



## MANAGEMENT OF HEREDITARY GINGIVAL FIBROMATOSIS IN PEDIATRIC PATIENT: A CASE REPORT

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### ABSTRACT

Hereditary Gingival Fibromatosis (HGF) presents significant challenges in pediatric dentistry, necessitating a comprehensive understanding of its etiopathology, diagnosis, and treatment options. This article provides a focused overview tailored for pediatric dental practitioners, discussing the genetic and environmental factors contributing to HGF, along with its clinical manifestations. Diagnostic criteria and differential diagnosis are outlined to aid in accurate identification of the condition. Furthermore, various treatment modalities, including surgical intervention and periodontal management, are examined to enhance patient outcomes. This review aims to equip pediatric dentists with the knowledge required to effectively manage HGF in their clinical practice

**KEYWORDS :** Hereditary gingival fibromatosis; Gingival overgrowth; Fibroblastic proliferation; Genetic analysis.

### INTRODUCTION:

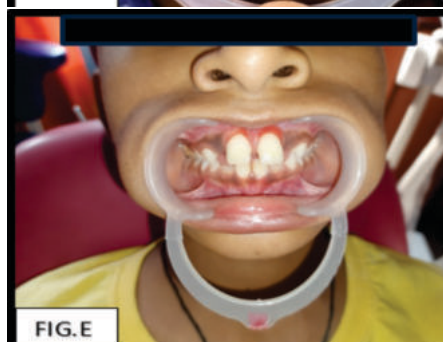
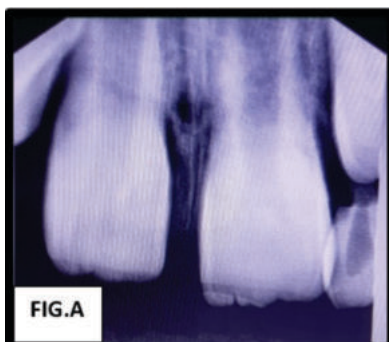
Hereditary Gingival Fibromatosis (HGF) is a rare but notable condition characterized by the gradual overgrowth of gingival tissue, often presenting in early childhood. This genetic disorder can significantly impact oral health, aesthetics, and overall quality of life for affected individuals. HGF is typically inherited in an autosomal dominant pattern, though sporadic cases also occur. The etiology remains multifactorial, involving both genetic predispositions and potential environmental triggers.

Pediatric dentists play a crucial role in the early diagnosis and management of HGF, as timely intervention can mitigate complications such as periodontal disease, tooth mobility, and speech difficulties. This article aims to provide a comprehensive overview of HGF, focusing on its etiopathology, clinical presentation, diagnostic criteria, and treatment options. By equipping pediatric dental practitioners with essential knowledge, we hope to enhance their ability to recognize and effectively manage this challenging condition in young patients.

**Case 1:** A nine year old child reported to the department of pedodontics and preventive dentistry, Himachal Dental college, Sundernagar, nine months back with chief complaint of bulge formation in the maxillary anterior region leading to the delayed eruption of the permanent maxillary incisors i.e 11 and 21. Family history revealed that his another sibling also exhibited similar gingival changes.

### Clinical Examination:

Upon examination patient exhibited localised gingival hyperplasia in the anterior maxillary region. The gingival tissue appeared fibrous, firm and had normal pale pink colour with no signs of inflammation. Periodontal probing revealed pocket depth of 3-4mm and no significant bone loss was noted.



**Depiction Of Figures :****Fig A:** Pre-operative RVG**Fig B:** Intra-oral photograph revealing bulges in maxillary anterior region.**Fig C:** Surgical exposure done.**Fig D:** One month follow-up.**Fig E:** Six months follow-up.**Diagnostic Evaluation :**

A thorough clinical examination and family history assessment confirmed the diagnosis of hereditary gingival fibromatosis. Differential diagnosis such as drug induced gingival overgrowth and systemic conditions were ruled out based on patient's medical history and medication use.

**Treatment :**

The treatment included surgical intervention to remove the excess gingival tissue and restore oral function and aesthetics. A gingivectomy was performed under local anesthesia focusing on anterior region of maxilla.

Post-operative care included regular follow up visits, scaling, and oral hygiene instructions.

**Follow Up:**

The patient was reviewed at 1,3 and 6 months of clinical and radiographic control post treatment . At 6<sup>th</sup> month follow up the patient reported minimal recurrence of gingival overgrowth and reported improved eruption of permanent anterior teeth and satisfaction with appearance.

**DISCUSSION:**

This case highlights the clinical features and management of hereditary gingival fibromatosis.

The importance of early diagnosis and treatment is crucial to prevent complications associated with periodontal health and esthetics. Genetic counselling may benefit affected families in understanding hereditary nature of condition.

**CONCLUSION:**

Hereditary gingival fibromatosis is a manageable condition with proper surgical intervention and follow up. Thus, care underscores the need for awareness among pediatric dental professionals to recognize and treat HGF effectively therefore, enhancing the patient's quality of life.

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