Gingivitis artefacta – Self injurious behaviour in adult patients of depression Report of 2 cases

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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. Apart from pathological causes of the gums and established habits of nail biting and finger sucking, the aetiology could be psychological problems. We report cases of gingivitis artefacta in two adult patients of a family, who are suffering from depression and anxiety neurosis. Self-injurious behaviour (SIB) is a complex disorder. Management includes both dental correction and psychiatric intervention to allay this disturbing and damaging habit of the patient. Practitioners need to be aware of such presentations in patients.

Key Words: gingivitis artefacta, self-injurious behaviour (SIB), gum picking, depression, anxiety neurosis, familial, factitious oral lesions (FOL).

Introduction:

Self-injurious behaviour (SIB) is defined as those behaviours which inflict physical damage and pain.[1] These are also known as factitious injuries or self-mutilating injuries. A type of periodontal disease caused by such physical injury to the gingival tissue is termed as gingivitis artefacta, which has minor and major variants.[2]

Gingivitis artefacta minor is the most common but less severe form and is thought to be provoked by a pre-existing locus of irritation or overzealous tooth brushing habits. This form results from rubbing or "picking" the gingiva, using the finger nail or any foreign object.[3] Gingivitis artefacta major is more severe and widespread and can involve the deeper periodontal tissues. Other areas of the mouth such as lips and tongue or even extraoral injuries may be found. This type of behaviour is probably associated with an emotional disorder.[4] Such self-inflicted oral injuries seem to be more common in children than adults. Also prevalence is more in females.[5]

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Stewart and Kernohan[6] have suggested a classification system for self inflicted gingival injuries.

Type A: injuries are superimposed on a pre-existing condition such as herpetic lesions or localized gingival infection.

Type B: are secondary to established habits such as finger sucking or nail biting.

Type C: injuries have unknown or complex etiologies which include injuries due to psychological problems. Self-inflicted injury with foreign objects like toothbrushes, toothpicks, patient's fingernails could cause an erosion of the gingival tissue in a specific area or even gingival recession.[7,8] Most of the cases of gingival injury reported so far have been in children with emotional disturbances.[9] Reports are also there regarding such behaviours of "gum scratching" in adolescents, where the patients though aware of their damaging behaviour, were unable to stop. There was history of pain and sensitivity in the affected areas and the cause of the behaviour seemed to be of psychological origin.[4,10]

The purpose of the present case reports is to show that such self-injurious behaviour and gingival injuries can affect adult patients, suffering from depression and anxiety neurosis and that too occurring in the same family.

Case Report 1:

A forty eight year old female patient reported to an oral surgeon with history of severe gingival irritation off and on, since one year. On questioning,

she revealed that her irritation would start suddenly and become so intense and troublesome that she would finally resort to" picking" her gums either with a safety pin, toothbrush, aluminium foil or her fingernails. The irritation would start at a particular region of gum and then gradually spread to adjacent areas of gums and then to her lips. She would bite her lips or apply a pinch clip to control the sensation. At times, the gums and lips would pain and start bleeding. The process would become a vicious cycle with irritation leading to SIB and that causing more irritation

Clinical findings:

On clinical examination, there were no erosions or injury marks in the gingival area. The labial aspects of the gingiva of the upper and lower anterior teeth were slightly tender and a few areas in the interdental papillae bled easily. There were calculus deposits along the free gingival margins. The two mandibular canines were missing. Upon history taking, she reported similar gum irritation upon earlier occasions. Her gum picking had loosened her teeth considerably and she had extracted them herself. On radiological examination, x-rays showed impacted permanent canines on either side. Probably the patient could loosen the teeth easily as they were deciduous with root resorption. No other pathological changes were observed in the oral cavity. Her oral health and hygiene were otherwise normal.

Treatment:

She was advised oral prophylaxis followed by 0.2% chlorhexidine mouth rinse twice daily and follow up after two weeks. Patient reported back with history of two more episodes of severe gum irritation. Since she was menopausal, she had consulted her gynaecologist to know whether there could be any hormonal causes. Her gynaecological check-up and hormonal levels were normal and no causal relationship could be attributed. Further clinical evaluation revealed mild gingival recession on the lingual and labial surfaces of the anterior teeth. The cemento-enamel junctions of the two mandibular first premolars were exposed. The gingival condition did not however require active dental intervention. This time, the patient confided that she was suffering from endogenous depression and acute panic attacks since many years and was taking anti-depressants under the guidance of her psychiatrist.

Case Report 2:

At about the same time, the above patient's, 18 year old daughter started reporting similar gingival irritation, gum picking and lip biting. She also suffered from acute panic attacks and was under anti-depressant therapy since one year. On examination, there were no significant gingival changes except mild sensitivity of the lower anterior teeth, nail marks on the interdental gingiva and bite marks on her lower lip. On psychological interview, she revealed that she was the youngest of the three children. Her two elder siblings were into professional courses, whereas she was not. She believed that everyone gave more attention to them and she felt neglected. She had low self-esteem and lack of confidence.

Management:

After having a discussion with their psychiatrist, both mother and daughter were referred back to him for further management. In subsequent sittings, it was realized that the gum irritation co-related with incidences or periods of stress and anxiety in both. Both were on two anti-depressants. An anti-anxiety medication was prescribed S.O.S for control of symptoms. They responded favourably to the medication at that given time, but their episodes of gum irritation continued to be precipitated by stress. An increase had to be made in their dose of anti-depressants, till the frequency of their symptoms decreased. Both mother and daughter's dental condition did not show any obvious deterioration, hence no intervention was done. Patients were made to realize the self-injurious and damaging behaviour they were resorting to, during situations of stress. They were advised psychotherapeutic counselling, avoidance of their SIB and maintenance of good oral hygiene. Repeated counselling made them restrain their SIB and their episodes of gum irritations have decreased considerably. Professional therapy would be needed for as much time it takes, for them to learn to cope up with stress.

Discussion:

Self-injurious behaviour (SIB) is a complex disorder. Different theories have been suggested regarding its etiolgy. Biological causes such as Lesch-Nyhan syndrome, Gilles de la Tourett syndrome, autism, familial dysautonomia and mental retardation have been well recognised. 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, especially in the absence of any known biological factors.

In our case, both mother and daughter resorted to SIB off and on, during situations of stress and anxiety. Both patients had been diagnosed as suffering from depression and anxiety neurosis with history of acute panic attacks. They were on regular anti-depressant therapy. Historically, majority of the cases have been reported in children[5] and adolescents.[4,] In our case, both were educated adults. Most reports indicate that the gingival injuries were produced by the patient repeatedly "picking" or scratching their gingiva with the finger or fingernail. A variety of other agents have reportedly been employed, including knives[11,12], strands of hair[13], toothpicks.[12,14] Our patients used their fingernails, safety pins, clothes- clips and aluminium foils of medicines.

In case of self-inflicted injuries, it might be difficult for the patient to stop the noxious behaviour. There are no standard techniques to prevent or treat oro-facial self-inflicted injuries. Sedation, behaviour modification and restraints are usually utilized to control the destructive behaviour.[5,12,15,16] In our case, though anti-anxiety medication sedated the patients and resolved the problem for that time, such episodes of SIB kept recurring in spite of patients being discouraged to do so by the clinicians. This compulsive behaviour could be functional, occurring during stressful situations. Since our patients resorted to gingival picking only when they were unable to bear the irritation, there could be a neurohumoral precipitating endogenous cause of the irritation of the gingiva and the perioral tissues. Fingernail scratching could not only injure the gingiva, but also cause gingival recession, potential bacterial contamination, inflammation, attachment loss, bone loss and even tooth loss.[4] Our case demonstrates "picking" as the cause of gingival recession and even self-extraction of loosened teeth. The mild degree of gingival pathology could be, because our patients did not have a continuous habit of gum picking but only temporarily did so, during periods of anxiety. In between episodes, there was no gingival irritation, hence no picking, thus gingiva did not exhibit progressive damage. Moreover, there seems to be an overlap between gingivitis artefacta minor and major. The clinical features were of artefacta minor but the underlying aetiology corresponded to artefacta major.

In our second case, the daughter presented a picture similar to that of her mother. It seems likely that she picked up the SIB by trying to imitate her mother. Still, a familial trend of underlying pathology cannot be entirely ruled out. In our case, both the oral surgeon and psychiatrist have been practising for more than 30 years, but surprisingly, had not come across any such case in their respective fields. Self-inflicted gingival injury, although thought to be uncommon, it's quite widespread. Either these events are under reported or they are rare presentations in our population or else there is a lack of awareness.

These reports stress the importance of detailed history taking and considerations of SIB or Factitious Oral Lesions (FOL) in the differential diagnosis of the cases of gingivitis. Psychiatrists should also be aware of such orofacial SIB in patients of anxiety and depression. Medical and dental practitioners should be aware of such manifestations which could be otherwise very disturbing and damaging to the patient. The timely diagnosis and liason between the dentist and the psychiatrist is needed. Psychotherapeutic counselling and adequate management of underlying stress, is essential for the success of the treatment.

In our case there was a need to step up the dose of the anti-depressants to reduce the attacks of SIB. Since the gingival and lip irritations are still persisting under stress, we feel, the patients have to be taught self-restraint from SIB and strategies to cope up with stress. The treatment is complex and challenging and may need a long time.

Conclusion:

Gingivitis artefacta may be precipitated by psychological causes including stress, anxiety and depression. Patients presenting with such periodontal disease, without obvious organic cause, need to be evaluated by both the dentist and psychiatrist. Apart from necessary dental correction, they may need alteration in their anti- anxiety medication and regular counselling to teach them to identify trigger factors and learn to cope up with stress.

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