

CASE REPORT

Irritational fibroma of gingiva in a 60 years old female: A case Report

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ABSTRACT: Irritational fibroma is a common, benign, slow-growing, soft - tissue tumor. It can be often seen associated with trauma and constant irritation. We reported a case of irritational fibroma of gingiva in 60 years old female patient.

Key words: Irritational fibroma, soft - tissue tumor,

Received: 12 April, 2019

Revised: 22 April, 2019

Accepted: 28 April, 2019

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This article may be cited as: Bhatia A, Bains SK, Mehta R. Irritational fibroma of gingiva in a 60 years old female: A case Report. Int J Res Health Allied Sci 2019; 5(4):53-55.

INTRODUCTION

Irritational fibroma is a common, benign, slow-growing, soft - tissue tumor. It can be often seen associated with trauma and constant irritation. It usually presents as an asymptomatic mass which gradually increases in size.¹ The etiological factors for these lesions can be imputed to the irritants like plaque, calculus, overhanging margins and restorations.¹ Irritational fibroma represents a reactive focal fibrous hyperplasia due to trauma or local irritation.² Fibroma, a benign neoplasm of fibroblastic origin, is reactive in nature and represents a reactive hyperplasia of fibrous connective tissue in response to local irritation or trauma rather than being a true neoplasm.³

Traumatic or irritation fibroma is the healed end product of the inflammatory hyperplastic lesion which can occur at any age from almost any soft-tissue site, tongue, gingiva, and buccal mucosa being the most common.⁴ It is usually characterized by a slow, painless growth accumulated over a period of months or years. There are no significant complications due to irritational fibroma. It is usually managed by complete surgical excision. The prognosis is excellent once the source of irritation is completely eliminated.⁵ We reported a case of irritational fibroma of gingiva in 60 years old female patient.

CASE REPORT

A 60 years old female patient visited to the department with chief complaint of growth of maxillary anterior gingiva since 6 months (Fig- 1). History of presenting illness revealed that growth started 6 months ago as small size which gradually increased to attained the present size. History revealed that 11 exfoliated itself with increased in size of growth. There was no history of bleeding and pain associated with growth. Past medical & dental history was non- contributory.

Intra- oral examination revealed a 2X3 cm solitary growth of maxillary anterior gingiva extending from labial sulcus superiorly upto incisal third region of 12 inferiorly. It started medially from middle one third of 21 to middle one third of 12 laterally. The color of the growth was pale pink. On palpation, all the inspector findings were confirmed. The growth was non- tender, firm in consistency and having no discharge. It was sessile. On diascopy, blanching was absent. There was generalized grade II calculus. Intraoral periapical radiograph revealed slight bone loss in edentulous site of 11 (Fig- 2). Based on history and clinical examination, a diagnosis of irritational fibroma was made. Differential diagnosis of peripheral ossifying fibroma, peripheral giant cell granuloma and pyogenic granuloma was considered.

The growth was excised surgically following standardized surgical procedure (Fig- 3).



Fig 1- Growth on gingiva



Fig- 2- IOPAR of the site



Fig 3- Excised specimen

The specimen was sent for histopathological examination which showed superficial epithelium stratified squamous keratinized in nature and exhibits feature of atrophy at majority of the areas. Underlying connective tissue is composed of dense collagen fibre bundles along with mild infiltration of chronic inflammatory cells such as lymphocytes and plasma cells. Numerous endothelium lined blood capillaries along with endothelial cells were also noted. Features were suggestive of fibroma.

DISCUSSION

As the oral mucosa is constantly under the influence of various internal and external stimuli, it exhibits a variety of developmental disorders, irritation, inflammation, and neoplastic conditions.⁶ One of these conditions is the local reactive focal overgrowths. Localized fibrous tissue overgrowths are very common in the oral mucosa. The etiology of an irritational fibroma is usually a source of irritation.⁷ Furthermore, the character of these lesions tells a story. According to Barker and Lucas, irritational fibromas exhibit a pattern of collagen arrangement depending on the site of the lesion and the amount of irritation. There are two types of patterns: (a) radiating pattern and (b) circular pattern.⁸ Thus, they hypothesized that when there is a greater degree of trauma, the former appears in sites which are immobile in nature (e.g., palate), while lesser trauma induces the latter and it occurs in sites that are flexible in nature (e.g., cheeks). Similar such lesions, which may also arise as a result of irritation due to plaque microorganisms and other local irritants, include pyogenic granuloma, peripheral giant cell granuloma, and peripheral ossifying fibroma. All the lesions have a similar clinical appearance. Traumatic fibroma associated with oral practices such as tongue piercings has also been reported. Clinically, the growth is localized, with a smooth surface and a hard consistency usually with normal colored mucosa, sessile, or pedunculated base.⁹

The high female predilection and a peak occurrence in the second decade of life suggested hormonal influences. Approximately, 60% of irritation fibromas involve the maxilla and more often found in the anterior region, with 55 - 60% present at the incisor-cuspid region. It is usually reported with the diameter of 1.5 rarely reaching 3 cm; very few case reports are present in the literature with the lesion measures about 6 - 9 cm. In the present case, the lesion was also present in the maxillary anterior region with size of 2X3 cm.

Histopathologically, the sections show hyperplastic stratified squamous epithelium which is partly hyperkeratotic and hyperorthokeratotic at some places. Thin, finger-like rete ridges extend into underlying fibrocellular connective tissue stroma. Treatment includes scaling and root planning and excision (surgical) of lesion with totally removal of involved periodontal ligament and periosteum to minimize recurrence rate of lesion. Any other irritants such as an ill-fitting of dental appliance and high

restoration should be removed. Long-term follow-up is important for these types of cases because of the high growth potential of incompletely removed lesions.¹⁰

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