

Gingival fibromatosis of unilateral palatal gingival: A case report

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ABSTRACT

Background: Gingival fibromatosis, commonly called gingival hyperplasia, is an uncommon, diverse, benign hereditary condition characterized by slowly progressive, non-hemorrhagic, fibrous enlargement of keratinized attached gingiva and interdental papilla. This case report presents a grotesque enlargement of unilateral palatal gingiva in a 47-year-old male patient. The diagnosis was made based on case history, clinical examination, radiographic findings and finally, incisional biopsy histopathological report. The case was treated with surgical excision under general anaesthesia with a complete histopathological examination of the excised specimen. The patient was advised for oral hygiene maintenance and kept under close follow-up to rule out chances of recurrence.

Keywords: clinical features; gingival fibromatosis, pathogenesis; management.

INTRODUCTION

Gingival fibromatosis is a diverse and rare gingival condition affecting only the attached keratinized gingiva and interdental gingival papilla(1). The adjacent periodontium and alveolar bone though connective tissue remains free of disease. It may either have genetic predisposition or of idiopathic origin without any explainable etiology (2). Some systemic drugs like antiepileptic, calcium channel blocker, immunosuppressant can lead to gingival hyperplasia in persons with genetic predisposition (3). Those cases that are hereditary or part of syndromic manifestation shows either autosomal dominant or recessive trait of genetic transmission. The complete mechanism of genetic aberration related to its manifestation is not fully understood till date. However, mutation of son of sevenless-1 gene and in autosomal dominant trait chromosome 2p21-p22 and 5q13-q22 aberrations are responsible for its occurrence (4). It has no sex predilection, equally distributed among both sexes. In this condition gingival overgrowth often

encroaches over teeth crown causing hindrance in mastication, and oral hygiene maintenance (1). Pseudo periodontal pocket formation and plaque accumulation can sometimes lead to chronic or acute inflammation of gingiva (5). Severe cases present with gross disfigurement of either one or both jaw with delayed or impacted primary or permanent or both dentitions causing functional, aesthetic and psychological issues. Syndromic or autosomal dominant variant may also present with hypertrichosis, corneal dystrophy, nail abnormalities, deafness, mental retardation, and epilepsy (2). Clinically the affected gingiva appears as normal or slightly pale, nonpedunculated, diffuse or nodular, nontender, nonulcerated, non-hemorrhagic firm flat or bulbous enlargement of gingiva. Histologically appears as dense, avascular highly fibrous connective tissue with varying degree of cellularity and covered with hyperplastic Para-keratinized stratified squamous epithelium with elongated rete ridges (2).

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Fig. 1: Extraoral profile of the patient

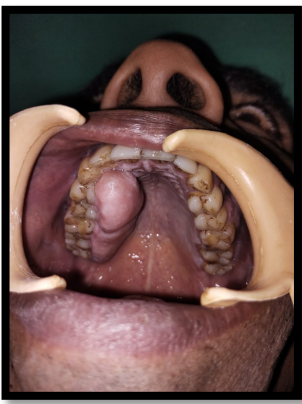


Fig. 2: Intraoral profile of the patient.



Fig. 3: CBCT coronal view

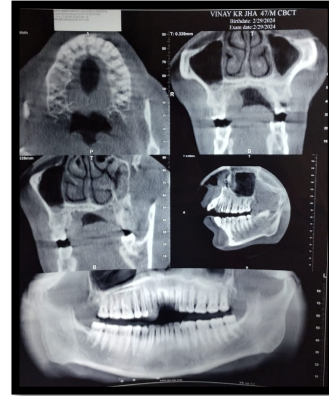


Fig. 4: CBCT view showing no bone loss



Fig 5: Surgical procedure step 1- incision marking



Fig 6: Surgical procedure step 2- excision of the lesion

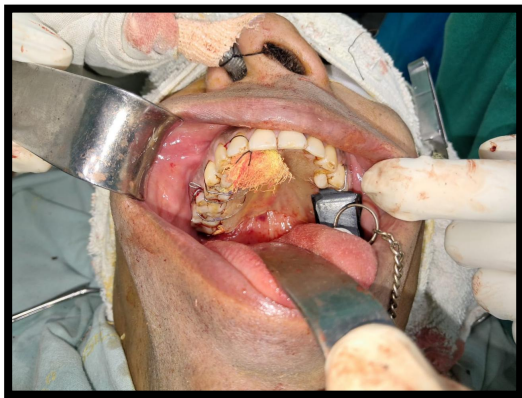


Fig 7: Surgical procedure step 3- surgical splint placement.

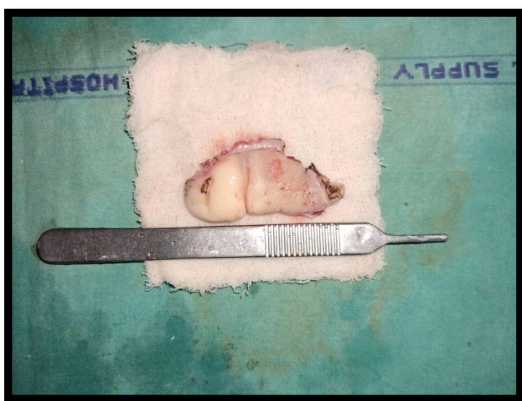


Fig 8: Specimen en mass



Fig. 9: 15 days post-operative view



Fig. 10: one-month post-operative view

CASE REPORT

A 47-year-old male patient reported to the department of oral and maxillofacial surgery of Dr R Ahmed Dental College, Kolkata, West Bengal, with a 4-year-old slow-growing mass over the palatal aspect of the right side of the upper jaw [figs. 1 and 2]. History, clinical and radiographic examination followed by confirmatory incisional BIOPSY was done to establish a definitive diagnosis. A general examination and blood test were carried out to rule out syndromic correlation and any other systemic disease. There were no signs of bone loss in the cone beam computed tomography report [figs. 3 and 4]. The case was then treated with surgical excision under general anaesthesia [figs. 5-7]. The specimen was sent for complete histopathological examination [fig. 8]. The final histopathological report was corroborative with features of idiopathic gingival fibromatosis.

Patient was kept under close observation with 3-day, 15-day, 1 month and 2 month follow up to assess healing [fig. 9 and 10]. Patient was advised to maintain good oral hygiene and stop any kind of deleterious oral habit to prevent further infection or recurrence.

DISCUSSION

Gingival fibromatosis can be classified as non-plaque induced hereditary benign gingival enlargement. Severe form may cause gross disfigurement leading to functional, aesthetic and psychological issues. Treatment may vary from simple oral prophylaxis to multistep surgical correction depending on gradation of disease (6). Early detection and close follow up are necessary to

prevent functional derangement and recurrence. Based on the progression of this case surgical excision was warranted. Other newer modalities of treatment that can be successfully carried out are electrocauterization and carbon dioxide Lazer ablation. Prognosis variable and to some extent depends on genetic makeover and oral hygiene maintenance. In rare instance chronic traumatic bite may lead to metaplastic transformation.

CONCLUSION

In this case treatment with surgical excision ensured regain of normal stomatognathic function. Timely removal prevented risk of nutrition and airway compromise providing functional and psychological relief to the patient.

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