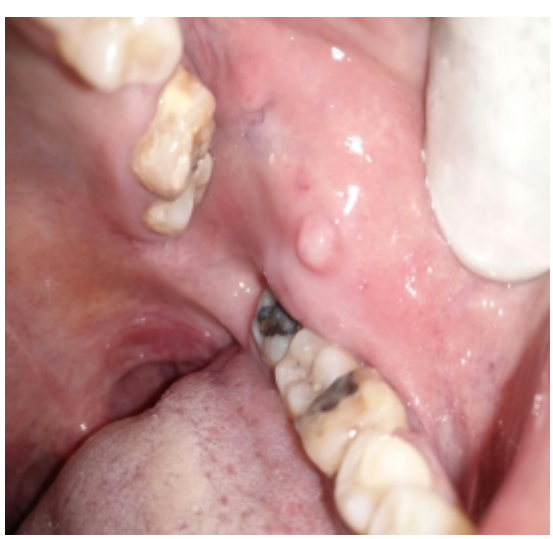

Fig-1: Clinical appearance of the lesion

Fig-2: Surgical gross specimen

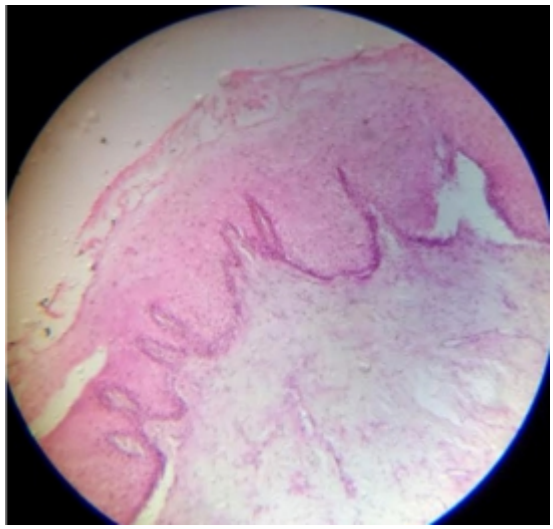

Fig-3:
Photomicrograph showing laser artefact as clefting between the epithelium and connective tissue (H&E, 4x)

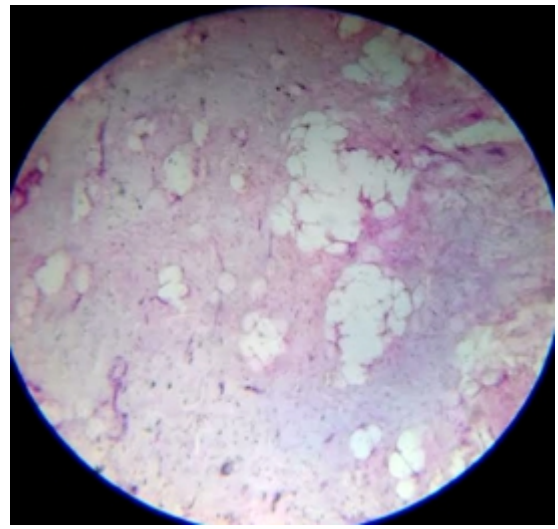

Fig-4:
Photomicrograph showing mature adipose tissue and intervening fibrous bands (H&E, 4x)

CONCLUSION

Fibrolipomas are rarely seen in oral cavity. The case presented hereshowed typical clinical and histopathological findings of afibrolipoma. It has a greater proliferative rate than other simple variants, which indicates the need for accurate diagnosis of such variants[15]. The treatment of lipomas including fibrolipoma is usually surgical excision.

REFERENCES

1. Fuchs A, Henrot P, Walter F, Lochum S, Vignaud JM, Stines J, et al. Lipomatoustumors of soft tissues in the extremities and the waist in adults. J Radiol2002;83:1035–1057.
2. Kumaraswamy SV, Madan N, Keerthi R, Shakti S. Lipomas of oral cavity: case reports with review of literature. J Maxillofac Oral Surg 2009;8:394–397.
3. Neville BW, Damm DD, Allen CM, Bouquot JE. Soft tissuetumors. Oral and Maxillofacial Pathology. 2nd ed. Philadelphia:W.B. Saunders; 2002.
4. Tettamanti L, Azzi L, Croveri F, Cimetti L, Farronato D,Bombeccari GP, et al. Oral lipoma: Many features of a rare oralbenign neoplasm. Head Neck Oncol 2014;6:21 7.
5. Rajendran R, ShivapathaSundharam B, editors. Shafer's Textbook of Oral Pathology.7 ed. Noida. Elsevier; 2012 pp 140
6. Adoga AA, Nimkur TL, Manasseh AN, Echejoh GO. Buccal soft tissue lipoma in an adult Nigerian: A case report and literature review. J Med Case Reports. 2008;2:382
7. Naruse T, Yanamoto S, S.-I. Yamada et al., “Lipomas of the oral cavity: clinicopathological and immunohistochemical study of 24 cases and review of the literature,” Indian Journal of Otolaryngology and Head & Neck Surgery, vol. 67, supplement 1, pp. S67–S73, 2015
8. Bancrof L.W, Kransdorf M.J, PetersonJ.J, and M. I. O’Connor, “Benign fatty tumors: classifcation, clinical course,imaging appearance, and treatment,” Skeletal adiology, vol. 35, no. 10, pp. 719–733, 2006.

9. J. G. A. M. de Visscher, “Lipomas and fbrolipomas of the oral cavity,” Journal of Maxillofacial Surgery, vol. 10, no. 3, pp. 177–181, 1982.

10. Fregnani E.R., PiresF.R., Falzoni R, Lopes M.A., and Vargas P.A, “Lipomas of the oral cavity: clinical fndings, histological classifcation and proliferative activity of 46 cases,” International Journal of Oral and Maxillofacial Surgery, vol. 32, no. 1, pp. 49–53, 2003.

11. Epivatianos A., Markopoulos A.K., and Papanayotou P, “Benign tumors of adipose tissue of the oral cavity: a clinicopathologic study of 13 cases,” Journal of Oral and Maxillofacial Surgery, vol. 58, no. 10, pp. 1113–1117, 2000.

12. Jo S, Vivek V, Nair BJ, Alex VB. A slow growing ambiguous soft tissue swelling of buccal mucosa. A diagnostic melee. Int J Adv Health Sci 2015;2:5 9

13. Sah K, Kadam A, Sunita JD, Chandra S. Non-infltratingangiolipoma of the upper lip: A rare entity. J Oral MaxillofacPathol. 2012;16(1):103-06.

14. Gnepp DR. Diagnostic Surgical Pathology of the Head andNeck. Philadelphia: WB Saunders; 2000

15. Iaconetta G, Friscia M, Cecere A, Romano A, Orabona GD,Califano L, et al. Rare fbrolipoma of the tongue: A case report.J Med Case Rep 2015;9:177