

## Case Report

### Traumatic Fibroma Misdiagnosed As Mucocele: A Case Report

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#### ABSTRACT:

Mucocele is the most common minor salivary gland disorder and represents the second most frequent benign soft tissue tumors of the oral cavity, following irritational fibroma. Traumatic or irritation fibroma is the healed end product of the inflammatory hyperplastic lesion, which can occur at any age. It is usually characterized by a slow, painless growth accumulated over a period of months or years and associated with a history of a prior lesion-biting injury at the site. It is a commonly acquired benign reactive lesion of the oral cavity.

This is a case report of Mucocele diagnosed clinically which pathologically diagnosed as Traumatic fibroma.

**Key Words:** Benign Tumor, Traumatic Fibroma, Mucocele, Benign Salivary Gland Tumor

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#### INTRODUCTION

Mucocele is defined as the sub-epithelial accumulation of mucous secreted from salivary glands and their ducts in the mucosa of the oral cavity. Alteration of minor salivary glands due to mucus accumulation causes limited swelling. Causes of mucocele are rupture of the salivary gland duct, blockage of the salivary gland duct, traumatic severance of a salivary duct produced by lip biting. It is not a true cyst because it lacks epithelial lining. Mucocele can occur as an extravasation and retention phenomenon type known as mucus extravasation cyst and mucus retention cyst respectively. It can also be a superficial mucocele that is located directly under the mucosa, a classic variant located in the upper submucosa, and a deeper mucocele located in the lower corneum.<sup>2</sup> Reactive conditions can present as an oral mucosal lesion. An irritation fibroma, also known as a traumatic fibroma, is a reactive lesion of the oral cavity that appears as a localized, non-neoplastic, inflammatory hyperplastic papule of fibrous

connective tissue.<sup>1</sup> Anirritational fibroma usually occurs as an isolated event. A mucocele is an intraoral lesion that results from trauma to the minor salivary glands.<sup>1</sup>

#### CASE REPORT

A 24-year-old male patient came to the Department of Oral Medicine and Radiology, St. Joseph Dental College, Duggirala, Eluru, with a chief complaint of growth in right cheek region since 1 month. Patient gave history of growth which is initially small in size and increased to attain present size. Patient gave no history of pain or discomfort. Intra-oral examination revealed, on inspection a solitary growth seen involving the right buccal mucosa of size 1X1 cm approximately, extending anteroposteriorly 2 cm from right corner of mouth to 3 cm in front of right retromolar pad area, superiorly inferiorly at the level of occlusion. On palpation, all inspectory findings are confirmed on palpation. The lesion is non-tender, soft in consistency, smooth in texture. (Figure: 1)



Figure: 1 and Figure: 2

On diascopy examination, bluish translucent hue is evident. Based on the above observations, clinical diagnosis was given as Mucocele involving right buccal mucosa. (Figure: 2) Treatment plan was discussed with the patient. He was advised to have an excisional biopsy. Excisional biopsy was performed under LA, and it was sent to the histopathological laboratory for analysis.

**Investigations:** Blood report and Biopsy

A complete hemogram was performed, and all the values were in the normal range. An excisional biopsy was performed in the right buccal mucosa region, and the excised tissue was sent for histopathological analysis. (Figure: 3)



Figure: 3 and Figure: 4

On histological examination of the sample, the histological features include overlying parakeratotic stratified squamous epithelium and an underlying connective tissue component with short and blunt rete ridges formation. The underlying connective tissue shows dense collagen bundles associated with fibroblasts, mild chronic inflammatory infiltrate and endothelial lined blood capillaries. These features are suggestive of Traumatic fibroma. Based on the clinical and histological features, the final diagnosis is given as Traumatic fibroma involving right buccal mucosa.

**DISCUSSION**

Aspiration is needed to be done for mucocele, though it is a simple lesion clinician may overlook it as other reactive lesion. Therefore, aspiration is required. Improper examination of smaller lesions can mislead

the diagnosis if fluctuance and aspiration are not done. The bluish hue is due to over dampen blood vessels due to which the lesion may be confused as hemangioma, ecchymosis, mucocele. In this case, traumatic fibroma has superficial veins giving bluish hue which led to the misdiagnosis. The clinical differential diagnosis of a traumatic fibroma is diverse. Other reactive conditions of the oral cavity can have a similar morphology which include fibroma, inflammatory fibrous hyperplasia, inflammatory gingival hyperplasia, peripheral giant cell granuloma, peripheral ossifying fibroma, pyogenic granuloma, giant cell fibroma, mucocele, neurofibroma, polyp, salivary gland benign tumors and soft tissue mesenchymal tumors.<sup>1</sup> The pathogenesis of a biting fibroma involves trauma or chronic inflammation or both. The trauma can be acute and isolated, such as a tooth bite of the lip.

Alternatively, the trauma can be recurrent, such as chronic biting of the buccal mucosa of the cheek. Other potential causes of mechanical injury include calculi, dental prosthetics, dentures, foreign bodies, overextended borders of an oral appliance, overhanging margins of a dental restoration, and sharp spicules of the bones.<sup>1</sup>

## CONCLUSION

The recurrence of a biting fibroma is rare. However, several factors can contribute to provoking the recurrence of a biting fibroma. The lesion can persist and continue to grow if it has not been completely excised. Also, if the biting fibroma-initiating trauma persists or a new source of injury occurs at the site, the lesion can recur. The management of a biting fibroma has two key components: the excision of the lesion and the prevention of recurrence by eliminating the aetiology of chronic inflammation.<sup>1</sup> Different kind of treatment for soft tissue lesions include: scalpel excision, electrical surgery and laser surgery. Laser can be considered as a good modality even for very large lesions which are difficult to access by conventional surgery.<sup>4</sup>

## REFERENCES

1. Cohen PR. Biting Fibroma of the Lower Lip: A Case Report and Literature Review on an Irritation Fibroma Occurring at the Traumatic Site of a Tooth Bite. *Cureus*. 2022 Dec
2. Ghunawat DB, Marathe S, Thete SG, Chakraborty S, Lath H, Shehare NV, Laddha R. Mucocele: A Case Report. *J Pharm Bioallied Sci*. 2024 Jul
3. Dhanai A, Bagde HS, Gera R, Mukherjee K, Ghildiyal C, Yadav H. Case report on Irritational Fibroma. *J Pharm Bioallied Sci*. 2024 Feb
4. Bakhtiari S, Taheri JB, Sehhatpour M, Asnaashari M, Attarbashi Moghadam S. Removal of an Extra-large Irritation Fibroma With a Combination of Diode Laser and Scalpel. *J Lasers Med Sci*. 2015
5. Halim DS, Pohchi A, EE Yi P. The prevalence of fibroma in oral mucosa among patient attending USM dental clinic Year. 2006- 2010. *The Indonesian J Dent Res*. 2010
6. Singh A, Vengal M, Patil N, Sachdeva SK. Traumatic fibroma- A saga of reaction against irritation. *Dental Impact*. 2012