FOCAL FIBROUS HYPERPLASIA A REACTIVE LESION

Triveni Ashok Kale

ABSTRACT

Focal fibrous hyperplasia is a localized reactive progressive, proliferation of oral mucosa in response to injury or local irritation. This case report describes a case of focal fibrous hyperplasia, which was successfully treated by surgical excision and apically positioned flap.

Keywords: Focal fibrous hyperplasia; Gingival neoplasms; Hyperplasia; Fibroma

Introduction

Focal fibrous hyperplasia is a localized reactive progressive, proliferation of oral mucosa in response to injury or local irritation. Local reactive focal overgrowths are frequently found in the oral cavities. Different types of localized reactive lesions may occur on the gingiva, including focal fibrous hyperplasia, pyogenic granuloma, peripheral giant cell granuloma and peripheral ossifying fibroma (POF). The most common site is the buccal mucosa along the line of occlusion and sessile lesion on the gingiva. The causative etiology for this lesion can be attributed to the local irritants like plaque, calculus, overhanging margins and trauma. Rarely it causes erosions in the underlying bone or separation of adjacent teeth from each other. The present case report describes a massive fibrous enlargement of the lesion located in lingual aspect of lower anterior teeth between 31, 41 treated by surgical excision of the lesion followed by periodontal flap surgery.

Case Report

A 24-year-old female patient reported with a chief complaint of an enlargement in the lingual aspect of lower anterior region for last one year. History reveals a nodular enlargement about a size of a pea nut which progressively increased to the present size. On clinical examination grade I tooth mobility was noticed in relation to 31 and 41 along with pathologic migration, reduced width of attached gingiva and periodontal pocket with a probing depth of 4-5mm. The lesion was single lobulated, 5cm x 5cm size with a peduncle (Figure 1). The dorsal surface of the lesion appears reddish white in with some hemorrhagic spots and its ventral surface appears whitish in color. The size of the lesion is enlarged because of chronic irritation from the maxillary incisor teeth. Due to the massive enlargement the patient had difficulty in mastication and swallowing and periodontal maintenance was not possible. The tongue was displaced medially. The lesion was not tender on palpation and had a firm consistency. The oral hygiene of the patient was poor with plaque and calculus. A provisional diagnosis of irritational fibroma was made and preoperative full mouth oral prophylaxis followed by excisional biopsy was planned. The excisional biopsy was performed under local anesthesia with scalp knife blade (Figure 2, 3). The area was curetted to remove any leftover flecks of the calculus. Later periodontal flap surgery was done followed by apically positioned flap (Figure 4, 5). The specimen was sent to the department of oral pathology for the histopathological examination (Figure 3).

The histopathologic report showed bundles of collagen fibers, fibroblasts and few blood capillaries as well as infiltration of chronic inflammatory cells like lymphocytes and plasma cell. The report was suggestive of focal fibrous hyperplasia (Figure 6). The patient was followed for 1 month from the day of surgical excision.

Discussion

The term “inflammatory hyperplasia” is used to describe a large range of commonly occurring nodular growths of the oral mucosa that histologically represent inflamed fibrous and granulation tissue. The size of these reactive hyperplastic masses may be greater or lesser, depending on the degree to which one or more of the components of the inflammatory reaction and healing response are exaggerated in the particular lesion. Focal fibrous hyperplasia is also known as irritational fibroma, oral fibroma or as fibromatosis fibroma. It is a connective tissue tumor and is the most common benign soft tissue neoplasm occurring in the oral cavity. Most fibromas represent reactive focal fibrous hyperplasia due to trauma or local irritation. Although the term focal fibrous hyperplasia more accurately describes the clinical appearance and pathogenesis of this entity, it is not commonly used. Females are affected twice as frequently as males.

The differential diagnosis of fibrous inflammatory hyperplasia should include consideration of the possibility that the lesion is a true papilloma (a cauliflower-like mass made up of multiple fingerlike projections of stratified squamous epithelium with a central core of vascular connective tissue) or a small verrucous carcinoma. Other differential diagnosis includes giant cell fibroma, neurofibroma, peripheral giant cell granuloma, mucocele, benign and malignant salivary gland tumor. Areas of diffuse or focal calcification or even ossification are found in some fibromas chiefly those occurring on gingiva and these lesions sometimes be called peripheral ossifying fibroma, ossifying fibrous epulis, peripheral cementifying fibroma or peripheral odontogenic fibroma. Localized overgrowths of fibrous tissues are of frequent occurrence in the oral mucosa. Several authors believed that many of these lesions are true fibromas, whereas Cooke believed that, the cause being local irritation as they are reactive in nature.
ed the term “focal fibrous hyperplasia” which implies a reactive tissue response and is therefore preferable to the term “fibroma” which implies incorrectly, a benign neoplastic proliferative fibrous lesion.2,8

In certain cases the histology may reveals the presence of spindle or stellate cells and multinucleated giant cells both of which appear to be of fibroblastic origin. These lesions have been termed by several authors as “giant cell fibroma”. They appear in the interdental papilla as a result of local irritation from calculus; caries or restorations with irregular margins. Histologically they are characterized by a focal sub epithelial mass of fibrous connective tissue composed has inter lacing or parallel bundles of collagen, containing occasional vascular channel and variable inflammatory infiltrate. The fibroblasts are apically narrow and elongated and reveal a stratified squamous parakeratinized epithelium with both areas of hyperplasia and atrophy. The underlying stroma was dense fibrous in nature with less vascularity and cellularity. Collagen fiber bundles are scattered in all direction with stellate fibroblast between them. The sub epithelial chronic inflammatory cell infiltrate like lymphocyte and plasma cells.5,10 Treatment modalities commonly practiced include scalpel surgery and complete removal of local irritants with follow-up care.

Conclusion
In conclusion, the treatment of reactive gingival lesions is the complete removal of local irritants with follow-up care, as well as dental hygiene maintenance to prevent or treat recurrence.

Acknowledgement
All staff members in the Department of Periodontics and Department of Oral Pathology, Rural Dental College, Loni, Ahmednagar, India.

Authors Affiliations
Triveni Ashok Kale MDS, Reader, Department of Periodontics, MGV Dental College and Hospital, Nasik, Maharashtra, India.

References

How to cite this article

Address for Correspondence
Dr. Triveni Ashok Kale MDS, Reader, Department of Periodontics, MGV Dental College and Hospital, Nasik, Maharashtra, India.
Email: trivenikale@yahoo.com

Source of Support: Nil
Conflicts of Interest: None Declared