# Recurring sessile fibroepithelial polyp of palatal gingiva – A case report

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### Abstract

Most common benign tumor of oral cavity is fibroepithelial hyperplasia. Number of etiological factors is associated with its pathogenesis; most important is hyperplastic inflammatory reaction because of irritation. Clinically we do encounter cases of unknown etiology. Present case presents a case of fibroepithelial hyperplasia in a lady patient aged 32 years with unknown etiology which was successfully treated and followed for 6 months with no reoccurrence.

Keywords: Fibroepithelial Hyperplasia, Gingival Growth, Benign Tumor, Pyogenic Granuloma

## Introduction

Wide range of lesions which may be developmental, reactive, inflammatory or neoplastic in nature result from various external or internal stimuli to mucous membrane and epithelial linning of oral cavity. As the result of constant and reccurent irritation body responds by development of exuberant tissue response but clinically these can be called as non neoplastic nodular swelling.<sup>(1)</sup> Most common site for such reactive lesions is gingival and less commonly seen in cheek, tongue, palate and floor of mouth. These lesions have same clinical presentation so they need to be differentiated on basis of their histopathology. They may be termed 'epulis' when the connective tissue proliferation which occurs is confined to the gingiva. According to Romer, the term epulis was first employed by Galen to designate a tumor on the gums.<sup>(2)</sup> The term as used by him applied generally to any kind of abnormal gingival growth. In more recent times its use has been restricted, as a rule, to certain types of growth found in oral cavity. Histologically these lesions can be classified and differentiated. Kfir et al have specifically classified reactive gingival lesions into pyogenic granuloma, peripheral giant cell granuloma. fibrous hyperplasia and peripheral fibroma with calcification.<sup>(3)</sup> Many authors believed that most lesions are true fibromas, whereas Cooke in 1956 said that these growths result from local irritation and are reactive lesions. Daley et al in 1990suggested the term, focal fibrous hyperplasia" describes a reactive tissue response and should be the preferable term over fibroma which incorrectly gives a picture of a benign neoplastic proliferative fibrous connective tissue.<sup>(4,5)</sup>

Most of lesions of oral cavity can be called fibromas but are not true neoplasms they are just a fibrous overgrowths caused by chronic irritation. That is why most author prefer the term fibroepithelial polyp or fibrous hyperplasia. Axell (1976) encountered prevalence of 3.25% for fibromas in the adult Swedish population.<sup>(6)</sup> They are mostly seen after second and

third decade of life with no specific sex predilection. Most common o fibrous growth of mouth is fibroma, composed of Types I and III collagen .More common reason for gingival growth is chronic irritation over traumatic causes and frequently gets submitted for biopsy.<sup>(7)</sup> The lesion presents as painless, sessile, round or ovoid, broad-based swelling, lighter in colour than surrounding tissue due to a reduced vascularity. The surface may be ulcerated and diameter varies from 1 millimeter to several centimeters. Treatment is surgical excision and a low recurrence rate is expected. Differential diagnosis of fibroma includes: giant cell fibroma, neurofibroma, peripheral giant cell granuloma, mucocele, lipoma, or salivary gland tumor. Fibrous polyp as submucosal response to trauma from any sharp tooth in oral cavity or dental prosthesis can be seen.<sup>(8)</sup> Another important point is we always need to diffentiate hyperplasia from neoplasia for correct diagnosis and proper treatment. In this article we present a case report of recurring sessile fibroepithelial polyp of palatal gingival in a lady patient aged 31 years.

# Case Report

A 31 years old female patient with a chief complaint of a mass in interdental premolar region on palatal side for last 6 months reported to the outpatient department 8months back patient first noticed this growth which got excised from local practioner. Since last 6 months patient again experienced appearance of the lesion again which increased progressively. Lesion was increasing in size with no history of bleeding, par aesthesia and pain. Clinical examination revealed a smooth sessile growth interdentally in premolar region with dimensions approximately 1.4 cm x1.5cm in diameter (Fig. 1 & 2), extending on buccal side also. The overlying mucosa was of same color as surrounding colour of palatal gingiva. The mass was firm in consistency, non-tender and non calcified provisional diagnosis was given irritational fibroma and differential diagnosis included chronic fibrous epulis,

peripheral giant cell granuloma, osteosarcoma, chondrosarcoma, pyogenic granuloma and peripheral odontogenic fibroma. Preoperatively complete hemogram, intraoral radiographs was done(Fig. 3) and then excisional biopsy of the lesion was performed under anesthesia(Fig. 4). Histological reports revealed that at 10x and40x stained section showed the presence of hyperplastic stratified squamous epithelium. The basal layer of epithelium showed hyperchromatic. The rete ridges were elongated. In the epithelium, the cell sizes have increased but the nuclear size remained same. The connective tissue showed haphazardly arranged collagen fibers. Also, there is presence of spindle shaped fibroblasts along with blood vessels and chronic inflammatory cell infiltrate. Thus, a final diagnosis of fibro epithelial hyperplasia was given (Fig. 7 & 8). Patient was recalled after 7 days and there was uneventful healing (Fig. 5). Patient was again followed up after 6 months with no sign of re-occurrence(Fig. 6).



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7

## Discussion

Clinically it is difficult to specific the exact type of lesion.it is of outmost importance to take a look at histopathological features of the lesion being treated for proper diagnosis and satisfactory treatment. Reactive hyperplasia is a fibrous connective tissue lesions that commonly occur in the oral cavity as a result of injury or chronic irritation. Body responds to chronic irritation with formation of granulation tissue consisting of endothelial cells and various chronic Inflammatory cells, process known as inflammation. This is clinically presented as overgrowth or polyp or epulis resulting from reactive hyperplasia by fibroblast expansion. Histologically, consist of mass of hyperplastic connective tissue with dilated blood vessels and various chronic inflammatory cells such as lymphocytes and plasma cells. The surface epithelium ranges from normal to acanthotic, ulcerated, keratotic or a combination of these features.

In cases of chronic inflammation, there is attendance for regeneration and healing process by forming granulation tissue but sometimes, there is excessive formation of this granulation tissue.

Chronic inflammation  $\rightarrow$  attendance for healing  $\rightarrow$  sometime excessive tissue formation.

These tissues clinically present itself in the oral cavity as polyps. All the factors which are potential source of chronic irritation should be removed. If the lesion does not resolves surgical excision with carefully checking for the left over inflammatory source during biopsy procedure should be done. These lesion have tendency of reoccurrence so, long term maintenance is required for these patients.

### Conclusion

A fibroma is an inflammatory hyperplastic growth of the connective tissue. This local response to tissue insult results in formation of polyp because of fibroblast proliferation as body's response. These lesion vary in size and may pose esthetic and functional problems in patients. Identification of any reactive hyperplastic gingival lesion requires the formulation of a differential diagnosis to enable accurate patient evaluation and management. It is very important to differentiate hyperplasia from neoplasia in patients presented with lesion with the help of biopsy. Treatment of choice should be complete removal of lesion along with removal of source of irritation to avoid possibility of reoccurrence.

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