Research Paper

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Inflammatory Fibro-Epithelial Hyperplasia with Two Variants- A Report of Three Cases

MEDICAL SCIENCE

KEYWORDS : Trauma, Overgrowth, Pyogenic granuloma,

*** Dr Nitin Gorwade**	Assistant Professor, Dept of Periodontics, Govt. Dental College & Hospital, room no-135 Mumbai- 400001 Maharashtra, India * Corresponding author
Dr.C.D.Dhalkari	Associate professor, dept of periodontics, Govt.Dental college and hospital, Aurangabad -431001
Dr. Jayant R Ambulgekar	Consulting Periodontist, Ambulgekar Dental Clinic, Aurangabad-431001 Maharashtra, India

ABSTRACT

Introduction: Inflammatory Fibro-epithelial hyperplasia is a histological variant of fibroma and a proliferative fibrous lesion of the gingival tissue that causes esthetic and functional problems which need to be evaluated and treated as early as possible.
Methods: Three of these cases shows pedunclated base. Initially base of the overgrowth is incised through and through to cut the lesion, next to this step flap is raised and through interdental debridement is done. This article addresses the diagnosis and treatment of two different variants of cases of inflammatory fibro-epithelial hyperplasia.
Results: These lesions are a result of trauma, showing variations in size and shape follows different age groups and arises from cells of periodontal ligament and periosteum. After six months none of the lesion shows recurrence.
Conclusion: The cases demonstrate the need for awareness, and role of biopsy and histologic evaluation in management of these lesions.

Introduction:
Oral mucosa is constantly subjected to external and internal stimuli and therefore presents with a spectrum of diseases that range from developmental, reactive and inflammatory to neoplastic[1,2]. These lesions present as either generalized or localized. Reactive lesions of the gingiva are clinically and histologically non-neoplastic nodular swellings that develop in response to chronic and recurrent tissue injury which stimulates an exuberant or excessive tissue response[3,4,5,6,7]. They may present as pyogenic granuloma, fibrous epulis, peripheral giant cell granuloma, fibroepithelial polyp, peripheral ossifying fibroma, giant cell fibroma, and pregnancy epulis. Such reactive lesions are less commonly present in other intraoral sites such as cheek, tongue, palate and floor of the mouth but very frequently present in relation to the gingiva[5,6,7]. Clinically, these reactive lesions often present diagnostic challenges because they appear similar. But they possess distinct histo-pathological features[6,7,12]. There are different lesions that appear in the oral cavity with different frequency and etiology.

Among all these, most commonly classified lesions are [according to Buchner][6,7]-

- 1] pyogenic granuloma
- 2]calcifying fibroblastic granuloma
- 3] fibrous hyperplasia
- 4] peripheral giant cell granuloma

This paper covers a report of three cases with different diagnosis.

Case no-1



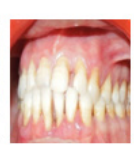
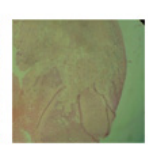
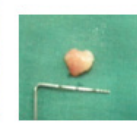



Fig. 1 Fig. 2 Fig.3 Fig.4

• A 44 year- old male patient reported with the chief complaint of swelling in the left front region of upper jaw since 4 months. The patiet gave H/o tooth brush trauma one day prior to the appearance of swelling, which gradually increased to the present size(fig-1). Histopathological diagnosis- inflammatory fibroepithelial hyperplasia(fig-4).

Case no-2

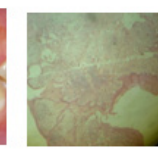
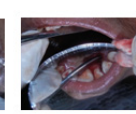
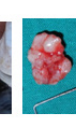


Fig. 5 Fig. 6 Fig. 7 Fig. 8

A 24 year old female patient reported with the chief complaint of swelling in the left front region of upper jaw since 3months, having a h/o tooth brush trauma after which a small painless swelling appears which gradually increased to the present size(fig-5). Histopathological diagnosis- inflammatory fibroepithelial hyperplasia.with calcification(fig-8).

Case no-3

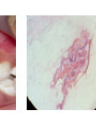


Fig. 9 Fig. 10 Fig. 11 Fig. 12 Fig. 13

A 17year old male patient reported to our department with the chief complaint of swelling in the left front region of upper jaw since 4 1/2months.There was a prick with bone spicule while eating meat, which he was removed immediately and next day a small painless swelling appears in the region of 2,3 interdentally on palatal side, then it gradually increases to the present size(fig-9). Histopathological diagnosis- inflammatory fibroepithelial hyperplasia with ossification and calcification(fig-13).

All the above cases were operated by common method i.e lesion was excised by cutting the lesion at its base i.e. stalk of peduncle, next to this step flap is raised and through interdental debridement is done.(fig-2,3,5,6,10,11) None of the lesion shows recurrence 2 years after surgery (3,8,12)

Discussion: All the above cases have a same etiology. Except for the size all the lesions shows similar clinical appearance. Radio-

graphically case-1 and case-2 shows same amount of bone loss, but case-3 shows moderate amount of bone loss. Because of all the cases have the same etiology, every case was provisionally diagnosed as a pyogenic granuloma. Pyogenic granuloma occurs at all ages, mainly in younger age group [second third, and fourth decade of life][2,5,6,7,12]. Females are more frequently affected than males, but there is no significant predilection for maxilla or mandible, the posterior or anterior regions. These findings are in general agreement with Angelopoulos[2,6,7]. Angelopoulos, Kerr, Lee, and Buchner analyzed 835 cases from literature[12]. The finding the pyogenic granuloma is more common in females than males with the greatest incidence in the second and fourth decade of life. Also same in the case of peripheral giant cell granuloma i.e. it is also occurs in all ages with peak in second, third and fourth decade[6,8,9,11]. It is frequently occurs in mandible than in maxilla[2,6]. Fibrous hyperplasia more frequently occurs in the older age groups than do the pyogenic granuloma and inflammatory fibrous hyperplasia with calcification and ossification[6]. The clinical aspects of inflammatory fibrous hyperplasia with calcification and ossification are similar to pyogenic granuloma. In one of the clinicopathologic studies conducted by yehoshua kfir, amos buchner, and louis hansen over 741cases it has been proved that inflammatory fibroepithelial hyperplasia with calcification and ossification affect more commonly young people and female[6]. The myriad histological entities show that reactive hyperplasia may be due to connective tissue response to varied intensities of gingival irritation or trauma[2,6,7,11]. This response may be influenced by the serum levels of certain endocrine hormones[2,6].

Conclusion: These cases demonstrate the need for biopsy and histologic evaluation in management of these lesions.

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