



Successful Management Of Gingival Enlargement (Masochistic Habit) - A Rare Case Report

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Abstract

This is an unusual case report of 13 years old patient presented to the department of Pedodontics and Preventive dentistry, with chief complaint of gingival swelling confined to the upper front tooth. On clinical examination localized gingival enlargement was seen i.r.t. Upper Rt. Central Incisor which was non inflammatory, covering almost half of the clinical crown and tooth was displaced from normal alignment. Patient had given the history of impinging pencil during study times. Surgical excision of enlarged gingiva was

performed. Based on history and histopathological examination, a diagnosis of gingival enlargement was made because of irritational trauma done by the pencil. This case report aims at highlighting the self inflicted injury amongst pediatric patients and the importance of taking complete and thorough history which reveals relevant information.

Keywords

Gingival enlargement, Localized, Irritational trauma

Introduction

During initial years of child development, a child indulges in various activities some productive, some destructive. One of the most common destructive acts involving oral cavity and surrounding structures is self inflicted injury, also referred as Self-injurious behavior (SIB), self-mutilating injuries and injuries due to masochistic habits results in the infliction of physical damage and pain upon oneself^{1,2}. The common traumatic lesions in the oral cavity may be chemical, thermal or physical in nature³⁻⁷. The physical one is more severe, widespread and can involve the deeper periodontal tissue. There are number of ways in which oral injuries can be inflicted, either by accident or through a conscious deliberate effort or because of some anomalous habits. These injuries occur as a result of trauma from some foreign objects or frequently from patient's own fingernail as a result of habitual scratching of the gingival or soft tissue which may lead to ulceration of the affected area. There are myriad differences in the degrees of self inflicted injuries ranging from simple nail biting to the most extremes of mutilation⁸⁻¹⁰.

Etiology may be either organic or functional. Among the functional etiology, one type has a greater psychogenic component and child may resort to various self injurious habits as a form of stress release¹¹.

Present article describes a unique case of self inflicting injury to the gingival tissue. Pertinent

management depends on precisely diagnosing the origin of enlargement.

Case Report

A 13 years old male patient was reported in the deptt. Of Pedodontics and Preventive Dentistry with a complaint of swollen gum of upper front tooth. Patient noticed swelling approx. 6 months back when it was of pea size and increased to the present size in 6 months (fig. 1) and his main concern was for the aesthetics. Gingival enlargement was painless and bleeds only after tooth brush trauma. No relevant medical history recorded of intake of drugs, any systemic disease, nutritional deficiency or family history of gingival enlargement however patient gave the history of impinging pencil in the respective gum while studying.

On clinical examination, the extraoral findings revealed that the lesion size made difficult a correct lip seal. Intraoral findings showed a non-inflammatory, non-edematous gingival enlargement i.r.t. upper right Central incisor, almost covering half of the clinical crown. Clinically tooth was displaced mesiopalatally (fig. 2). No tooth mobility was noticed and tooth responds normally to the vitality test however mild bleeding on probing was seen and pocket depth of 10mm was present (measurement was done with GP) (Fig. 3). Overall oral hygiene status was good.



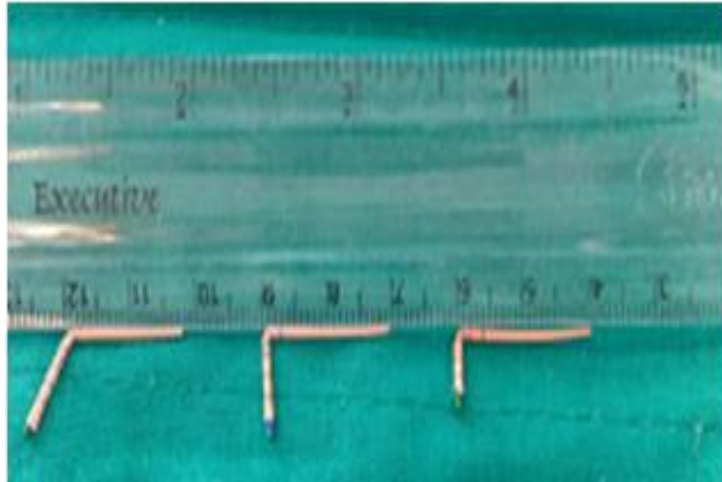
Fig1. Hypertrophic gingival enlargement covering almost half of the clinical crown of upper rt. Central incisor.



Fig 2. Photograph showing clinical tooth displacement



Fig 3. Photograph showing pocket depth measurement done with GP points



PROCEDURE....After all blood investigations were performed , internal bevel gingivectomy was planned for easthetic benefits. Pockets were measured with pocket marker and bleeding points were produced on the outer surface of gingiva. After that an internal bevel incision was made to a point apical to the alveolor crest depending on the thickness of the tissue (fig 4). Full thickness mucoperiosteal flap was raised on labial surface with a periosteal elevator. On surgical exposure

of the clinical site Angular bone defect was noticed with intact labial cortical bone(fig.5). Complete debridement was done and bone defect was filled with **Demineralised freeze dried bone allograft (DFDBA)** . Then flap was sutured back to secure the facial and palatal flaps. Biopsy of the excised tissue showed hyperkeratotic stratified squamous epithelium with underlying tissue associated with fibrosis.



Fig 4. Photograph showing internal bevel incision.



Fig 5. Surgically exposed site with angular bone defect with intact labial cortical plate



Fig 6. Photograph showing bone defect filled with DFDBA bone graft



Fig 7. follow-up after 6 months

Antibiotics and analgesics were prescribed for 5 days and for managing such self inflicting habit, oral hygiene instructions were given to the parents and child .

Follow up observation showed uneventful healing and patient was recalled after 6 months(fig. 8)

6 months post operative radiograph showed bone formation in angular bone defect seen before the

procedure(fig 8 & 9).



Fig 8. preoperative radiograph

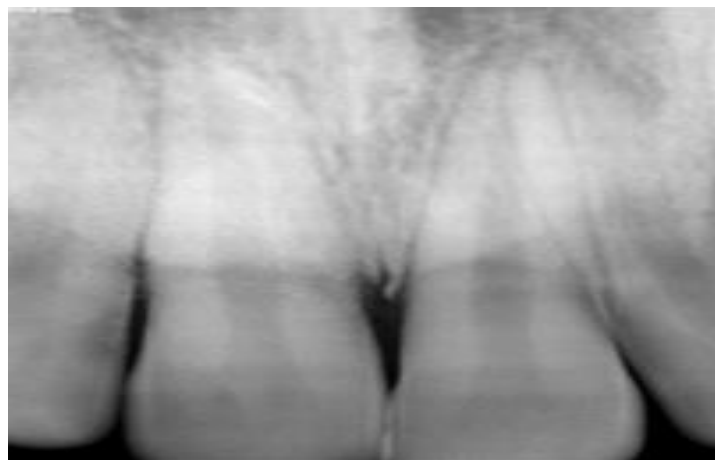


Fig. 9. 6 months post operative radiograph showing bone healing

Discussion

Self-Injurious behavior is a complex disorder. Several theories have been put forward to suggest its etiology. Biological causes such as Lesch-Nyhan syndrome, Gilles de la Tourette syndrome, Autism, Familial dysautonomia and mental retardation have been well recognized. On the other hand, functional theories maintain that escape or attention seeking through SIB which may arise in stressful situations, may be the etiological factor, specially in the absence of any known biological factors¹².

In our case patient resorted to SIB off and on during situations of stress while studying. More oftenly gingival injuries were produced by patients repeatedly ‘pricking’/scratching their gingival with finger or fingernail. A variety of other agents have been reportedly been employed including knives^{13,14}, strands of hairs¹⁵ and toothpicks^{14,16}. In our case, patient used pencil during study.

Though self mutilation among children is quite a frequent phenomenon yet it is less commonly realized because children tend to admit their injurious habits only

when they are caught practicing them. That is why many of the self-inflicted lesions go undiagnosed or incorrectly diagnosed¹⁷. Management of SIB is still a challenge for the dental profession and for many clinicians it is a diagnostic challenge. It often involves and can potentially compromise the form and function of the oral tissues. In these situations, dental management is required as the team approach to protect the patient's overall health. The dentist's goal in treating SIBs is focused on preventing harm to the soft tissue from the traumatizing dentition while minimizing the risks of compromised oral hygiene and other common oral illnesses secondary to any appliance therapy.

Stewart and Kerohan have listed several features that are common to self-inflicted gingival injuries:

1. They do not correspond to those of any known disease.
2. They are mostly of a bizarre configuration with sharp outlines on an otherwise normal background.
3. The grouping and distribution of the lesions are unusual and in positions that can easily be reached by the patient's hand.
4. They may occur singly, but more often they are multiple.

Management of self-inflicted injuries is usually complicated as there are no standard techniques to prevent or treat orofacial self-inflicted injuries. It might be difficult for the patients to stop the noxious behavior. Treatment plan is made according to the circumstances. For control of destruction, sedation, behavior modification and restraints are generally employed¹²

Conclusion

An awareness regarding the incidences of such conditions is a must among the dentists so that they can approach the problem in a much practical way. The

etiology should be given utmost importance and the requisition of a thorough history can never be sidelined. Although the diagnosis of self-inflicted oral mutilation may be a challenge for the pediatric dentists, this should not prevent the consideration of this possibility when idiopathic lesions are present in a child. Appropriate preventive methods need to be developed for the patients based on reasonable consideration.

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