

Case Report of Gingivitis Artefacta in Libyan Female Child 5-Years Old

Khyria Dhaw Omar
e-mail: Khyryhdw@gmail.com

Department of Periodontics, Faculty of Dentistry, Sirte University.

Abstract

Gingivitis artefacta is a type of periodontal disease caused by self- inflicted injuries to the gingival tissues. The injuries, most commonly, occur due to picking or scratching of the gingiva with fingernails or any foreign object. The purpose of this article is to review clinical findings in a patient who presented with gingival recession in the primary dentition. A case report of an 5-year-old girl with gingival recession in the both sides of mandibular and maxillary deciduous canines and molars was admitted to periodontics department. Upon questioning, the patient readily admitted traumatizing her gingiva with her fingernail. The cause of his behavior appeared to be of psychological origin, and therefore, Psychological support was suggested. Patient compliance, regular dental follow-ups, and psychological support may be useful in stabilizing the periodontal condition of this child and preventing injury of permanent teeth in future.

Keywords: *Gingivitis artefacta, gingival injuries, gingival recession, self-inflicted injuries, scratching of the gingiva with fingernails*

1. Introduction

Self-injurious behavior (SIB) has been described as an act of unassisted and deliberate injury to one's own body which is severe enough to cause tissue damage not including those with a conscious suicidal intent [1].

Traumatic lesions, whether chemical, physical, or thermal in nature, are among the most common in the mouth. A type of physical injury to the gingival tissues is self-inflicted. Sometimes the lesions are termed gingivitis artefacta.[2,3,4]

Gingivitis artefacta is classified into three types [5]: Type A: injuries superimposed upon a preexisting lesion (or irritation), Type B: injuries secondary to another established behavior (such as thumb sucking), and Type C: injuries of unknown or complex etiology (often based on some emotional disturbance or psychological illness). This classification was further modified by Stewart [2] as minor: superficial gingival lesions resulting from rubbing or picking the gingiva with fingernails or sharp objects and major: severe and more widespread lesions with deeply entrenched habit.

Gingival recession could be due to wrong brushing technique. This type of trauma can be diagnosed by history and clinical presentation of the lesion and easily managed by modifying the brushing technique. The gingiva may be more seriously traumatized where patient repeatedly pick or scratch their gingiva with a finger or finger nail [6] or used other object including knives [7] baby pacifiers [2] or coin [8]. Since these injuries are often associated with emotional disturbance they are more difficult to resolve.

Multiple treatment possibilities have been attempted to address self-injurious behavior. Behavioral modification techniques combined with pharmacologic and psychotherapeutic therapies are most frequently used [9, 10, 11, 12].

The purpose of the present case is to highlight the impact of stress and emotional disturbance on the health of peridontium in children.

2. Case Report

A 5-year-old female accompanied by her unt reported to our department with a complaint of increasing length of upper canine of both sides of sister's daughter. Clinical examination revealed multiple gingival recession related to both side of upper and lower deciduous canine and molars.

The medical and dental histories were taken and revealed that she was systemically and dentally healthy and presence of anterior crossbite which is unrelated to gingival recession. Upon questioning, the patient concealed of doing any habits. Then latterly, as a result of a frank and friendly conversation with the patient, she admitted of scratching her gingiva by her fingernails.

Her social history was reviewed which revealed that the child's father was dead since three months and the child and her mother leaved there house and lived with mother's family. since that the child became sad and introverted.

Further questioning, the child admit that she had a continuous insertion of index finger in her mouth. The patient was asked to show how she doing that? Meanwhile; a clinical diagnosis of self-inflicted injuries outset and a psychological behavior approach was considered. The aim was to make the child stop or alter this repetitive act. A behavior guidance technique to manage this case was planned; the key was in having good communication with the child to enhance her self-confidence.

Child's unt was reassured and advised to consult the psychiatrist; no medicaments were prescribed and patient was called for periodic follow up.

Patient and her aunt were both encouraged to make every attempt to stop the scratching of gingiva in order to prevent further damage in the periodontal tissue of future permanent teeth.

3. Discussion

The self-inflicted behavior (SIB) is usually of a psychic nature, originating from mental or emotional disturbance. The most common ones are stress, anxiety and depression. However, this behavior has been recorded intensely in the past several decades. Although neither a hard nor a soft oral tissue is excluded from the harmful effects of these psychological influences, the gingiva is the most affected tissue [13].

World workshop in periodontics which was held in 1999 classified gingival disease as plaque induced and non-plaque induced gingival disease and is classified as due to thermal, chemical and physical causes. Physical injuries to gingival tissue can occur due to accidental, iatrogenic and factitious (self-inflicting) occurrences. Self-inflicted injuries may be premeditated, accidental, or the result of an unconscious habit. They are still a challenge for many clinicians in diagnosis. In this case, self-inflicted gingival lesions were diagnosed as being caused by the patient's self-injurious behavior due to emotional stress which was revealed after detailed conversation with the patient[14].

The clinical characteristics agreed with the descriptions published by many authors[6,15,10] whereby such lesions are most frequent in females[6,15,10,16] and in children.

The lesions present in this patient were characterized by gingival recession, as in other cases described previously[6,16,17,18,12] They do not correspond to those of any known disease[19]; they are mostly of a bizarre configuration, bilateral, and in positions that can easily be reached by the patient's hand, as described by Stewart and Kernohan.[5]

Moreover, the patient confirmed the habit of scratching the gingival area. This fact, in addition to the clinical appearance of the lesions, together with the excluding diagnosis of systemic or periodontal diseases, were the clues to self-injurious behavior.

In this case, the gingival recession was so great that the canines and primary first molar roots were uncovered in a period of three months.

Although the patient no longer has lesions, the self-injurious behavior persists because it enables the child to attract attention from the family. For this reason, psychologic support was suggested.

4. Conclusion

Dentists must be aware of self-inflicted gingival injury, although thought to be uncommon, is quite widespread. When a diagnosis of gingivitis artefacta is made, the presence of an underlying emotional or psychiatric issue must be considered. It could be difficult to treat gingivitis artefacta without treating the underlying emotional disturbance or psychological illness.

Accurate diagnosis and appropriate psychiatric referral are of paramount importance. Stress and emotional disturbance impact the periodontal health through changes in the individual's habits and through complex interactions among the nervous, endocrine, and immune systems. Therefore, we need awareness campaigns about the impact of psychological pressure on oral health, especially in children who have faced in recent years in my country the pressures of war and lost one of their family members.

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Figure 1. views show gingivitis artefacta of deciduous canines and first molars