



Oral Fibroma: A Case Report

Shagun Malik^{1*}, Amit Bhardwaj², Shilpa Kamra³

^{1,2,3}Department of Periodontology, Faculty of Dental Sciences, SGT University, Gurugram

*Email id - shagun_fdsc@sgtuniversity.org

ABSTRACT

Fibroma is a lesion which is reactive in region, it comprises of majority of the benign lesions of the oral cavity. Local irritants are the main etiologic factors responsible for the hyperplastic changes in the tissue include dental calculus, overhanging margins of the restoration, faulty prostheses, etc. A 34 year old patient came with a chief complaint of growth in front tooth region of the lower arch. The lesion was 1x1.5cm in size, tender and firm in terms of consistency. The treatment plan included Scaling and Root planing followed by surgical excision of the lesion. The excised tissue was sent to the laboratory for histological examination. Histopathological investigation revealed hyperplastic changes in the epithelium as well as connective tissue. The changes include intracellular oedema in the stratum spinosum layer of epithelium and the connective tissue changes include mixed inflammatory cell infiltrate along with presence of microbes in the dilated capillaries. On the basis of clinical examination and histological investigations the lesion was diagnosed as irritational fibroma. After thorough clinical and lab investigations the diagnosis of fibroma was formed. After the non-surgical mechanical debridement, surgical excision of the lesion was performed.

KEYWORDS: Connective tissue, Histological investigation, Fibroma, Stratum spinosum.

Received 28.07.2022

Revised 19.08.2022

Accepted 26.10.2022

INTRODUCTION

Oral cavity is very dynamic in nature. It is persistently displayed to both internal and external stimuli. This lead to initiation and development of various disorders ranging from developmental anomalies to reactive lesions and neoplasm[1]. Oral mucosa is considered as the most common site for fibroma in the oral cavity, usually benign in nature having connective tissue origin[2]. Oral fibroma is considered to be most prevalent in older adults when compared to any other age group, with a preponderance of 1-2%. Other names given for fibroma are Irritation fibroma, a fibrous nodule, or a fibro-epithelial polyp. Orally, fibroma occurs as a result of insult or irritation to the tissues which could be due to trauma induced by biting lip or cheek, overhanging margins of the restoration, dental calculus, sharp edges of the tooth, dental prostheses[3].

Fibroma is a hyperplastic lesion which is formed as an end product of a healed tissue of an inflammatory condition. Fibromatous lesion could be sessile or pedunculated, the site affected ranges in terms of consistency from firm and resilient to soft and spongy[4]. According to Cooke, the pedunculated lesion present on the surface of the mucosa is termed as "polyp" whereas the lesion whether it is sessile or pedunculated "polyp" in the gingival region it is termed as "epulides"[5-6].

CASE REPORT

A 34 year old male patient came to the outpatient department with a chief complaint of a growth in the lower front tooth region since 1 year. Patient's medical and genetic history was non-relevant. The overall physical examination of the patient was normal.

Intraoral examination revealed the presence of a well circumscribed swelling of 1x1.5cm in its greatest measurements. The lesion is existed in the region of 41 and 42. The lesion was tender on palpation and firm in terms of consistency. The lesion was present since 1 year. During the first dental visit, non-surgical periodontal therapy in the form of Scaling and Root Planing was performed. The patient was recalled for the next visit, one week after the SRP. The signs of inflammation get subsided and the excision was planned. Prior to the surgical excision, written informed consent from the patient was taken. Routine blood tests were prescribed; the test results were obtained within normal range. Under local anaesthesia, excision of the overgrowth was performed and the collected sample was sent for histological

examination. Surgical scalpel was used; no suturing was performed postoperatively. Post-operative medications and instructions were given to the patient.

Histopathological examination revealed hyperplastic changes in the epithelium. The epithelium overlying the mass of connective tissue is stratified squamous epithelium, with presence of intracellular oedema in stratum spinosum. The connective tissue consists of loosely arranged collagen fibres. Inflammatory cell infiltrate which comprised of both lymphocytes and plasma cells are appreciated in the connective tissue. Focal areas of dilated blood capillaries along with presence of microbial colonies. On the basis of clinical examination as well as histologic investigations, the lesion is diagnosed as irritational inflammatory fibroma.



Figure 1. Pre-operative intraoral lesion **Figure 2. Surgical excision of the lesion**

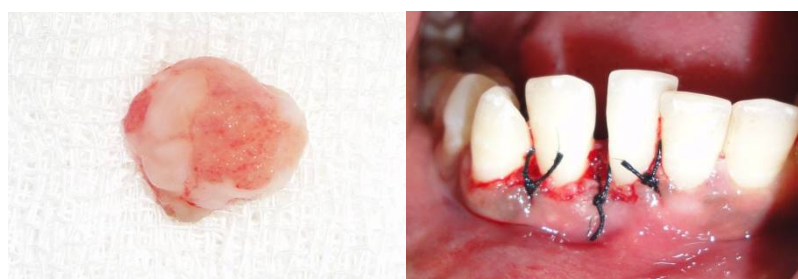


Figure 3. Excised mass **Figure 4. Immediate post-operative intraoral**



Figure 5. One month post-operative intraoral photograph

RESULTS AND DISCUSSION

Certain oral lesions occur as a result of some oral habits such as lip biting, trauma from occlusion and local causative factors. It occurs because of prolonged process of repair which lead to granulation tissue formation and scarring of the tissue in the submucosal region as a mass. Domingo *et al* conducted a study in 2008 in which examination of 300 subjects with benign oral mucosal tumours revealed in their histological investigation that more than 50% were diagnosed as fibroma[7-8], which is among the most common form of tumour of benign type. The cases of irritational fibroma will show radiating pattern at oral sites with no mobility (e.g., hard palate or gingiva), whereas in cases of sites which are not in close proximity to the underlying bone (e.g., buccal mucosa) the fibroma show circular pattern. These patterns are not very evident in case of true fibroma[9-10].

Scaling and root planning followed by excision of the fibroma is considered as the treatment of choice for such cases[11]. The lesion could be sessile or pedunculated, with a slow pace in terms of progression. It is self-limiting in nature and does not undergo malignant transformation. Although, in some cases long term follow ups are required in order to appreciate transformational change in the tissues and recurrences in case of such lesions. However, different treatment modalities can be undertaken to perform the excisional surgery ranging from surgical blades to lasers, electrocautery, etc. the selection of the treatment modality was done on the basis of anatomical as well as clinical considerations[12-13].

Although, laser surgery is beneficial in terms of surgical blades in terms of many aspects such as accuracy, less scarring and tissue contraction, minimal trauma, bloodless field and maintenance of elasticity in tissues. Other merits of using lasers include better treatment results and more pronounced healing of the tissues. Fibromas are among the common benign lesions of the oral cavity, both clinical examination as well as histological investigations are required to come to the diagnosis. Scaling and root planing to remove the local irritants from the targeted site followed by surgical excision of the lesion was the treatment of choice opted for the patient. The recurrence of the lesion is quite rare in such cases. These results supported the diagnosis and are consistent with those reported by Buchner and Hansen[14].

REFERENCES

1. Shafer, Hine, Levy. Benign and malignant tumors of oral cavity. In: Shafer's Textbook of Oral Pathology (R. Rajendran, B. Shivapathasundaram, eds). Elsevier, New Delhi, India, 2007; 178-180.
2. Neville BW, Damm DD, Allen CM, Bouquot JE. Soft tissue tumors. In: Oral and Maxillofacial Pathology. 3ed. Philadelphia, Saunders, PA, USA, 2002; 507-12.
3. Convissar R. Ablation/Vaporization Techniques and Procedures- Clinical Scenarios. In: Principles and Practices of Laser Dentistry. Elsevier, St. Louis, Mosby, 2011; 107-8.
4. Esmeili T, Lozada - Nur F, Epstein J. Common benign oral soft tissue masses. Dent Clin North Am. 2005;49:223-40.
5. Yeatts D, Burns JC. Common oral mucosal lesions in adults. AmFam Physician. 1991; 44:2043-50.
6. Cooke BE. The fibrous epulis& the fibro epithelial polyp: Their histogenesis& natural history. Br Dent J. 1952; 93:305-9.
7. Regezi JA, Sciubba JJ, Jordan RC, Abrahams PH. Oral Pathology: Clinical Pathologic Correlations. 5th ed. St. Louis, MO: WB Saunders; 2003;165-6.
8. Terres-Domingo S, Bagan JV, Jimenez Y, Poveda R, Murillo J, Diaz JM, Sanchis JM, Gavalda C and Carbonell E. Benign tumors of the oral mucosa: A study of 300 patients. Med Oral Patol Oral Cir Bucal. 2013;13:161-6.
9. Barker DS, Lucas RB. Localised fibrous overgrowths of the oral mucosa. Br J Oral Surg 1967;5:86-92.
10. Patil S, Rao RS, Sharath S, Agarwal A. True fibroma of alveolar mucosa. Case Rep Dent. 2014; 2014:904098.
11. Rossmann JA. Reactive lesions of the gingiva: diagnosis and treatment options. Open Pathol J 2011;5(1):23-32.
12. Halim DS, Pohchi A, Pang EE. The prevalence of fibroma in oral mucosa among patient attending USM dental clinic year 2006-2010. Indonesian J Dent Res. 2010; 1:61-6.
13. Buchner A, Hansen LS. The histomorphologic spectrum of peripheral ossifying fibroma. Oral Surg Oral Med Oral Pathol. 1987;63:452-61
14. Regezi J, Sciubba J. Oral Pathology: Clinical pathologic considerations. 4th ed. Philadelphia: WB Saunders; 2003; 115-6.

CITATION OF THIS ARTICLE

S Malik , A Bhardwaj, S Kamra. Oral Fibroma: A Case Report. Bull. Env.Pharmacol. Life Sci., Spl Issue [2]: 2022: 280-282