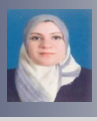
Hereditary Gingival Fibromatosis - A Case Report



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Introduction

Generalized gingival enlargement is a rare condition of varying etiology, resulting in oral hygiene impairment and increased risk of periodontitis

Case Report

A 40-year-old male presented with generalised hyperplasia of the gingiva, halitosis, bleeding gums, masticatory difficulties, and compromised aesthetic. While the medical history was unremarkable, a positive family history was reported, since his mother was also affected.

Clinical examination showed a firm, dense generalised gingival overgrowth, massive plaque, subgingival and supragingival calculus, and tooth migration (Fig. 1). Periodontal charting revealed active deep pseudo pockets, periodontal pockets, and clinical attachment loss (Fig. 2). Generalised bone resorption was radiographically detected (Fig. 3). Histological examination of the excised gingiva (Fig. 4) revealed connective tissue with dense collagenous fibers, large numbers of fibroblasts, fibrocytes, and a high quantity of chronic inflammatory cells (Fig. 4, 5). A hereditary gingival fibromatosis (HGF) and severe chronic periodontitis were diagnosed.

Initial periodontal therapy with adjunctive systemic antibiotics was followed by surgical excision by means of internal gingivectomy and open flap debridement (Fig. 6, 7). Significant clinical improvement was achieved and remained stable up to one year (Fig. 8, 9). In addition, orthodontic treatment and periodontal maintenance are recommended.

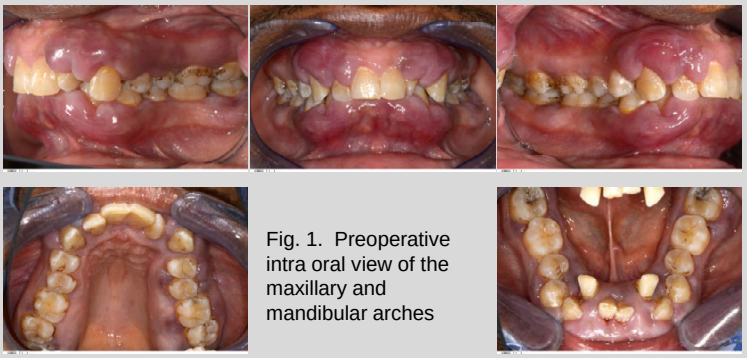

Fig. 1. Preoperative intra oral view of the maxillary and mandibular arches

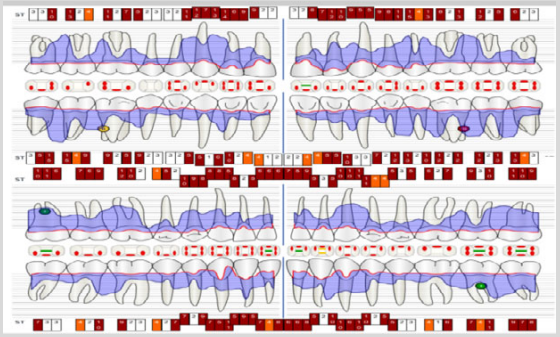

Fig. 2. Preoperative periodontal charting showing pseudo pockets and attachment loss

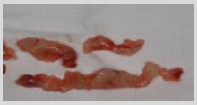

Fig . 4. Excised gingiva

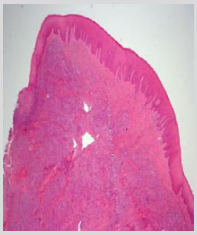

Fig. 5. Photomicrograph of specimen

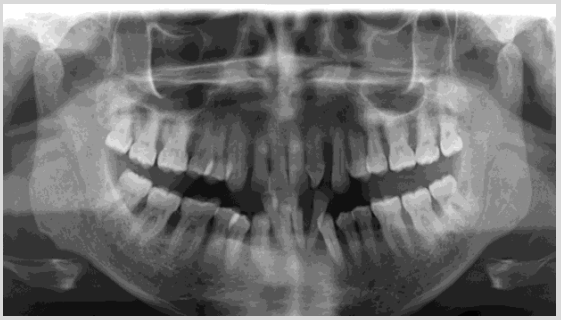

Fig. 3. Preoperative panoramic radiograph

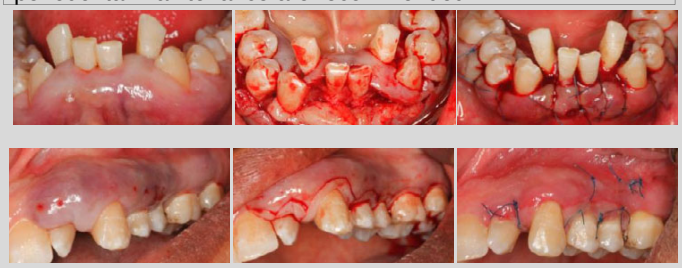

Fig. 7. Intraoperative intraoral view

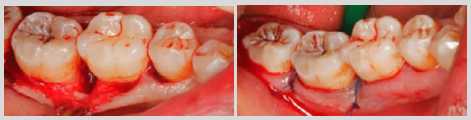

Fig. 6. Intraoperative intraoral view showing alveolar defects

Discussion

Gingival fibromatosis can be caused by number of factors, e.g. by inflammation, leukemic infiltration, systemic medication, or genetic origin is considered (hereditary isolated or as part of a syndrome). An association of HGF with periodontitis requires a combined anti-infective and surgical treatment approach.

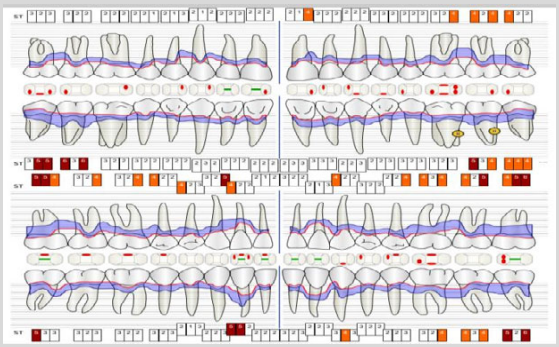

Fig. 8. Periodontal chart 12 months after surgery

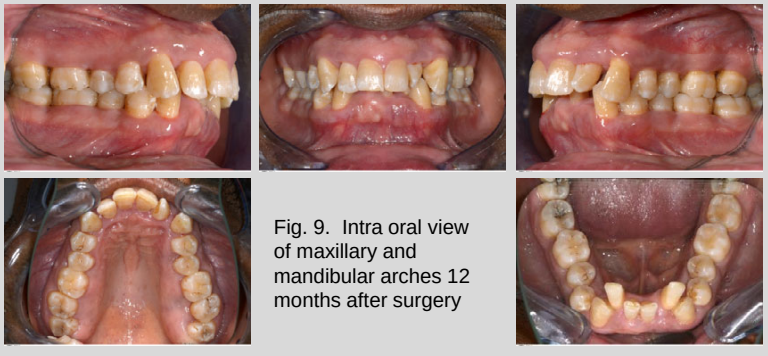

Fig. 9. Intra oral view of maxillary and mandibular arches 12 months after surgery

Conclusion

HGF should be managed as early as possible to prevent periodontitis and further functional and aesthetical impairment. Regular supportive periodontal therapy is important to maintain the treatment success.