

Unveiling Oral Focal Mucinosi-

A rare finding Department of Periodontics and Oral Implantology

Aishwary Patil¹, Praneeta Kamble¹, Madhuri Meshram¹
Nair Hospital and Dental College, Mumbai

Corresponding Author:

Aishwary Patil

Email : aishwaryupatil@gmail.com



Abstract :

Epulis is the most common finding seen in the oral cavity especially in gingiva. It a nonspecific term used for growths on gingiva and thus a histological analysis plays a key role in diagnosis to identify so as to provide appropriate treatment for the lesions and to prevent the recurrence. This article presents two cases with no distinguishing clinical features between two growths making histological examination of the upmost necessity for appropriate diagnosis.

Keywords- Epulis, Fibrous hyperplasia, myxoid degeneration

Introduction

Localized, slow growing mostly asymptomatic gingival growth is termed as “epulis”. Epulis in Greek literally means over the gingiva. The localized enlargements of gingiva can be either **isolated**(limited to gingiva adjacent to one or two teeth), **discrete**(sessile or pedunculated), or **regional**(involving three or more teeth in one or more areas).^(1,2)

Reactive lesions of gingiva could be fibrous hyperplasia, pyogenic granuloma, peripheral ossifying fibroma, or peripheral giant cell granuloma.⁽³⁾

Baesso RC et al (2023) has studied the incidence of reactive lesions of gingiva and found that incidence of fibrous hyperplasia is 47%, incidence of pyogenic granuloma is 28%, incidence of peripheral ossifying fibroma is 18% and incidence of peripheral giant cell granuloma is 7%. The mean age for these reactive lesions was found to be 40-53 years.⁽⁴⁾

Fibrous Hyperplasia

It is a benign lesion of fibrous connective tissue origin that causes functional and esthetic problems and tissue gives an elated response to chronic tissue injury. The lesion is mostly painless and sometimes histologically may present with focus of calcification, cementicle or trabeculae of bone^(1,5).

Pyogenic Granuloma

It is a non-neoplastic lesion occurring as a result of inflammatory reaction. Pyogenic granuloma is a misnomer because it not a consequence of granulomatous inflammation neither does it contain pus material. Several reasons are considered to be the etiology for pyogenic granuloma as soft tissue injury due to infection, invasive stimuli of low grade intensity, hormonal changes in pregnancy, puberty; and in cases of tissue regeneration and implants. Usually seen in females, in anterior region of maxillae, it is a exophytic mass which bleeds easily and recurrence rate of 5.8% to 16% after surgery was reported.⁽⁶⁾

Peripheral ossifying fibroma

Eversole and Robin coined the term peripheral ossifying fibroma. They occur exclusively on gingiva with high degree of cellularity exhibiting either bone formation, cementum like material or dystrophic bone formation. It may be pedunculated or sessile pink to red in colour with or without ulceration.⁽⁷⁾

Peripheral giant cell granuloma

It is a soft tissue lesion which originates from periosteum or periodontal membrane and rarely affects the underlying bone. It presents as red purple nodule. It is more common in mandibular arch and in anteriors than molars. PGCG are very aggressive in nature and may penetrate Col causing erosion and separation of adjacent tooth. The recurrence rate is around 10%.^(3,8)

Case 1

A 51-year-old male reported to the Department of Periodontology and Oral Implantology complaining of growth in gums in the lower front region since 2 months. The patient was systemically healthy and didn't have any form of habit. The growth was slowly progressing and was painless. On intraoral examination solitary, round shaped measuring 1cm x 1cm was seen. The surface was smooth and reddish in color and bleeding on probing was observed. Scaling was performed to remove the local irritants which resulted in shrinkage of the lesion. The patient was kept under a follow-up for 1 month. Later Excisional biopsy and microscopic examination were planned, and the patient's consent was taken for the same. All blood counts were within normal limits. After giving adequate local anesthesia, the lesion was excised, and bleeding was controlled. Suturing was not required, and analgesics were prescribed postoperatively. The excised lesion was stored in formalin and sent for histopathologic examination and the patient was followed after 7 days. The surgical site appeared to be healed well. Histological features were suggestive of fibrous hyperplasia.



Fig 1: Intraoral solitary sessile growth in between 32 and 33

Case 2

A 27-year-old female reported to the Department of Periodontology and Oral Implantology with a complaint of growth in the lower left back region of teeth. The patient was systemically healthy and didn't have any form of habit. On intraoral examination, there was a heart-shaped growth in 38 region measuring around 1cm x 0.5 cm. Excision and microscopic examination were planned, and the patient's consent was taken for the same. All blood counts were within normal limits. After giving adequate local anesthesia, an excisional biopsy was performed. Suturing was not required, and analgesics were prescribed postoperatively. The excised lesion was sent for histopathologic examination. The patient was followed after 7 days. On examination after 7 days healing was in

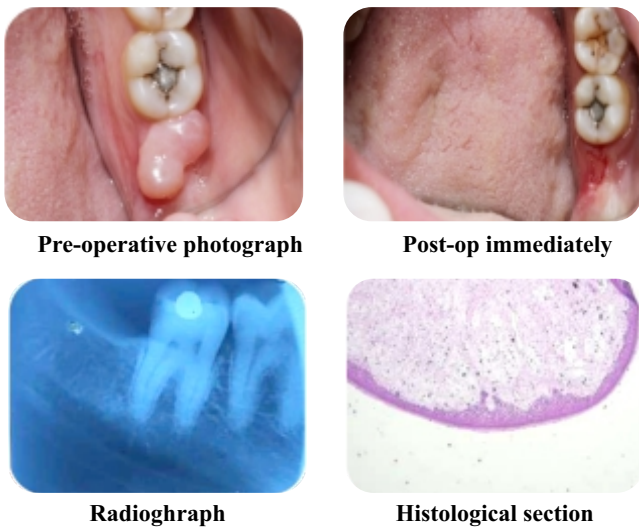


Fig 2: Intraoral solitary sessile growth in 38 region

Discussion-

Oral fibroma is a benign exophytic growth that projects above the normal contours. Most of these reactive lesions are caused due to trauma, local irritants, dental abnormalities and present as fibrous hyperplasia.^(8,9) The size of these lesions depends upon the inflammatory components associated with them. According to Zarei *et al.*, the lesion is mostly found on the gingiva in the fourth to sixth decade of life, with male to female ratio being almost 1:2⁽¹⁰⁾

In the present article a 51-year-old male presented with epulis in the interdental area of 32 and 33. The etiology for this epulis is local irritants, the patient does not give the history of any trauma. The inflammatory component of epulis subsided in this case after the removal of local irritants. Radiographically there was no bony involvement. Histological examination shows the proliferation of epithelial and connective tissue cells suggestive of **Fibrous Hyperplasia**.

In the second case a 27-year female had an epulis in 38 region. The patient explained that she didn't notice there was growth until it started occluding with 28, after which she started experiencing discomfort while mastication. Radiographically there was no bone involvement seen. The overall histological features are suggestive of **Fibroepithelial hyperplasia with Myxoid Degeneration**.

Oral focal mucinosis is a rare soft tissue lesion of unknown etiology showing female predilection mostly in the 4th-5th decades of life. Clinically it presents as a solitary sessile, pedunculated mass of the same color as the surrounding tissue.⁽¹¹⁾ Tomich was the first to describe oral focal mucinosis in 1974.⁽¹²⁾ Histopathological examination shows myxoid tissue area surrounded by dense connective tissue. There is an overproduction of hyaluronic acid by fibroblasts and its accumulation among collagen fibers.⁽¹³⁾

Conclusion-

Reactive lesions of gingiva present more or less the same clinical features and Oral focal Mucinosis is not commonly used as a differential diagnosis for reactive lesions of gingiva due to its rarity. Thus this article seeks attention that Oral focal Mucinosis should be considered as a differential diagnosis for the reactive lesions of gingiva. Surgical excision seems to be curative and even though till date there is no evidence of recurrence, follow-up is must.

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