

## CASE REPORT

# FIBROUS HYPERPLASIA OF HARD PALATE IN EDENTULOUS PATIENT- A CASE REPORT

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### ABSTRACT:

Local reactive focal overgrowths are frequently found in oral cavities. The fibrous hyperplasia is a reactive, inflammatory hyperplastic lesion of the connective tissue. Fibrous hyperplasia is considered the most common benign soft tissue growth in oral cavity. The most common intra oral site is along the occlusal line of buccal mucosa, but it also affects the lower lip, tongue, hard palate and edentulous alveolar ridge and whose frequency is estimated to be 1.2 % in adult subjects. Here we present a case of a 60 years old male patient who was having swelling on left side of posterior region of hard palate.

Key words: Focal overgrowth, Fibrous Hyperplasia, Buccal mucosa.

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### INTRODUCTION

Fibrous hyperplasia is a reactive inflammatory hyperplastic lesion of connective tissue<sup>1</sup>. It is a benign neoplastic proliferation of fibrous connective tissue.<sup>2</sup>

It is a non specific reactive lesion of soft tissues of unknown etiology usually associated with local irritation<sup>3</sup>. Inflammatory hyperplastic lesion may be defined as "An increase in the size of organ or tissue due to an increase in number of constituted cells as a local response of tissue to injury<sup>4</sup>. Clinically they appear either as pedunculated or sessile growth on any surface of mucous membrane. The majorities are small lesion and those measuring more than 1 cm are rare and they do not have malignant potential. Fibrous hyperplasia is considered the most common benign soft tissue growth in oral cavity.<sup>5</sup> The clinical presentation and epidemiology of most non neoplastic growths in oral cavity are quite similar: thus identification is dependent on histopathological differentiation.<sup>5</sup> Reactive localized inflammatory hyperplasia are commonly encountered oral lesions in humans.<sup>6</sup>

### CASE REPORT:

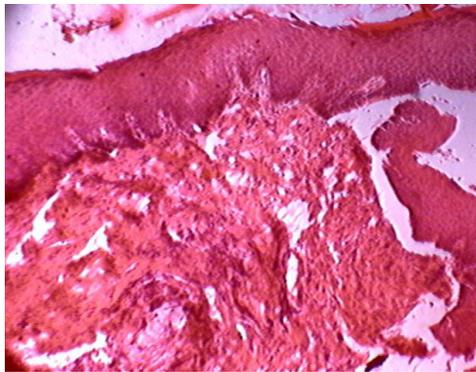
A 60 year old male patient was reported to Department of Oral Medicine and Radiology with chief complaint of swelling in left side of posterior region of hard palate and difficulty in chewing food due to absence of teeth. History of present illness revealed that swelling was noticed two years back and started increasing gradually to present size of 2cm x 1cm, thus posing some difficulty in swallowing. Past medical history was not significant and dental history revealed gradual natural exfoliation of upper and lower teeth due to mobility three to four years back and patient remained edentulous in relation to upper and lower arches since then. Extra oral examination revealed no significant abnormalities. On Intraoral examination, Inspection revealed 2cm x 1cm, pinkish, painless, asymmetric, lobulated, sessile, well circumscribed, firm growth covered by normal mucosa in left posterior region of hard palate. On palpation, the lesion was non tender, soft to firm in consistency, non fluctuant and non compressible. The

Radiological examination did not reveal any hard tissue involvement. Incisional biopsy was performed and sent for histopathological examination.



**Figure 1:** Clinical Photograph

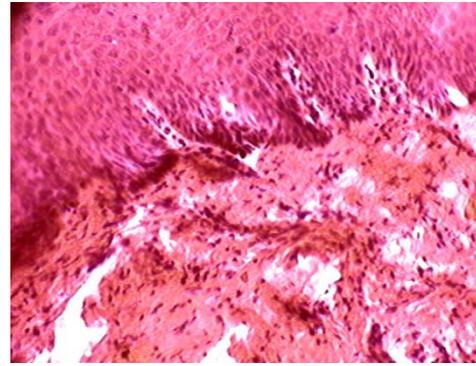
The gross macroscopic examination of tissue specimen revealed reddish white color, soft consistency with irregular surface texture measuring 5mm x 5mm in size. On microscopic examination Hematoxylin and Eosin stained slide showed single bit of tissue with epithelium and underlying fibrous connective tissue stroma under scanner view. Low power view showed hyperkeratinised stratified squamous epithelium and connective tissue showing dense collagen bundles which were scattered with stellate fibroblasts in between them. High power view showed proliferation of fibroblasts, minor salivary glands and inflammatory cells. Hence all the above features were suggestive of Fibrous Hyperplasia.



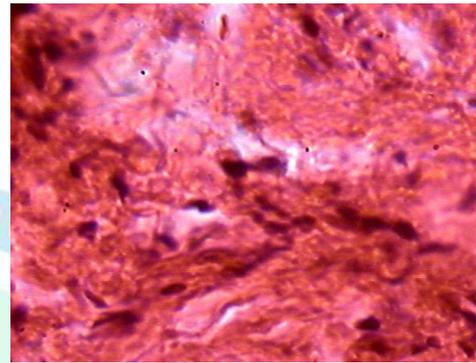
**Figure 2:** Photograph of H & E section under scanner view

## DISCUSSION

Fibrous hyperplasia is a reactive lesion which proliferates in response to injury. The reactive lesions are common in oral cavity because of frequency with which the tissues are injured<sup>2</sup>. Soft



**Figure 3:** Photograph of H&E Section under Low Power view (10X)



**Figure 4:** Photograph of tissue specimen under High Power View (40x)

tissue tumor-like lesion is term used to describe any pathologic growth that projects above normal contour of oral surface.

Different mechanisms may lead to development of soft tissue tumor like lesion in oral cavity. The most common mechanisms include reactive hyperplasia and neoplasia. The great majority of localized overgrowths of oral mucosa are considered to be reactive than neoplastic in nature.<sup>4</sup>

Reactive oral lesions were histologically classified using Neville classification of common mucosal overgrowth. Lesions were classified as hyperplastic, reactive and non pigmented lesions and as dermatoses, lichen planus and lichenoid reactions. Hyperplastic lesions included fibro epithelial hyperplasia, irritational fibroma, epulis fissuratum, fibrous polyps and cheek biting lesions. Focal reactive lesions included peripheral giant cell granuloma, pyogenic granuloma, peripheral ossifying fibroma and giant cell fibroma. These lesions are non neoplastic but microscopically specific, developing in response to acute or chronic trauma and appear as relatively common tumor like

growth of oral mucosa.<sup>7</sup> The term “inflammatory hyperplasia” is used to describe a large range of commonly occurring nodular growths of 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.<sup>9</sup> It is covered by normal mucosa. Etiological factors reported in literature include genetic predispositions or alterations, infective agents (virus), carcinogen, immunologic and nutritional elements (chilies, spicy food, tobacco and betel nut chewing, vitamin B deficiency and protein malnutrition). Rarely the size exceeds the cm, but in these cases a complaint of increasing difficulty of mastication and swallowing appears.<sup>10</sup> Although the term focal fibrous hyperplasia more accurately describes the clinical appearance and pathogenesis of this entity, it is not commonly used. It is intimately related to fibrous hyperplasia and in many instances is histologically indistinguishable from it. Other differential diagnosis includes giant cell fibroma, neurofibroma, peripheral giant cell granuloma, mucocele, benign and malignant salivary gland tumor.<sup>9,11</sup> Histologically focal fibrous hyperplasia is characterized by an encapsulated, solid, nodular mass of dense and sometimes hyalinized fibrous connective tissue. The surface epithelium is usually atrophic, but may show signs of continued trauma, such as excess keratin, intracellular edema of the superficial layers or traumatic ulceration. About 1% of the focal fibrous hyperplasia presents stellate and giant cells<sup>1</sup>. In certain cases the histology may reveal the presence of spindle or stellate cells and multinucleated giant cells both of which appear to be fibroblastic in origin.<sup>2</sup>

## CONCLUSION

Fibrous hyperplasia is a slowly progressing lesion, the growth of which is generally limited. Many cases will progress for long periods before patients seek treatment with lesion. In general, oral mucosal reactive lesions were more common during fifth and sixth decade of life. Geographic and ethnic differences of patients with various types of oral mucosal lesions require further investigation.

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