

CONTINUING MEDICAL EDUCATION ΣΥΝΕΧΙΖΟΜΕΝΗ ΙΑΤΡΙΚΗ ΕΚΠΑΙΔΕΥΣΗ

Oral Medicine and Pathology Quiz – Case 8

A 9-year-old boy was referred by his orthodontist for evaluation of recurrent, bilateral painful lesions of the posterior buccal mucosa. The lesions were first noticed 9 months ago coinciding with the placement of an orthodontic appliance. Periodic treatment with antiseptic mouthwashes did not resolve the lesions, which exhibited remissions and exacerbations. Temporary removal of the orthodontic appliances had resulted in complete healing, but the lesions recurred upon new placement of orthodontic rings. The medical history was non-contributory; there was no report of allergies and skin or nail lesions were absent.

Clinical examination revealed bilateral, white plaques with rough surface on the posterior buccal mucosa, extending to the retromolar pad areas (fig. 1). In addition, ulcerations covered with pseudomembrane were noticed on the left buccal mucosa. Removal of the orthodontic rings was suggested, since a mechanical irritation or a contact allergy to the metal was considered as the possible cause. Tests to rule out contact allergy were performed by a specialist and were negative. Administration of topical corticosteroids to accelerate healing was recommended. On follow-up appointment one week after the removal of the rings (fig. 2), there was only a remaining ulceration on the left buccal mucosa, which was further managed with an intralesional injection of corticosteroids. However, on the next day, there was bilateral,



Figure 1



Figure 2

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ΑΡΧΕΙΑ ΕΛΛΗΝΙΚΗΣ ΙΑΤΡΙΚΗΣ 2009, 26(4):572–573

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severe recurrence of the condition. On careful clinical examination, contraction of the masticatory muscles was noticed. Finally, the patient admitted to his parents, his habit to chew on his cheeks when he was under stress. The patient was encouraged to avoid this habit and no further recurrences were reported.

Comment

Self-mutilation is the intentional act of tissue destruction with the purpose of shifting overwhelming emotional pain to a more acceptable physical pain. The etiology of self-mutilation can be divided into organic and functional categories. Organic causes include metabolic and genetic disorders with Lesch-Nyhan syndrome being the most common. Functional self-mutilation is performed knowingly, as a response to certain stimuli and may or may not serve a cognitive purpose.

Oral self injury or self mutilation is thought to be more widespread than usually recognized. In its most common and relatively mild form, it consists of habitual cheek, tongue and/or lip biting, described with the term "morsicatio". However, it may assume various forms

and ensuing clinical presentations, including gingival, mucosal and periodontal damage, glossectomy, autoextraction and the insertion of foreign bodies.

Most patients are unaware of their habit or unwilling to admit it, thus complicating the diagnosis. As a result, self-induced oral injury may be confused with other topical and systemic disorders involving the oral mucosa and can lead to misdiagnosis. In the present case, the differential diagnosis included contact allergic reaction or mechanical irritation due to the orthodontic appliances, immunologically-mediated mucocutaneous diseases or early signs of hereditary disorders. It should be noticed that the final diagnosis was rendered with consideration of the progression of the lesions, thorough physical examination that allowed us to observe the patient's parafunctional muscle movements, appropriate counseling with the parents and gentle questioning of the patient.

There are only a few studies in the literature concerning self-mutilation and its pathogenesis. It has been suggested recently that self-mutilation not only allows the individual to gain control over emotions and provides a diversion from emotional pain but is also followed by a release of endorphins that contribute to the feeling of relief.

Incidence of oral self-induced injury or self-mutilation is not uncommon and thus, it should be always considered in the differential

diagnosis of oral lesions of unknown cause.

References

1. HICKS KM, HINCK SM. Concept analysis of self-mutilation. *J Adv Nurs* 2008, 64:408–413
2. SINGH P, EMANUEL R, PARRY J, ANAND PS. Three pediatric patients with oral self-mutilation – a report. *Dent Update* 2008, 35:280–283
3. LEE JH, BERKOWITZ RJ, CHOI BJ. Oral self-mutilation in the Leisch-Nyhan syndrome. *ASDC J Dent Child* 2002, 69:66–69
4. GLASS LF, MAIZE JC. Morsicatio buccarum et labiorum (excessive cheek and lip biting). *Am J Dermatopathol* 1991, 13:271–274

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