IDIOPATHIC GINGIVAL ENLAGMENT: A CASE REPORT

Sambhav Jain[1]
1. MDS,Periodontolgy,Dentocare Dental & Implant Centre, New Delhi

ABSTRACT

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

The gingival enlargement results in both esthetic and functional problems for affected individuals. The most common effects are diastemas, malpositioning of teeth, prolonged retention of primary dentition, delayed eruption, cross and open bites, prominent lips and open lip posture.

The aim of this article is to highlight the diagnosis, clinical features and management of a rare case of idiopathic gingival fibromatosis in a 18 year old girl.

Keywords: Idiopathic gingival fibromatosis, Gingival enlargement, Hereditary gingival fibromatosis, Gingivomatosis, familial elephantiasis.

INTRODUCTION

Gingival fibromatosis (GF) is a heterogeneous group of disorders characterized by progressive enlargement of the gingiva caused by an increase in submucosal connective tissue elements [1].

Gingivomatosis, diffuse fibroma, hereditary gingival fibromatosis, familial elephantiasis, Idiopathic fibromatosis, elephantiasis gingivae, congenital hypertrophy of the gingiva, fibromatosis gingivae, gigantism of the gingiva, symmetric fibroma of the palate, congenital macrogingivae, hereditary gingival hyperplasia, and hypertrophic gingival [2,3-5] are the synonyms used for gingival fibromitosis.

Idiopathic gingival fibromatosis is a slowly progressive benign enlargement that affects the marginal gingiva, attached gingiva and interdental papilla [6]. It varies from minimal involvement of only the tuberosity area and the buccal gingiva around the lower molars to generalized enlargement inhibiting eruption of teeth [7,5,8,9].

The hyperplastic gingiva is pale-pink, firm, leathery in consistency that is nonhemorrhagic and asymptomatic.

The gingival enlargement results in both esthetic and functional problems for affected individuals. The most common effects are diastemas, malpositioning of teeth, prolonged retention of primary dentition, delayed eruption, cross and open bites, prominent lips and open lip posture [7,10,9-13,14-19] Although the gingival enlargement does not directly affect the alveolar bone, the gingival swelling may increase the bacterial plaque accumulation, inducing periodontitis, bone resorption and halitosis [2]. In extreme cases of massive gingival enlargement, an affected child usually develops abnormal swallowing pattern and experiences difficulty in speech and mastication [4].

Corresponding Author: Dr Sambhav Jain Email: drsambhavjain3@gmail.com

The aim of this article is to highlight the diagnosis, clinical features and management of a rare case of idiopathic gingival fibromatosis in a 18 year old girl.

CASE REPORT

A 18 year old girl reported to the Dentocare Dental & Implant Centre , with the chief complaint of slow growing, non-tender gingival enlargement {Fig. 1} since last 5 years.

The major concern of the patient and family was esthetic and functional problems including mastication, speech, and oral hygiene.

General Examination: The patient was slightly under nourished for her age. Patient din give history of intake of any type of drug in recent past, or family history indicating any undelying genetic mechanism .

Extra Oral Examination :The patient had convex facial profile with incompetent lips.

Intra Oral Examination:Intra oral examination revealed diffuse type of gingival enlargement involving marginal, papillary and attached gingiva in the maxilliary and mandibular region.

Gingiva was reddish pink in colour along with the tendency of bleeding of gums when probed.

Gingival enlargement enclosed the major surface of the teeth present except the incisal/occlusal surfaces.Because of the enlarged gingival tissue, the patient was not able to occlude properly .

Investigations: The results of the hematological investigations showed no abnormality.

Biopsy: Excisional biopsy report showed stratified squamous epithelium with mild hyper-keratosis, acanthosis and patchy elongation of retepegs. Subepithellally there was connective tissue composed of dense collagen fibers with infiltration of acute and chronic inflammatory infiltrate.

Biopsy report was suggestive of infective gingival fibromitosis.

As the medical, family, prenatal and drug histories were non-contributory, other reasons of gingival hyperplasia were excluded and the case was diagnosed as idiopathic gingival fibromatosis.

Mangment: The case was planned for segmental gingivectomy of the hyperplastic tissue. After initial diagnosis and treatment planning, routine oral hygiene instructions were given and oral prophylaxis was completed. Considering the size and extent of gingival enlargement, a quadrant-wise gingivectomy was performed under local anaesthesia followed by marking of bleeding points with the help of pocket marker.

An external bevel gingivectomy was done in all four quadrants with an interval of about one month in between each surgery.

After performing surgery of each quadrant the specific treated quadrant is covered with coe- pack for 10 days.

After the gingvectomy procedure for all the quadrants have been completed the follow up has been done at the interval of 3 months . { Fig.2, Fig.3}

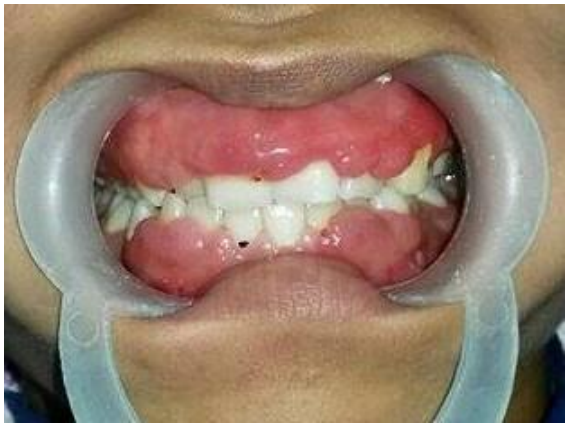

Fig. 1 pre-operative

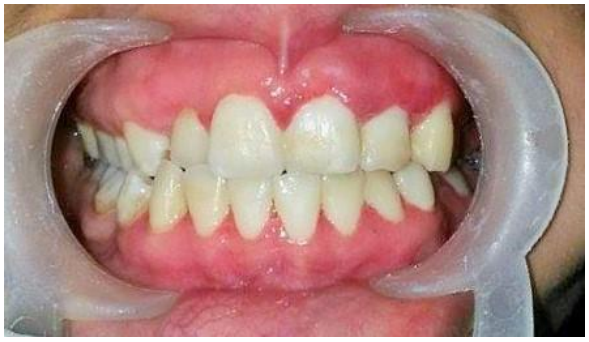

Fig. 2 post- operative { after 3 months}

Fig.3 post-operative {after 6 months}

DISCUSSION

The gingival enlargement observed may be localized or generalized and is an inflammatory response that occurs when plaque (collection of food debris and bacteria) accumulates on the teeth. This is a result of the patient not accomplishing effective oral hygiene. An example is noted to the right. Gums affected by this condition are often tender, soft, red, and bleed easily. Fortunately, this condition usually resolves with effective oral hygiene practices (tooth brushing, flossing) to remove the plaque and irritants on the teeth.

The aim of this article is to highlight the diagnosis, clinical features and management of a rare case of idiopathic gingival fibromatosis in a 18 year old girl.

The surgical approach has shown outstanding results to the treatment of idiopathic gingival enlargement and maintaining the patient on intense plaque control measures.

CONCLUSION

This case highlights the unusual coexistence of nonsyndromic idiopathic gingival fibromatosis with generalized aggressive periodontitis. Diagnosis was based on clinical, radiographic, histopathologic and immunologic assessment.

The surgical approach has shown outstanding results to the treatment of idiopathic gingival enlargement. This technique eliminate periodontal pockets, preserve attached gingival tissue and establish proper periodontal morphology for good hygiene in the maintenance phase, which is of great importance in such patients. frequent follow up is required with surgical correction of any specific sites if needed. Psychological counseling is must for both patient and parents.

REFERANCES

1. Anegundi RT, Sudha P, Nayak UA, Peter J. Idiopathic gingival fibromatosis-a case report. Hong Kong Dental Journal 2006;3:53-57.

2. Coletta RD, Graner E. Hereditary gingival fibromatosis: A systematic review. J Periodontol 2006;77:753-64.
3. Fletcher J. Gingival abnormalities of genetic origin: A preliminary communication with special reference to hereditary generalized gingival fibromatosis. J Dent Res 1966;45:597-612.
4. Indu Shekhar KR. Idiopathic gingival fibromatosis. Saudi Dental Journal 2002; 14(3):143-45.
5. Tavargeri AK, Kulkarni SS, Sudha P, Basavprabhu. Idiopathic gingival fibromatosis-a case report. J Indian Soc Pedo Prev Dent 2004;22(4):180-82.
6. Chaturvedi R. Idiopathic gingival fibromatosis associated with generalized aggressive periodontitis: A case report.JADC 2009:75(4):291-95.
7. Bozzo L, de Almeida OP, Scully C, Aldred MJ. Hereditary gingival fibromatosis: Report of an extensive four-generation pedigree. Oral Surg Oral Med Oral Pathol 1994;78:452-54.
8. Bittencourt LP, Campos V, Moliterno LF, Ribeiro DP, Sampaio RK. Hereditary gingival fibromatosis: Review of the literature and a case report. Quintessence Int 2003;31:415-18.
9. Kelekis-Cholakis A,Wiltshire WA, Birek C.Treatment and long-term follow up of a patient with hereditary gingival fibromatosis: A case report. J Can Dent Assoc 2002;68:290-94.
10. Bozzo L, Machado MA, de Almeida OP, Lopes MA, Coletta RD. Hereditary gingival fibromatosis: Report of three cases. J Clin Pediatr Dent 2000;25:41-46
11. Henefer EP, Kay LA. Congenital idiopathic gingival fibromatosis in the deciduousbdentition: Report of a case. Oral Surg Oral Med Oral Pathol 1967;24:65-70.
12. Kratz CL, Morin CK. Hereditary gingival fibromatosis: A child affected with concurrent abnormalities. J Pedod 1987;11:187-92.
13. Danesh-Meyer MJ, Holborow DW. Familial gingival fibromatosis: a report of two patients. NZ Dent J 1993;89:119-22.
14. Goldblatt J, Singer SL. Autosomal recessive gingival fibromatosis with distinctive facies. Clin Genet 1992;42:306-08.
15. Clocheret K, Dekeyser C, Carels C, Willems G. Idiopathic gingival hyperplasia and orthodontic treatment: A case report. J Orthod 2003;30:13-19.
16. Kavvadia K, Pepelassi E, Alexandridis C,Arkadopoulou A, Polyzois G, Tossios K. Gingival fibromatosis and significant tooth eruption delay in an 11- year old male: A 30 month follow up. Int J Paediatr Dent 2005;15:294-302.
17. Kamolmatyakul S, Kietthbthew S, Anusaksathien O. Long-term management of an idiopathic gingival fibromatosis patient with the primary dentition. Pediatr Dent 2001;23:508-13.
18. Baptista IP. Hereditary gingival fibromatosis: A case report. J Clin Periodontol 2002;29:871-74.
19. Doufexi A, Mina M, Ioannidou E. Gingival overgrowth in children: Epidemiology, pathogenesis and complications. A literature review. J Periodontol 2005;76 (1):3-10.