

TRAUMATIC FIBROMA – A CASE REPORTDr. Sharyu Thool¹, Dr. Mangala Rakaraddi², Dr. Swati Paraye³, Dr. Dhanvarsha Sarwade⁴,Dr. Aman Thakare⁵, Dr. Ayesha Khan⁶.PG Student^{1,4,5,6}, Prof & Head², Reader³, Dept. of Oral Medicine & Radiology, Saraswati Dhanwantari Dental College & Hospital, Post Graduate & Research Institute, Parbhani, Maharashtra, India.

ABSTRACT : Irritational / traumatic fibroma is a reactive lesion that represents most common oral lesions of the soft-tissue, caused by local trauma or plaque-induced inflammation, calculus, overhanging margins of restorations, which may lead to aesthetic and functional problems. It can occur at any age group from almost any soft-tissue site, buccal mucosa, tongue, gingiva. However, the buccal mucosa is more commonly involved. In the present article we report a case of traumatic fibroma on the right buccal mucosa in a 28 year old female patient.

Keywords : fibroma, buccal mucosa, cheek biting.

INTRODUCTION

Traumatic fibroma is one of the common exophytic lesion of the oral cavity that is reactive in nature. It occurs due to repetitive irritation or trauma in the mouth and surrounding structures.^[1] The recurrence rate is rare and this occurs only if the etiologic factor is not addressed.^[1,2] It typically presents as an asymptomatic mass that increases slowly in size.^[3]

Any irritants, such as plaque, calculus, overhanging margins of restorations, may be the causal factors for these lesions.^[4,5] The surface of the lesion is sometimes ulcerated due to trauma but has no change in color. Tongue, buccal mucosa, and lower labial mucosa are the common sites involved and the lesion is usually presented as a dome shaped lesion or is pedunculated occasionally.^[3]

CASE REPORT

A 28 year old female reported to the department of Oral Medicine and Radiology with a growth in relation to right buccal mucosa since 2 months. It started initially as a small lesion two months ago which steadily increased to the current size. There was no bleeding and pain associated with the growth. She gave a history of cheek bite during chewing and speaking. Chewing and normal oral function had been hampered due to the growth and patient also gave history of discomfort during mastication. No medical or family history noted. Patient did not give the history of any deleterious habits. Patient was conscious, well oriented and cooperative, with a normal gait and average built.

Extraoral examination revealed no facial deformity,

swelling or asymmetry. Eyes, ears and nose appeared normal. Range of motion of temporomandibular joint was smooth. No associated lymph node enlargement was noted.

Intraoral examination revealed Labial mucosa appeared normal, there was a growth present in the right buccal mucosa.

On inspection of the area of chief complain as shown in [Fig. 1] was a single, pale pink, sessile growth present in the right buccal mucosa. The growth was ovoid in shape, measuring approximately about 1 x 1 cm. Anteroposteriorly it was 1 cm away from corner of mouth till 2.5 cm away from retromolar area. Superoinferiorly it extended from line of occlusion upto 1 cm above the buccal vestibule. It had an indented surface with well-defined edge. The area surrounding the growth appeared to be normal.

All the inspectory findings were confirmed. The swelling was firm in consistency and non-tender on palpation. No signs of bleeding were noted with the growth. Diascopy test was negative.



Fig.1. :Pre-Operative Image Showing Firm Growth On The Right Buccal Mucosa.

The provisional diagnosis based on clinical findings was suggestive of a traumatic fibroma.

Differential diagnosis included soft tissue reactive lesions like lipoma, mucocele and minor salivary gland lesions.^[6]

Patient was explained about the treatment and a written informed consent was taken. Patient was advised routine diagnostic blood investigations. The values in the reports were within the normal limits. Patient was referred to the department of endodontics for a selective cuspal grinding. Complete excision of the lesion was done under local anaesthesia and closure was done using 3-0 black braided silk suture [Fig. 2& 3]. Post-operative medications and instructions were given to the patient along with instructions to maintain oral hygiene and the surgical site. Surgical site as shown in [Fig.4] showed improvement and complete healing of the lesion without any scars during the last follow up visit after 14 days.

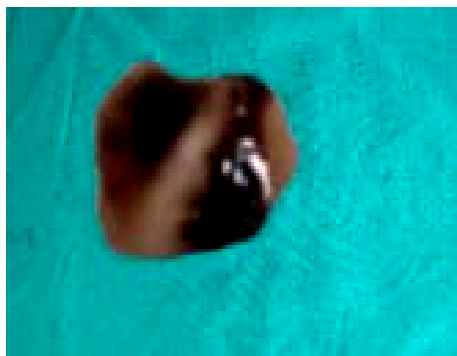


Fig. 2 : Image Showing Excised Tissue.



Fig. 3 : Image Showing Closure Done Using 3-0 Silk Suture.



Fig.4: Post-Operative Image after 14 days follow up Showing Complete Healing Of The Lesion.

Histopathological evaluation revealed stratified squamous parakeratinized atrophic surface epithelium and connective tissue. Connective tissue stroma was dense fibrous with few fibroblasts and inflammatory cell infiltrate. Final diagnosis of fibroma was given. [Fig. 5]

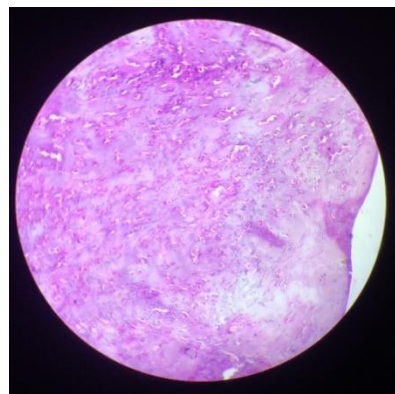


Fig. 5: H &E Under High Power Magnification.

DISCUSSION

Irritational fibroma and mucocele are two examples of traumatic and recurring oral lesions that can result from parafunctional habits like lip- and cheek-biting.^[7]None of the other local etiological factors mentioned in the literature have been linked to these lesions. Fibroma is an inflammatory and trauma-related reactive connective tissue hyperplasia.^[4] There is no history of malignant transformation of the lesion.^[7]

The tongue, buccal, and labial mucosa are the most prevalent places where the lesion seems to be a fibrous swelling. It typically manifests at the line of occlusion in the buccal mucosa.^[3]The surface is smooth but occasionally ulcerated.^[7]The colour appears similar to adjacent oral structures.^[7]

With the exception of ulcerated ones, fibromas are usually completely asymptomatic other from growth and discomfort when speaking or chewing.^[7]Low grade friction might lead to hyperkeratosis, which gives the lesion a white appearance. It typically has a diameter of 1 cm, while bigger sizes are incredibly rare. It mostly affects women between the ages of 20 and 50.^[7]Recurrence rates are typically minimal and only occur when the underlying cause is still present.^[2]On the other hand, mucocele recurrence is far more common. The best course of treatment for fibromas is enucleation, or surgical removal.^[7]

According to Barker and Lucas, different patterns of collagen arrangement are observed depending on the location of the fibroma lesion and the degree of irritation that preceded it. They typically exhibit two forms of arrangement: round and radiate. The radiating form, which is more common in the palatal region, exhibits fibres extending from the lesion base towards the epithelium, indicating that these areas have experienced more stress and are immobile. The circular pattern, which is observed in less traumatized and more flexible areas, displays a core mass of disoriented fibres encircled by a periphery of collagen fibres that run beneath and parallel to the surrounding epithelium.^[9]

A true fibroma can be distinguished from a pseudo-fibroma by the presence of a capsule, a clear separation of the tumor from the surrounding normal tissue, and the presence of collagen fibres within the lesion.^[9]

Mucoceles rarely occur on the palate and almost exclusively affect the lower lip. The appearance is pink, not bluish, when the mucosal coating is thicker than usual if the lesion is not superficial. Its consistency ranges from soft to rubbery, and it is variable but not emptyable.^[8]With the exception of salivary gland tumors (SGTs), which create mucus, all previous lesions can be removed if aspiration of the lesion yields a sticky, viscous, transparent fluid that resembles mucus. These are not common lesions.^[8]

There have been reports of oral lipomas in people as young as six weeks old to as old as 75 years old, with an early 50s average age. The distribution of

genders appears to be about equal. The most frequent locations are the buccal mucosa and mucobuccal fold; the tongue, floor of the mouth, and lip are the next most frequent locations.^[8]Typically, a lipoma presents as a single, sessile, pedunculated, or submerged lesion. It might be as tiny as a lesion with a diameter of about 1 cm or as large as a huge tumor 5 x 3 x 2 cm.^[8]The thickness of the mucosa that lies on top determines the color, which is often yellow. The surface is scarred, otherwise smooth and nonulcerated.^[8]The lesion is nontender, soft, and almost cheesy in consistency, however it could fluctuate.^[8]

CONCLUSION

Generally, fibromas are classified as benign fibrous connective tissue tumors. The current case's histological characteristics revealed characteristics of a fibroma. To identify these lesions, however, comprehensive clinical, radiographic, and histopathologic aspects together with surgical findings are necessary; further research is needed to determine the true nature of such fibromatous lesions.

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