Irritational Fibroma – A Case Report

Dr Shrutika Borude [1], **Dr Akshaya Banerjee** [2], **Dr Rajesh Gaikwad** [3], **Dr Tabish Joy** [4],

1. Post Graduate Student, Department of Periodontology, Government Dental College & Hospital, Mumbai, India.
2. Associate Professor, Department of Periodontology, Government Dental College & Hospital, Mumbai, India.
3. Professor & HOD, Department of Periodontology, Government Dental College & Hospital, Mumbai, India.
4. Professor & HOD, Department of Oral Pathology, Government Dental College & Hospital, Mumbai, India.

Abstract

Oral fibromas is the most common soft-tissue neoplasm occurring in the oral cavity, caused due to trauma or local irritation by plaque, calculus and overhanging restorations, that may cause interference in normal functioning and aesthetic appearance. The present case report discusses a case of irritational fibroma in a male patient.

Key Words: Gingiva, Irritational fibroma, Fibrous hyperplasia.

Introduction

Irritation traumatic fibroma, peripheral ossifying fibroma, focal fibrous hyperplasia, pyogenic granuloma, inflammatory hyperplasia, and peripheral giant cell granuloma are common irritated localized reactive lesions occurring on gingiva. A fibroma may occur at any oral site, commonly it is seen on the buccal mucosa along the plane of occlusion.[1] Irritational fibroma can occur at any age from almost at any soft tissue site including gingiva, buccal mucosa, the tongue, lips and palate.[2] It is a well-defined, slowly growing lesion of oral cavity. Irritational fibromas are painless overgrowth sometimes may even show superficial ulceration or hyperkeratinosis. Females are affected twice as frequently as males.[3] Furthermore, it occurs commonly in the anterior maxilla, more precisely in the interdental papillary region.[4]

Case Report

A 35 years old male had reported to the Department of Periodontics, Government Dental College & Hospital, Mumbai with the chief complaint of overgrowth in the gums in the lower front region of jaw since 7 months. The patient was apparently all right 7 months back, when he noticed small overgrowth in lower anterior region of jaw. The growth was painless, slow progressing and with time had increased to present day size. There was no associated bleeding and pain. There was no relevant systemic history and family history.

On intraoral examination, a 10 mm x 9 mm x 5 mm roughly oval gingival growth was seen on lingual side in the interproximal region of 31 and 32 (pics-coronally from gingival margin till the incisal third of the crown and the growth also had a lobular contour). The growth was pale pink in colour, soft and firm in consistency, well defined, mobile, pedunculated, non-pulsating and smooth surfaced **[Figure 1]**.

Address For Correspondence
Dr. Shrutika Borude [1st]
Post Graduate Student,
Department of Periodontology,
Government Dental College & Hospital,
Mumbai, India.
Email id: shrutikaborude@gmail.com
Contact Details - 9665842268

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Figure 1: Irritation fibroma (a = 10 mm x 9 mm x 5 mm roughly oval gingival growth seen on lingual side in the interproximal region of 31 and 32 (pics-coronally from gingival margin till the incisal third of the crown which also pale pink in colour, soft and firm in consistency, well defined, mobile, pedunculated, non-pulsating and smooth surfaced.

There was spacing between the 31 and 32 teeth with plaque and calculus deposits.

On the basis of clinical evaluation provisional diagnosis of irritational fibroma was made. Irritational fibroma can also produce migration of teeth with destruction of the interdental bone.[5] Differential diagnosis includes pyogenic granuloma, peripheral giant-cell granuloma, and peripheral ossifying fibroma, which may also arise as a result of irritation due to plaque or calculus or other local irritants.[6]

Routine haematological examinations including haemoglobin, bleeding time and clotting time were found to be within normal physiologic limits. X-Ray of the region revealed no significant radiographic findings with respect to 31, 32.

Treatment

Phase I therapy-

Consisted of a thorough scaling and root planing; oral oral hygiene instructions were given to the patient. Patient was advised 0.2% chlorhexidine mouthrinse 10 mL, 1:1 dilution, twice daily for 15 days. The patient was recalled after 1 week and there was no reduction in the size of the growth.

Phase II therapy-

After phase I therapy, surgical excision of the growth was planned under local anaesthesia following localised full thickness flap and thorough debridement with 31 and 32 region on lingual and buccal aspect **[Figure II]**.

Figure II: Surgical excision of growth and localised flap.

After suturing, the periodontal dressing was placed and combiflame and analgesic were prescribed for 3 days. **[Figure III, IV]**.

Figure III: Suture given

Figure IV : Periodontal dressing given

Post-operatively at 1 week, the surgical site had healed uneventfully. The patient was kept on maintenance therapy and proper brushing technique (modified Bass technique) and oral hygiene instructions were given. Patient was recalled after 3 months and re-examined for recurrence, there was no recurrence of the lesion seen post-operatively **[Figure V]**.

Figure V : 3 months post surgery evaluation.

The patient was then referred to the Department of Orthodontics, Government Dental College & Hospital, Mumbai for correction of the spacing of mandibular anterior teeth, to prevent the recurrence of the gingival growth.

Discussion

Irritational fibroma is a clinical term for fibrous hyperplasia. 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.[7]

The frequency of irritational fibroma is found to be more in men than in the mandible and more often in anterior mental region, ranging between 55-62%.[8] Buccal mucosa is the most common site for oral fibroma. In present case,

lesion was present in relation to 31 and 32 teeth region on lingual aspect . Diameter of these lesions usually measures less than 1.5 cm and more than 3 cm in some cases. In very few cases lesions of 8 cm and 9 cm have also been reported. The surface of lesion may be ulcerated in 66% of cases and intact in 34% of cases.[9] In our case diameter of lesion was 1 cm x 0.9 cm in diameter **[Figure VI]**.

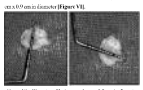

Figure VI : Diameter of lesion was 1 cm x 0.9 cm in diameter

In our case, the etiological factor was plaque and calculus. All other oral lesions such as pyogenic granuloma, peripheral giant cell granuloma, and peripheral ossifying fibroma have a similar clinical appearance.

Histopathologically, under low power view shows proliferative parakeratinized stratified squamous epithelium of variable thickness. The underlying connective tissue shows collagen fibres and bundles interspersed with fibroblast, patchy distribution of moderate inflammatory cells and lymphocytes throughout connective tissue stroma, endothelial lined vascular channels are noted suggestive of fibrous hyperplasia **[Figure VII]**.

Figure VII: Parakeratinized stratified squamous epithelium of variable thickness. The underlying connective tissue shows collagen fibres and bundles interspersed with fibroblast, patchy distribution of moderate inflammatory cells and lymphocytes

Treatment of irritation fibroma aims at eliminates of etiological factors followed by scaling and root planing of adjacent teeth and total surgical excision of fibroma along with localised flap reflection and thorough debridement which minimizes the chances of recurrence after removal.

Conclusion

Irritational fibroma/fibrous hyperplasia are one of the most common oral soft tissue neoplasms. To arrive at an accurate diagnosis a thorough history, clinical, radiographic and histologic examination should be carried out to differentiate it from other oral lesions. Early detection, elimination of the local irritation factor and the appropriate treatment of the lesion is important to reduce the chances of dentofacial complication.

Conflict of Interest

Nil

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms.

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