CASE REPORT

Idiopathic Gingival Fibromatosis

1Sujata Rath, 2Raghavendra M Shetty, 3Choubarga Naik, 4Laxmikant K Mishra
5Suraksha Bhat, 6Vishal Solanke

1Professor and Head, Department of Pediatric Dentistry, Chhattisgarh Dental College and Research Institute
Rajnandgaon, Chhattisgarh, India
2Associate Professor, Department of Pediatric Dentistry, Chhattisgarh Dental College and Research Institute
Rajnandgaon, Chhattisgarh, India
3Assistant Professor, Department of Oral Surgery, Institute of Dental Science, Bhubaneswar, Odisha, India
4Associate Professor, Department of Plastic Surgery, Institute of Dental Science, Bhubaneswar, Odisha, India
5Former Postgraduate, Department of Oral Medicine and Radiology, Oxford Dental College, Bengaluru, Karnataka, India
6Assistant Professor, Department of Oral Pathology, Dr Hedgewar Smruti Dental College, Hingoli, Maharashtra, India

Correspondence: Raghavendra M Shetty, Associate Professor, Department of Pediatric Dentistry, Chhattisgarh Dental College and Research Institute, Rajnandgaon-491441, Chhattisgarh, India, e-mail: raghavendra77@yahoo.com

ABSTRACT

Gingival fibromatosis (GF) is a heterogenous group of disorders characterized by progressive enlargement of the gingiva caused by an increase in submucosal connective tissue elements.

This article presents a case report of a 14-year-old female patient with idiopathic gingival fibromatosis in the maxillary region with radiographic feature of congenitally missing maxillary permanent left lateral incisor, maxillary left and right permanent canine, mandibular right second premolar, all third molars along with overretained primary maxillary left lateral incisor and primary mandibular second molar. The treatment rendered in this patient comprised of surgical excision of the hyperplasia under general anesthesia.

Keywords: Gingival fibromatosis, Hyperplasia, Nonsyndromic.

INTRODUCTION

Gingival hyperplasia is a bizarre condition causing esthetic, functional, psychological and masticatory disturbance of the oral cavity. Causes of gingival enlargement can be due to plaque accumulation, due to poor oral hygiene, inadequate nutrition or systemic hormonal stimulation.1

Gingival fibromatosis (GF) is a heterogenous group of disorders characterized by progressive enlargement of the gingiva caused by an increase in submucosal connective tissue elements. Many cases are iatrogenic; some are inherited while others are idiopathic.2 Synonyms of GF include elephantiasis gingiva, congenital hypertrophy of the gingiva, fibromatosis gingiva, gigantism of the gingiva, symmetric fibroma of the palate, congenital macrogingiva, hereditary gingival hyperplasia and hypertrophic gingiva.2-4 This article presents a case report of a 14-year-old female patient, with idiopathic gingival fibromatosis in the maxillary region and its management.

CASE REPORT

A 14-year-old girl accompanied by her parents reported to the outpatient department with a chief complaint of growth of mass in the oral cavity since she was 7-year-old (Fig. 1). According to patient, swelling appeared at the time of eruption of permanent teeth. Swelling was not associated with pain. She reported to the department as she was having functional and masticatory difficulty. Patient’s medical, dental, personal, and family histories were noncontributory. No such growth was noticed in any of the member of her family.

Extraoral examination showed facial disfigurement. Intraoral examination revealed enlargement of maxillary gingiva on both labial/buccal and lingual/palatal sides with pinkish red in color, fibrous in consistency with absence of stippling.

Fig. 1: Extraoral view of the patient showing grown mass in the oral cavity.
Gingival enlargement enclosed the maxillary teeth present except the occlusal surface of the posteriors (Fig. 2).

A whole body general body examination and blood investigations were advised to eliminate any medical abnormalities. Panoramic radiographic examination revealed no bone destruction. Congenitally missing maxillary permanent left lateral incisor, maxillary left and right permanent canine, mandibular right second premolar, all third molars along with overretained primary maxillary left lateral incisor and primary mandibular second molar were seen (Fig. 3). Incisional biopsy was carried out and sent to the oral pathology department. Histological examination revealed a fibroconnective tissue with extensive collagen bundles. The overlying surface of the epithelium exhibited hyperkeratosis, acanthosis and elongation of rete ridges. The fibroconnective tissue consisting of densely arranged collagen fiber bundles, numerous fibroblasts, compressed blood vessels and various degree of focal areas of chronic inflammatory cells (Fig. 4).

On the basis of clinical, radiographic and histopathological findings, the present case was diagnosed as idiopathic gingival fibromatosis.

Patient was taken under GA, excessive gingival enlargement were excised with surgical blade and electrocautery. During excision, the tissue was so firm and fixed that both side lateral incisors got exfoliated. All raw areas were covered with split thickness skin graft and supported with dental impression compound. At the 6-month follow-up, healing was satisfactory without any sign of recurrence and the mouth opening of the patient was also improved.

**DISCUSSION**

Gingival overgrowth varies from mild enlargement of isolated interdental papillae to segmental or uniform and marked enlargement affecting one or both of the jaws.5 Causes of gingival enlargement can be due to plaque accumulation, due to poor oral hygiene, inadequate nutrition or systemic hormonal stimulation.1 Gingival enlargements are also pragmatic in several blood dyscrasias such as leukemia, thrombocytopenia, or thrombocytopathy. A progressive fibrous enlargement of the gingiva is a facet of idiopathic fibrous hyperplasia of the gingiva.6 Idiopathic gingival fibromatosis is a rare hereditary condition that has no definite cause.7 Investigations are in evolution to establish the genetic linkage and heterogeneity associated with it.8 In the present case, it was diagnosed as idiopathic gingival fibromatosis without any findings of hereditary involvement.

The syndromes associated with gingival fibromatosis2 include Murray-Puretic-Drescher syndrome (multiple hyaline fibromas), Rutherfurd syndrome (corneal dystrophy), Zimmermann-Laband syndrome (ear, nose, bone and nail defects with hepatosplenomegaly), Jones’ syndrome (progressive deafness), Cross syndrome (microphthalmia, mental retardation, athetosis and hypopigmentation)3; Cornelia de Lange syndrome (primordial growth deficiency, severe mental retardation, anomalies of the extremities and a characteristic face)8 and Ramon syndrome (association with cherubism). A syndrome associated with hearing deficiencies, hypertelorism, and supernumerary teeth has been reported by Wynne et al8 and Takagi et al.10 Other associations include hypothyroidism, chondrodystrophia and diffuse osteofibromatosis.4 Our patient demonstrated no clinical features fulfilling any of these possible syndromes.
The hyperplastic tissue is usually a normal, pink color, enlargement may be generalized or localized to specific areas of the mouth, typically the maxillary tuberosities and the labial gingiva around the lower molars. Severity may vary from mild involvement of one quadrant to severe involvement of all four quadrants. A pink color and generalized enlargement involving especially maxillary quadrant was reported in our patient, which was surgically removed.

REFERENCES