Factitious oral injuries in dental patients and recall appointment default

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ABSTRACT

Background: Factitious injuries of oral mucosa other than that of gingiva are rarely reported in the literature. Aim: To document three cases of habitual factitious or injuries in apparently normal children that defaulted from recall appointment. Methods: Three children (2 males and 1 female) aged between 5 and 13 years presented on account of ulceration and swellings of varying duration for necessary professional dental healthcare services in a dental clinic. Findings: There should be a high index of suspicion of habitual factitious oral lesion among dental practitioners when attending to patients with mucosal conditions (ulceration, fibroma or mucocele) related to the dentition with or without eliciting cheek or lip biting habit. Conclusion: Holistic diagnosis and treatment plan can be achieved by psychologic evaluation of the affected patients before offering dental care as this will help overcome the deficiencies created by recall appointment default.

Key words: Factitious injury, habitual, lip biting, cheek biting, oral mucosa, dental care

INTRODUCTION

Oral habits described as psychodynamic phenomena by psychologists and psychiatrists are common in childhood and they include digit sucking, pacifier sucking, lip sucking, lip biting, cheek biting, nail biting, mouth breathing, tongue thrust, bruxism and self-injurious habits.[1] The severe and persistent oral habits are usually associated with adverse effects on both the soft and hard tissues of the orofacial region and therefore needs intervention.[2-4] However, it is the dentoalveolar and skeletal deformation from oral habits that are commonly emphasized, prevented and cared for, thereby paying little or no attention to the oral habit-related soft tissue injuries.[5]

The soft tissue injuries arising from oral habits are usually considered as factitious oral injuries if they are detectable habitual or inadvertent self-inflicted injuries of the orofacial region.[6] However, bone and tooth structure destruction may also result from these self-inflicted oral
injuries. [7] Factitious injuries are rare in normal children but common in children with some form of psychological and developmental problems. [8] It is also established that children are more often the subjects of oral self-injurious behaviour than adults. [7] The prevalence of these oral habit-related injuries is scanty and usually underestimated because it is uncommon for patient or their clinician to associate the oral soft tissue lesion with oral habit because low index of suspicion. Even when such habits are suspected by the attending clinician, denial by the patient is possible. Zonuz et al. [9] stated that the factitious self-inflicted conditions of maxillofacial region is rare.

Intervention in patients with oral habits whether without or with associated soft /or hard tissue injuries is necessary to prevent the negative impact on their well-being. [5] The intervention which may include patient/parent counseling, behaviour modification, myofunctional and appliance therapy is usually individualized.

Recall appointment which is a norm in dental practice, is necessary in patients with oral habits as it provides opportunity for full scale evaluation of patients and facilitates the early detection of relapse in habits. It also offers the opportunity to re-evaluate the diagnosis and treatment plan, evaluate treatment outcome, and the decision after the evaluation may be to continue, modify or abandon the original treatment plan.

The aim of this study was to document three cases of habitual factitious oral injuries in apparently normal children that defaulted from recall appointment.

**Case 1**

A 5 year old nursery three boy accompanied by his mother presented with a complaint of a sore on the inner side of his left cheek for four days which did not improve despite the application of ointment of which the name could not be ascertained. Mother complained that there was also a slight swelling of the cheek which was warm to touch. She stated that it was a recurrent condition, always on the same side and that she brought him this time to know the cause of the condition. Upon questioning, the patient was friendly and answered all questions. His medical history was non-contributory. He is the first of two children of the mother; the younger brother was two years old. On extraoral examination, there was left submandibular lymphadenopathy and elevated body temperature. Intraoral examination revealed an ulcerated area at the left buccal mucosa which was paler than the surrounding area (figure 1). Impression of recurrent oral ulceration of queried aetiology was made. The patient was placed on amoxicillin (5mls 8hourly for 5 days), metronidazole (5mls 8hourly for 5 days) and paracetamol (5mls 8hourly for 3 days). He was also asked to do warm saline mouth bath eight times daily for two weeks. He was given a 3 day appointment and on examination, the ulcer was observed to be resolving. He was given a further recall visit of 3 days (figure 2). Cheek biting was observed on this visit. The patient’s mother was told the way to treat this was to gently rub on his cheek and to persuade him gently to stop biting on his cheek. Patient did not come back after this visit even though he was given an appointment.

Figure 1: Buccal mucosa ulceration (case 1)
Case 2
A 10-year old primary six boy accompanied by his mother came to the Dental Centre with a complaint of swelling on the right side of lower lip which has been increasing in size. The patient’s mother gave a history of traumatic injury to the lip which resulted in a slight swelling that he started biting on, subsequently. At the time of the clinical examination, the patient had a healthy appearance and seemed relaxed and was communicative. On intraoral examination, there was a marked swelling of the lower lip on the right side with the incisal surfaces of the 11 and 12 resting on the swelling. Lymphadenopathy or other constitutional signs/symptoms were not detected. The child was noticed biting his lower lip in the region of the swelling while on the dental chair (figure 3). The patient was counseled to stop the lip biting, followed by surgical excision as the history and clinical findings were suggestive of mucocele complicated by lip biting. The patient presented with uneventful healing on the first recall visit. The patient did not come back for subsequent review appointment.

Case 3
A 13-year old senior secondary one girl presented to the clinic with the complaint of “something growing on her cheek” for a period of 3 months that has been increasing gradually in size. An intraoral examination of the patient showed a hypertrophic, lobulated, sessile growth of about 2 mm × 2 mm on the left mucosa of cheek along the masticatory surfaces of the first and second molars (figures 4). The growth was pale, non-tender and without any ulceration. A history of cheek-biting was elicited and was also observed on the dental chair. Lymphadenopathy or other constitutional signs/symptoms were not detected. Surgical excision of the soft tissue growth was done as the history and clinical findings were suggestive of traumatic fibroma from cheek biting. The patient was counseled on the effect of cheek biting as observed from the subsequent trauma and growth of the soft tissue. Hypertrophic tissue was evident in the histopathological examination of the excised tissue. The patient was lost to follow-up.
DISCUSSION

Factitious injuries are self-inflicted injuries which may be either habitual or inadvertent. In this series, we report habitual factitious oral injuries in form of buccal mucosal ulceration, traumatic fibroma of the cheek and mucocele on the lip. It is known that cheek and lip biting factitious injuries occur in the oral mucosal soft tissues that can be grasped in-between the patients' teeth.\[10\] The injuries in this series were associated with teeth, as the biting tool in lip and cheek biting. The varied pattern of manifestations of factitious orofacial injuries in the form of gingival and mucosal ulceration, mandibular subluxation, dental pain, salivary gland pain, facial emphysema, periorbital ecchymosis, nasal ulceration and glossopharyngeal neuralgia that exist in the literature explained the varied manifestations in form of recurrent buccal ulceration, lip mucocele and traumatic fibroma of the cheek reported in this series.\[9\]

Stewart and Kernohan\[11\] classified factitious oral injuries into three namely: Type A: Those superimposed upon a pre-existing lesion; Type B: Those occurring secondary to an established habit and Type C: Those of an unknown or complex etiology. In this series, Case 1 and Case 3 were classified as Type B factitious oral injuries while Case 2 was classified as Type A factitious oral injuries according to Stewart and Kernohan.\[11\] This is because there was a history of initial trauma that aided the development of the habit which consequently led to the factitious injury. Traumatic injuries have been reported to precipitate self-mutilation as seen in this patient who developed habitual biting of his lower lip after initial trauma.\[12\] Trauma leads to inflammation which may trigger habit and the habit will lead to more injury thereby resulting in a vicious cycle.\[12\]

Recall appointment default of the patients which is common plus the relatively absent or poor interdisciplinary approach to oral healthcare management system in developing countries hamper the full scale psychiatric evaluation of the affected patients by psychiatrists. Although, no formal psychological examination was carried out by a psychiatrist, routine questioning of the patients did not give the attending dentists any cause to request for further evaluation. Literature have it that emotional problems are often detected in individuals with self-inflicted oral injuries but easily discernible emotional disturbance appear to be non-existent in some cases.\[7\] The attending dentists' perception of the patients to be psychologically normal can be considered acceptable in the absence of a psychiatrist and in situations of poor attitude toward referral for psychiatric evaluation. However, we recommend that dentists should consider referring patients with suspected cases of factitious injuries to psychiatrist before offering treatment or on the alternative get trained to stand as a stop gap in the absence of easily accessible psychiatrist as this will overcome deficiencies created by recall appointment default. Full scale psychiatric evaluation is recommended against the backdrop that factitious injury may be the initial presentation of some serious underlying psychological and medical problems in children.\[12\]

Shetty and Munshi\[13\] reported the lip/cheek biting prevalence of 6% in Indian school children and this was more prevalent among the girls and the 13-16 years old. However in this report, more males were affected than females. The variation with the compared report is because it focused on oral habit and not on habitual factitious oral injuries. It could also be due to the fact that more attention is given to the female children than the male children culturally thus the involved male children may have devised this, as a means of seeking attention. Case 1 was the first child but had a younger brother of two years which may have captured all the mother's attention so in order to get those attention he solely had in the past, he may have engaged in this habitual factitious oral injury. Kotansky \emph{et al.}\[14\] reported that most cases of self-injurious behaviour could be linked to secondary gain. “This type of behaviour is also exhibited in cases in which people wish to obtain special attention from family members”.\[15\] It is known that factitious injuries are purposely created for seeking attention and are commonly seen in persons with disturbed developmental or mental state and rarely in normal patients. The pattern of occurrence is explainable by the postulated biological and functional theories of the aetiology. “Lesch-Nyhan and Gilles de La
Tourett syndromes, autism, familial dysautonomia and mental retardation are recognized biological causes.[16-20] Escape or attention seeking through self-inflicted behaviours arise in stressful situations in the absence of a known biological factor.[18-20] The affected children in this series were in transitional classes in primary and secondary schools as the case 1 was in nursery three from where he will move to primary one, the case 2 was in primary six from where he will move to junior secondary one and the case 3 was in senior secondary one which meant that she just moved from junior secondary three. These transitions are usually stressful and can be suggested as the aetiological component in these reported factitious oral injuries. Flaitz and Felefli[21] found that transient factitious oral injury which wanes over time in children is usually aggravated during sports competition, school examination and other stress precipitating activities.

In case 1, although an initial history of cheek biting was not elicited, it was observed during the subsequent visit and confirmed by the patient’s mother. This emphasizes the diagnostic challenge of factitious oral injuries whether habitual or inadvertent.[7,22] The ulceration and the persistent biting obvious led to further inflammation and consequent lymphadenopathy of the draining lymph nodes. The chronically traumatized area from repeated biting is usually thickened, scarred and paler than the surrounding mucosa as was seen in case 1.[12]

Comprehensive care include (1) reconditioning the patient to avoid abnormal behaviour with counseling, relaxation techniques, biofeedback, hypnosis and sedatives targeted at the habit. (2) Oral appliances to protect of the gingiva, tongue, lips, and cheek mucosa and (3) dental management of the deleterious effects of the habit.[10,12,23,24] Initial counseling after detecting the habit was the treatment offered in this series. The patient exhibit varied pattern of recall appointment default which prevented long term follow-up and re-evaluation. This could have been due to the relief from the ulcer/swelling which was the only concern, or their inability to keep up with the appointment schedules due poor attitude to hospital visits. This re-emphasized recall appointment default that hampers long term monitoring of patients in developing countries. Dentists need to enhance patient motivation and recall compliance through effective communication with the patient by providing adequate information regarding their disease condition and treatment options and follow up as well as persistent reminders after the initial visit.

CONCLUSION

There should be high index of suspicion of habitual factitious injury among dental practitioners when attending to patients when mucosal conditions related to the dentition with or without eliciting cheek or lip biting habits. Holistic diagnosis and treatment plan can be achieved by considered psychological evaluation of the affected patients before offering dental care as this will overcome deficiencies created by recall appointment default.

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