

**Case Report****Benign but troublesome: A case study of irritational fibroma in the oral cavity**
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**ARTICLE INFO***Article history:*

Received 22-09-2024

Accepted 19-10-2024

Available online 16-11-2024

*Keywords:*

Case series

Chronic irritation

Irritational fibroma

Oral mucosa

Reactive lesion

**ABSTRACT**

In the oral cavity, fibroma is the most common type of connective tissue tumor. The size of these proliferative benign connective tissue tumors varies from tiny to large, contingent upon the degree of presence of one or more components of the inflammatory response. They are usually asymptomatic. It is a locally confined hyperplasia of fibrous connective tissue brought on by persistent inflammation or local trauma. This lesion is more typically observed in men, with a preference for buccal mucosa, labial mucosa, and tongue. This lesion preferentially affects the tongue, buccal mucosa, and labial mucosa. A traumatic or irritating fibroma develops from an inflammatory hyperplastic lesion that can occur at any age and in almost any soft tissue location.

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**1. Introduction**

Fibroma is a frequent submucosal reaction to damage from teeth or dental prosthesis. It is sometimes referred to as fibrous polyp or polypus. In 1846, it was originally reported.<sup>1,2</sup> It arises from local irritation or injury and is also referred to as reactive focal fibrous hyperplasia.<sup>3,4</sup> It is most frequently found in 1.2% of people and is frequently made up of Type I and Type III collagen.<sup>5</sup> This lesion is the result of irritations like calculus, overhanging edges, trauma, and dental appliances.<sup>6</sup> Three distinct kinds of fibromas exist:

1. Hard fibroma.
2. Soft fibroma.
3. Other fibroma types include angio fibroma, cystic fibroma, myxo fibroma, and cemento-ossifying fibroma. Hard fibroma has numerous fibres and few cells, whereas soft fibroma has many loosely packed cells.<sup>7</sup>

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**2. Case Reports***2.1. Case 1*

A male patient, 52 years old, arrived at the Oral Medicine and Radiology Department with the primary concern of growth in the left lip area for past 3 months. The patient was apparently normal before 3 months, patient has a habit of smoking for past 4 years, no significant dental history. Medical history indicated that the patient has had hypertension and diabetes for the previous four years and is now on medication. The etiology is trauma caused by sharp edged tooth surface. Intra-oral Examination: On inspection, a single sessile growth on the labial mucosa measuring about 0.5X0.5 and extending from the lower labial mucosa 1.5 mm away to the vermilion border surface seems smooth with slight pigmentation. On palpation, the site size, form, and extent are confirmed; it is non-tender, soft to firm in consistency, it is compressible, movable and does not bleed when manipulated. (Figure 1)



**Figure 1:** Clinical image showing fibroma in the left corner of the lip

### 2.2. Case 2

A male patient, 36-year-old, arrived at the Oral Medicine and Radiology Department complaining primarily of a growth that had been present for the previous two months in the area of his right upper back teeth. The patient was apparently normal before 2 months and had no significant dental history. Medical history shows that the patient is overall healthy. The etiology is trauma caused by sharp edged tooth surface of 18.

**Intra-oral Examination:** On inspection, a single moveable pedunculated growth is detected on the right buccal mucosa, measuring about 1.5X1.5mm and extending 1cm short of the upper mucobuccal sulcus and inferiorly away from the right lower buccal sulcus. The surface above the growth seems smooth. On palpation, the site's size, shape, and extent are confirmed; it is non-tender, with no pus discharge; it has a soft to firm consistency; and it does not bleed when manipulated.(Figure 2)

### 2.3. Case 3

A male patient, 45 years old, at the Oral Medicine and Radiology Department with the primary concern of growth in the area around his right lower back tooth for past four months. The patient was apparently normal before four months and had no significant dental history. Medical history shows that the patient is overall healthy. The etiology is trauma caused by sharp edged tooth surface of 47. **Intra-oral Examination:** On Inspection A single moveable growth on the right buccal mucosa, about measuring 2X2mm, extends 1cm short of the upper mucobuccal sulcus and inferiorly away from the right upper buccal sulcus; the surface above the growth seems smooth. On palpation, the site, size, shape, and extent are confirmed; it is non-tender,



**Figure 2:** Clinical image showing fibroma in the buccal mucosa in relation to 18



**Figure 3:** Clinical image showing fibroma in the buccal mucosa in relation to 47

with no pus discharge; it has a soft to firm consistency; and it does not bleed when manipulated.(Figure 3)

## 3. Discussion

The term "irritational fibroma" was coined by Dr. E. A. McCarthy. The most prevalent type of connective tissue tumor in the oral cavity is fibroma. A fibrous or granular tissue's inflammation is referred to as "inflammatory hyperplasia". This term describes a benign fibrous growth that typically arises in response to chronic irritation or trauma. Depending on how much the lesion has undergone excessive healing and inflammatory reactions, proliferative benign connective tissue tumors can range in size from tiny to enormous. "Epulis" is the term for a comparable gingival lesion. Localized fibrous hyperplasia, fibromatous

**Table 1:** Summary of cases

Case	Age	Gender	Site	Personal history	Description
Case 1	59	Male	Labial Mucosa	Pt has history of smoking from past 4 years.	<p><b>On inspection</b> A single sessile growth on the labial mucosa measuring about 0.5X0.5 and extending from the lower labial mucosa 1.5 mm away to the vermillion border surface is seen.</p> <p><b>On palpation</b> On palpation it is soft to firm in consistency, it is compressable, movable and does not bleed when manipulated.</p>
Case 2	36	Male	Buccal mucosa	No relevant history.	<p>A single moveable pedunculated growth is detected on the right buccal mucosa, measuring about 1.5X1.5mm and extending 1cm short of the upper mucobuccal sulcus and inferiorly away from the right lower buccal sulcus is seen.</p> <p>On palpation it is non-tender, with no pus discharge; it has a soft to firm consistency; and it does not bleed when manipulated.</p>
Case 3	45	Male	Buccal mucosa	No relevant history.	<p>A single moveable growth on the right buccal mucosa, about measuring 2X2mm, extends 1cm short of the upper mucobuccal sulcus and inferiorly away from the right upper buccal sulcus is seen.</p> <p>On palpation it is non-tender, with no pus discharge; it has a soft to firm consistency; and it does not bleed when manipulated.</p>

fibroma, and irritational fibroma are other names for fibroma. In the third, fourth, and fifth decades of life, fibroma is more common in females than in males. If this benign lesion undergoes malignancy there is increased risk of oral cancer and Malignant lesions can grow rapidly and invade surrounding tissues, potentially causing local tissue destruction, pain, and difficulty with normal oral functions such as eating and speaking. Malignant lesions might have a higher likelihood of recurrence, necessitating ongoing surveillance and possibly multiple treatments. If the malignancy affects critical areas of the oral cavity or jaw, it can impact essential functions like chewing, swallowing, and speaking.<sup>8</sup>

#### 4. Conclusion

To summarise, irritational fibromas are a common occurrence, often caused by mechanical irritation or persistent damage. While they are typically innocuous, quick identification is critical to alleviating symptoms and avoiding consequences. The buccal mucosa is the most prevalent place for irritational fibroma to develop.<sup>9</sup> Regular dental check-ups can help with early diagnosis and management of these lesions, guaranteeing good oral health.

#### 5. Source of Funding

None.

##### 5.1. Conflict of Interest

None.

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**Cite this article:** Deepika D, Shanthi M, Divya VC, Ganesh C, Hamsavardini, Angela DT. Benign but troublesome: A case study of irritational fibroma in the oral cavity. *J Orofac Health Sci* 2024;11(4):206-209.