A Long Standing Fibrous Hyperplasia

Hema Seshan¹, Megha Mangal² and Ashwini³

*Corresponding Author Email: drmeghamds@gmail.com

Contributors:

¹Senior Professor, Department of Periodontics, Faculty of Dental Sciences, RUAS, Bangalore

²Post graduate student, Department of Periodontics, Faculty of Dental Sciences, RUAS, Bangalore.

³Professor, Head Of Department, Department of Periodontics, Faculty of Dental Sciences, RUAS, Bangalore.

Abstract:

Gingival enlargement is a common clinical problem, usually associated with multiple conditions. Such conditions could be associated with a variety of local and systemic factors. These can be result of trauma/chronic irritation, or arise from periodontal ligament, or periosteum. Appropriate treatment depends on correctly diagnosing the cause of the enlargement. The most common form of enlargement is due to plaque induced inflammation of the adjacent gingival tissues. In puberty and pregnancy, gingival enlargement can be due to poor oral hygiene, inadequate nutrition, or systemic variation in hormonal stimulation. In all forms of enlargements, good oral hygiene is necessary to minimize the effects of systemic factors; gingivoplasty or gingivectomy may be required, but should be done in combination with prophylaxis and oral hygiene instructions. Generalized gingival enlargement may vary from mild enlargement of interdental papillae to such severe uniform enlargement that the crowns of the teeth may be covered by hyperplastic tissue. This case report addresses the diagnosis and treatment of a case of gingival overgrowth encountered in our Department. It demonstrates the need for awareness, and role of biopsy and histopathologic evaluation in management of these lesions.

Key words: Gingival enlargement, gingivectomy, hyperplastic tissue.

INTRODUCTION:

Gingival enlargement or gingival overgrowth, a common trait of gingival disease, is characterized by an increase in the size of gingiva. The skills of a clinician is put to test when arriving at a particular diagnosis among the myriad of gingival enlargements that can be classified according to etiologic factors and pathologic changes, according to location and distribution and/or according to the degree of enlargement. Based on etiopathogenesis, enlargements could be inflammatory, drug influenced, those associated with systemic conditions or diseases, neoplastic or false enlargements. According to location, enlargements could be marginal, papillary or diffuse. Based on distribution they can be localized or generalized.

Idiopathic gingival enlargement is a rare condition of unknown etiology characterized by slow, progressive enlargement of the gingiva. Characteristically, this massive enlargement appears to cover the tooth surfaces. While the cause of the disease is unknown, there appears to be a genetic predisposition.

Classification of gingival enlargement is based on the degree of overgrowth as: Grade 0: No signs of gingival enlargement; Grade I: Enlargement confined to interdental papilla; Grade II: Enlargement involving papilla and marginal gingiva; and Grade III: Enlargement covering three-quarters or more of the crown.

In this case report, we present an unusual case of a long standing gingival overgrowth and discuss the clinical and histopathological features.

Case Report:

A 25 year old female patient reported to the Department of Periodontology, Faculty of Dental Sciences, MSRUAS, Bangalore with the chief complaint of gingival overgrowth in the lower left back region of the jaw. Patient’s history revealed that the lesion first began as a small growth around lingual aspect of left lower first molar 7 years back. Due to negligence patient did not seek any treatment for the same and it grew into the current size and started interfering and causing pain while eating and brushing etc. Patient is a lactating mother and her medical and drug history is non-contributory.

Extraorally the symmetry is maintained and the left submandibular lymph nodes are non-palpable. Intraorally a solitary swelling extending from left lower first premolar to third molar is observed on the lingual aspect. The of
size of which is 4mm in height and 6mm in length with an irregular shape and grooved border. It is non-tender on palpation, firm in consistency and shows no sign of bleeding. (Fig 1)

Fig 1 Gingival enlargement extending from 34 to 38

An OPG was taken to see the changes in the underlying bone, but no such changes were observed in the radiograph. (Fig 2)

Fig 2 CBCT showing no bony changes

To further confirm the findings, a biopsy was taken to know the histopathology before excising the whole lesion. (Fig 3a and 3b)

After this a complete gingivectomy was planned and performed under profuse local anaesthesia. First the depth of pocket was marked with a pocket marker at three places on each tooth on lingual surface. Then using blade #15, Kirkland and Orban’s knives continuous incisions were given from first premolar to second molar. After removing the bulk of tissue, contouring of gingival was done to create a scalloped margin. Also the granulation tissue and calculus under the surface was removed with help of curette. Later area was irrigated with saline and a periodontal pack was given over the surgical area. (Fig 4)
Massive gingival enlargement is frequently associated with various drugs, conditions, syndromes, and hereditary disorders. Clinically and histologically, it is difficult to differentiate between idiopathic, hereditary, and drug induced gingival enlargement. In the present case diagnosis of ‘fibrous hyperplasia’ was made. The various other diagnosis were ruled out as the enlargement was not related to hereditary, syndromes, drugs, conditions, or endocrine problems. There was minimum deposits like plaque and calculus so it cannot be inflammatory hyperplasia. Patients past history gives an idea that the initially the growth started at the age of puberty and present history reveals she is a lactating mother so the enlargement could be related to the endocrine system as it started during puberty and aggravated during pregnancy. But there were not much deposits to condition the puberty or pregnancy also the lesion subsides after the puberty or pregnancy phase but in the present case lesion is a long standing enlargement growing from 7 years. Hence it can be referred as idiopathic gingival enlargement.

The differential diagnosis of fibrous hyperplasia should include consideration of the possibility that the lesion is a true papilloma (a cauliflower-like mass made up of multiple fingerlike projections of stratified squamous epithelium with a central core of vascular connective tissue) or a small verrucous carcinoma. Other differential diagnosis includes giant cell fibroma, neurofibroma, peripheral giant cell granuloma, mucocele, benign and malignant salivary gland tumor.

Meticulous removal of plaque on a frequent basis helps in the maintenance of attachment levels. Patients at risk from, or who have developed drug-induced gingival overgrowth will benefit from effective oral hygiene measures, professional tooth cleaning, scaling, and root surface instrumentation. For some patients these measures alone could reduce the
gingival overgrowth to acceptable levels, for others, it could make surgical correction easier.8-10

The surgical management of drug-induced gingival overgrowth includes the scalpel gingivectomy, periodontal flap surgery, electrosurgery, and laser excision.

For the maintenance phase chlorhexidine gluconate rinses and professional cleaning can decrease the rate and the degree at which recurrence occurs. A hard, natural rubber, fitted bite guard worn at night may also assist in the control of recurrence. Recurrence may occur as early as 3-6 months after the surgical treatment, but in general, surgical results are maintained for at least 12 months.11

**Conclusion:**
Gingival enlargement is often encountered by practitioners and since it is a vivid entity with various aetiology, clinical picture and histopathology it becomes important to be familiar with the various types and treatment modalities for gingival overgrowth. Idiopathic fibrous hyperplasia is one of its kind which can be present as a small or large growth and generation of a proper diagnosis and treatment plan is mandatory.

**References:**