Parafunctional Cheek Biting

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Summary

A 22 year-old man was referred to our Department for evaluation of white hyperkeratotic multiple flakes, together with tiny erosions localized on both cheeks. Detailed medical history and clinical examination revealed habitual cheek biting as a result of a bad habit, which was manifest with a typical clinical finding. During treatment we applied a combination of salycil acid and corticosteroids as well as vitamin A drops and the patient was advised to stop the bad habit, and to take sedatives during states of nervousness. The therapy resulted in complete regression of the lesions.

Key words: *parafunction, biting, oral mucosa.*

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CASE REPORT
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Introduction

Cheek biting is a bad habit which occurs approximately in 3.44% of all white lesions and only one third of the patients are men, reported by Bouqot and Gorlin (1). Other authors such as Sewerin (2), in a study which included more than 8000 people, reported the prevalence of cheek biting in 0.5% of patients, while Axell (3) reported the prevalence of 4,7% of patients. Etiology of cheek biting is considered to be psychogenic, caused by wide range of emotions as reported by Walker and Rogers (4). Repeated biting leads to a chronically traumatized area which is sometimes thichkend, scarred and paler than the surrounding mucosa. Habitual cheek of lip biting generally refers to a more superficial lesion produced by frequently repeated rubbing, sucking, or chewing movements that abrade the surface of a wide area without producing discrete ulceration. Such lesions feel rough to the examiners' fingers and appear as poorly outlined, macerated and reddened areas, usually with whitish patches of partly detached surface epithelium (5,6). Habitual cheek or lip biting may sometimes produce hemorrhagic bleeding of the oral mucosa (7).

Habitual lip or cheek biting usually occurs a an unconscious habit. Allerting the patient to the bad habit is usually sufficient to discontinue the habit. However there are more severe cases in which a splint is recommended as well as sedatives, 5-10 mg diazepam. More severe cheek biting also occurs in association with uncontrolled tongue thrusting or chewing and grinding jaw movements in individuals with neuromuscular disorders such as tardive dyskinesia (8).

Case report

A 22 year-old male was referred to our Department because of lesions localized on both cheeks. Detailed medical history revealed that the patient was in the habit of biting his own buccal

mucosa in states of stress, for example before exams. The patient was completely aware of his bad habit. Clinical examination showed white hyperkeratotic flakes with exfoliated areas which were localized on both cheeks. The flakes could be removed from some parts of the buccal mucosa. Candida culture was negative.

While treating the patient we applied salicyl acid with corticosteroid in orabase. Home therapy consisted of application cream 3 times a day together with combined medication of salicyl acid and corticosteroid. The patient was also given A vitamin drops in a dose of 100,000 IU lasting for three weeks. The patient was advised to discontinue the bad habit and to take sedatives in states of severe stress (diazepam 2 mg three times a day). After three weeks a regular cheek-up did not disclose any pathological changes.

Discussion

The appearence of oral lesions after psychological stress situations is in accordance with the finding of authors who reported that psychological factors lead to cheek biting. A study conducted in South Africa on institutionalized children showed 4.5% (8). Hjorting-Hansen and Holst (9) reported that 4 patients out of 17 were sent for psychiatric therapy. However the authors indicate that in all other cases of cheek biting advise to stop the bad habit and the use a splint as a nightguard was sufficient therapy. Differential diagnosis can be candidiasis, white spnge nevus, lichen, congenital dyskeratosis, Dariers disease, congenital pachyonichia, benign intraepithelial dyskeratosis, combustions and states after topical use of medicines (6,10). Biopsy was not performed because the lesions disappeared after our theraphy and because a biopsy finding reveals only hyperkeratosis and is not specific, wich is in accordance with other authors (1,2,3). However, we consider that biopsy should be performed in all other cases of white hyperkeratotic lesions of uncertain etiology and when lesions are resistent to our therapy. It should not be forgotten that certain neurological diseases such as tardive dyskinesia could be manifested with cheek biting. Therapy is based on the explanation that oral lesions are a result of biting because patients are usually unaware of the bad habit and advice is in most cases sufficient. In more severe cases sedatives are prescribed, for instance 5-10 mg which was sufficient in our case (8).

If cheek biting occurs during the night the patient is supposed to have a splint overnight. Patients should be also sent for psychological help and treatment with relaxation, biofeedback or autogen training. In this case sanation of lesions occurred after causative explanation of the bad habit, use of sedative and keratolytic agents and vitamin A.

Unconscious cheek or lip biting leads to hyperkeratotic exfoliation of the mucosa and can have erosions as a basis. The changes are the result of psychological disturbances in the patient. It is necessary to identify the bad habit and to treat patients with sedative. Locally applied therapy helps to eradicate the hyperkeratotic flakes and inflammation. Systemic use of vitamin A regenerates the oral epithelium.