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### **Case Report**

# Fibroma of the floor of the mouth – Case report

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#### Abstract

Fibroma, also known as irritable fibroma, is the most prevalent fibrous tumour-like formation in the mouth. Despite being called benign tumours, most fibroids are focal reactive fibrous enlargements caused by trauma or local irritation. Fibromas usually damage the buccal mucosa because of local irritation and trauma. One unusual place is the floor of the mouth. Clinically, they typically manifest as an exophytic nodule that is solid to hard and has a smooth, flesh-coloured surface. Usually, the nodule's edges are clearly defined. The recommended course of treatment for an irritative fibroma is complete excision. Additional treatments like cryosurgery or intralesional steroid injection may be explored if a conclusive histological analysis is acquired. Here we present a case of 24-year-old female patient reported to the Dental Department with the chief complaint of a growth in the floor of the mouth.

Keywords: Oral diagnosis, Floor of mouth, Fibroma, Histopathology.

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#### 1. Introduction

Irritation fibroma, also known as traumatic fibroma, fibrous hyperplasia, or focal fibrous overgrowth, is a reactive oral cavity lesion that manifests as a localized, non-neoplastic, inflammatory hyperplastic papule of fibrous connective tissue. The majority of fibroids are brought on by trauma or local irritation, even though they are referred to as benign tumours. It is described clinically as a well-defined, slowly growing, pedunculated or sessile mass with a smooth surface, normal colour, and no pain. Persons between the ages of 30 and 50 are usually affected. 2

Similar lesions that can develop as a result of irritation from plaque microorganisms and other local irritants include pyogenic granuloma (PG), peripheral giant cell granuloma, and peripheral ossifying fibroma (POF). Sessile or pedunculated nodules at the interdental papilla are the clinical presentation of all the lesions. The surface can be

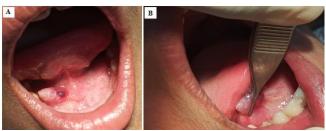
erythematous and/or gray, or it can be the typical color of the oral mucosa.<sup>3</sup>

The most typical site is buccal mucosa, though the lesion may occur over the tongue and gingiva. Because of lesser chances of trauma or irritation, occurrence in floor of mouth is quite uncommon. It is necessary to differentiate traumatic fibroma from mucocele, pleomorphic adenoma, myxoma and lipoma, if present at floor of mouth.<sup>4</sup> Cryosurgery, intralesional corticosteroid injection, or total excision of the lesion are available treatment options. Appropriate blood tests are required for the treatment method selection. There has been no recurrence rate after postoperative treatment.<sup>2,5</sup>

### 2. Case Representation

This case report describes the presentation and management of a soft fibromatous growth found in the floor of the mouth of a 24-year-old female (**Figure 1**a,b). The patient presented to the Dental Department with a chief complaint of growth in the floor of the mouth since last one year. Medical and Dental

\*Corresponding author: Harpuneet Kaur Email: drkaur071993@gmail.com history was non-significant. On intraoral examination, a soft nodule measuring 1 cm \* 3mm was observed on the right side of the floor of the oral cavity, covered by normal mucosa. The radiograph did not show any calcifications. Therefore, surgical excision of the lesion was performed under local anaesthesia (**Figure 2-3**). Written informed consent was obtained from the patient for publication of this case report and the pictures.



**Figure 1: A:** Fibroma in the right side of the floor of the mouth; **B:** Fibroma in the floor of the mouth



Figure 2: Lesion was surgically excised.



Figure 3: Postoperative

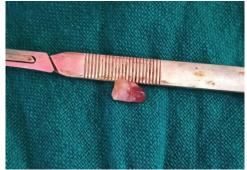
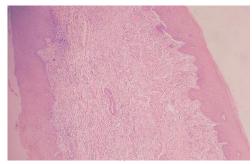


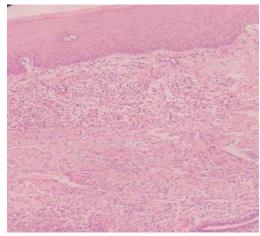
Figure 4: Fibroma after excision.

#### 2.1. Histopathological findings

Sections examined showed tissue pieces lined by mildly hyperplastic epithelium. The sub epithelium shows fibrosis, exuberant chronic inflammatory infiltrate comprising predominantly of lymphocytes with scattered plasma cells, congested blood vessels and variable edema. There is no evidence of dysplasia or malignancy in the section examined. (**Figure 5.6**)



**Figure 5:** Biopsy shows mildly hyperplastic squamous epithelium. Lamina Propria shows fibrosis, inflammation and few ectatic and congested capillaries (H&E, x4).



**Figure 6:** Lamina Propria showing variable admixture of fibrosis and edema with moderate lymphoplasmacytic infiltrate and congested capillaries (H&E, x 10).

#### 3. Discussion

The most prevalent benign tumor in the oral cavity is fibroma of the oral mucosa. It is a fibrous connective tissue hyperplasia that occurs reactively in reaction to trauma or local irritation.<sup>6</sup>

The buccal mucosa is typically affected by fibromas due to local trauma and irritation. The floor of the mouth is an uncommon location. They usually appear clinically as an exophytic nodule with a smooth, pink to flesh-colored surface and a solid to firm firmness. The edges of the nodule are typically well delineated. 9,10

Any lesion on the oral mucosa can have a wide range of differential diagnoses, including lipomas, inflammatory/reactive hyperplasia of soft tissue (pulp polyp),

neurogenic lesions (neurofibromatosis), traumatic lesions (mucocele), and epithelial tumors (squamous papilloma).<sup>6</sup>

These fibromas grow slowly and rarely go bigger than 1.5 cm. According to histology, an irritative fibroma is a mass made up of collagen bundles and fibrous connective tissue. The epidermis may exhibit hyperplasia or hyperkeratosis as a result of persistent irritation. Dense collagen fibers and localized hyperplasia of mature fibroblasts are found in the connective tissue. 9,10

Complete excision is the suggested treatment for an irritative fibroma. If a definitive histological analysis is obtained, further therapies like cryosurgery or intralesional steroid injection may be investigated. <sup>10,11</sup>

Because incompletely excised lesions have a high incidence of recurrence, long-term postoperative follow-up is crucial. 12

#### 4. Conclusion

A fibroma of floor of the mouth is a rare clinical condition. Despite being benign, a thorough histological analysis and surgical removal are necessary for diagnosis and to distinguish it from other neoplasms. To avoid recurrence, the local causes of this illness should be found and addressed.

### 5. Source of Funding

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#### 6. Conflict of Interest

None.

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