

# Idiopathic Gingival Fibromatosis

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## ABSTRACT

**Introduction:** Gingival hyperplasia is a heterogenous division of disorder characterized by increasing enlargement of the gingiva caused by an raise in submucosal connective tissue elements. Idiopathic gingival fibromatosis is a circumstance of undecided origin which can expand as an lonely disorder but frequently it is associated with a number of syndrome. It usually begins at the time of eruption of everlasting teeth but can build up with the upsurge of deciduous dentition and hardly ever present at birth.

**Case report:** This case report describes an extraordinary case of non-syndromic idiopathic gingival fibromatosis in a 25-years old female. Surgical treatment in the form of gingivectomy was performed.

**Conclusion:** Oral hygiene and the prevention of plaque accumulation have a crucial effect on the prognosis of the disease. Long term follow-up is required for predictability. Further research and genetics studies in this area is required for the group of patients with a permanent cure.

**Keywords:** Gingival enlargement, gingival fibromatosis, gingival hyperplasia, gingivectomy

## INTRODUCTION

Idiopathic gingival hyperplasia is a scarce compassionate situation without any origin.<sup>1</sup> The etiology and pathogenesis of gingival hyperplasia are still not well recognized but be directly linked to these factors that are individual susceptibility which depends on host response of the individual, local factors and the action of various chemical substances and their metabolites in day to day life.<sup>2</sup> The stipulation is painless until the gingival tissue enlarges to covers the occlusal surface of the teeth. Due to this condition the subject develops an irregular swallowing prototype and experiences intricacy with verbal communication and mastication. It also causes interference with maintenance of oral hygiene and mastication. The hyperplastic tissue occurs due to accumulation of materia alba and plaque which may further complicates the periodontium.<sup>3,4</sup> We reported a case of gingival hyperplasia of idiopathic origin without any syndrome and its management.

## CASE REPORT

A twenty five years muslim female patient came with bleeding gums in lower front region of the jaw since 7 days (fig 1). She was apparently alright 2-3 years back then she noticed bleeding during brushing for which she had consulted the dentist and scaling was done. But from 7 days she experienced bleeding in same region with difficulty in mastication. On extraoral examination all finding were normal which includes facial symmetry, lips competency, TMJ movements, lymph nodes. On Intraoral examination overgrowth of gingival was extending from distal surface of 33 till mesial surface of 43. It was pale, soft involving only marginal,

interdental and attached gingiva of 31, 32, 41, 42 (Fig 2). The overgrowth is extending till the middle one third of 31, 41, 32, 42. There was crowding with 31, 32, 41, 42. Pseudo-pockets was noted with bleeding on probing was also present. There was melanin pigmentation in 43, 44 region. Rotated 11, 12 and Anterior open bite was present (fig 3).

## Histopathology Report

The excisional biopsy was taken from lower front region of jaw (Fig 4). It showing keratinised stratified epithelium with proliferation of fibro collagenous tissue. Lymphocytes and polymorphs were present in the subepithelium.

**Histopathological diagnosis:** Benign squamous hyperplasia of gingiva.

**Final Diagnosis:** Idiopathic gingival hyperplasia of lower front region of jaw.

## Treatment

1. Surgical excision or gingivectomy
2. Orthodontic therapy

## DISCUSSION

Idiopathic gingival enlargement is a benign unusual condition.<sup>5</sup> It is usually caused by local conditions like improper brushing, food lodgment and mouth breathing habit. Systemic circumstances such as hormonal imbalance, medication and tumor infiltrates may possibly cause difficulties in maintaining oral hygiene. When edema occurs with vascular engorgement, and inflammatory cell infiltration then it is considered as inflammatory gingival hyperplasia. If the inflamed gingivae consist of intense fibrous tissue due to chronic inflammation or any other cause the condition is referred as fibrotic gingival hyperplasia or chronic hyperplastic gingivitis.<sup>6,7</sup>

The concerned tissues will be glossy in appearance, smooth, soft and edematous which will show bleeding on probing that is consider as the primary sign of gingivitis. A foul aroma may

occur due to disintegration of food stuff and from the accretion of microorganism in the difficult or proximal areas where cleaning is not possible. If the oral hygiene is not maintained then it may lead to bone

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**Figure-1:** Profile picture; **Figure-2:** Intra oral Overgrowth



**Figure-3:** Intraoral overgrowth with occlusion; **Figure-4:** After gingivectomy

loss and teeth mobility These changes will convert from gingivitis to periodontal disease.<sup>4,7</sup> In this case the plaque and calculus accumulates on tooth surface due to crowding which causes chronic irritation of gingival tissues resulting in its proliferation. Histologically showing keratinised stratified epithelium with proliferation of fibro collagenous tissue. Lymphocytes and polymorphs were present in the subepithelium.

It may keep going as an remote deformity or any syndrome.<sup>6,7</sup> It is frequently episodic but can be autosomal dominant. All the patients must be examined with awareness and blood picture should be checked to rule out any blood disease.<sup>3</sup> The syndrome associated with gingival fibromatosis are Rutherford, Cross, Ramon and Laband syndrome. Rutherford syndrome includes gingival fibromatosis, hypertrichosis, mental retardation, epilepsy and corneal dystrophy.<sup>8</sup> Cross syndrome consists of gingival fibromatosis with microphthalmia. There is mental retardation and pigmentary defects are noted.<sup>9</sup> Ramon syndrome contains the following features like gingival fibromatosis, hypertrichosis. It also shows mental retardation, delayed development, cerebral defect like epilepsy and cherubism.<sup>10</sup>

Laband syndrome shows the features of gingival fibromatosis and syndactily. It also shows extraorally finding like nose and ear abnormalities, hypoplasia of the nails and terminal phalanges. After exclusive of all these supplementary reason these condition it called as idiopathic gingival hyperplasia. Treatment is surgical excision or gingivectomy.<sup>11</sup>

## CONCLUSION

The etiopathogenesis of Idiopathic gingival enlargement is up till now to be unwavering. Even though there is not comprehensible accepted data about the treatment. In these cases only indicative treatment continues to be the solitary preference. The method of gingival enlargement and the causative factors which elicit the reappearance are up till now found. Even supposing reappearance cannot be predicted. As doc-

tors we should always realise that panic of nameless is the most horrible and we should hub our study towards these areas.

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