**Oral Medicine and Pathology Quiz – Case 9**

A 79-year-old female was referred to our clinic for evaluation of painful lesions on the vermilion border of both lips. The lesions were first noticed 1 year ago. The patient periodically used topical corticosteroid cream, which resulted in partial improvement of the lesions. She was a non-smoker, and her medical history was significant for hypertension, diabetes mellitus, hyperlipidemia and chronic angina, which were controlled by medications. She had not used any topical agent on the lips for the past few weeks. Recent blood tests showed only slightly decreased hematocrit levels.

On clinical examination, scaling and flaking of the vermilion border of both lips was noticed (fig. 1). Intraoral examination revealed mild dryness of the oral mucosa. No other oral or skin lesions were noticed. On careful questioning, the patient admitted a lip licking habit, also observed during the examination.

On the basis of the diagnosis, topical administration of combined corticosteroid, antibiotic and antifungal creams was prescribed for 2 weeks. Furthermore, the patient was advised to increase the daily consumption of water, stop the lip licking habit and use moisturising gel for the oral mucosa. Two weeks later, the lesions had disappeared and the patient reported no symptoms.

**Comment**

Exfoliative cheilitis is a superficial inflammatory condition characterized by scaling and flaking of the vermilion border of the lips. It is caused by overproduction and subsequent desquamation of the superficial keratin layer. The condition is usually described in young people (<30 years old) and has a female predominance. Patients may also report labial bleeding, resulting in hemorrhagic crusts, as well as pain, difficulty in speaking, eating or smiling. Perioral skin may exhibit areas of erythema (circumoral dermatitis). In chronic conditions, fissures on the vermilion border may appear.

Many causative factors are proposed. The most frequently implicated is chronic injury secondary to habits such as lip licking, biting and sucking (irritational contact dermatitis). The cases caused by chronic injury are termed factitious cheilitis. These self-inflicted lesions may arise on a background of psychiatric disturbances. Mouth breathing is another factor, which can result in dehydration and subsequent desquamation of the lips. Overexposure to cold, sunny or windy weather may also give rise to exfoliative cheilitis. Furthermore, the condition may be caused or complicated by bacterial or fungal infection, especially in cases of poor oral hygiene or immunosuppression. Diffuse candidal involvement may represent superinfection of chronically injured areas due to lip licking. An increased prevalence of exfoliative cheilitis has been reported in HIV positive patients, patients with Down syndrome and even patients with thyroid dysfunction.

A condition mimicking exfoliative cheilitis (dryness, lip fissures) may also appear on chronic use of retinoid acid medication or hypervitaminosis A. Smoking and photosensitivity have been also implicated as possible predisposing factors. Last but not least, allergic contact dermatitis, due to allergens from various sources such as cosmetics, toothpastes and sunscreen agents, has been considered as an etiologic factor in a significant proportion of the cases.

The diagnosis of exfoliative cheilitis is based on clinical signs. The differential diagnosis includes mainly actinic cheilitis and angular cheilitis. Treatment of exfoliative cheilitis involves the elimination of any causative factor. Moreover, in cases where bacterial or fungal infection is suspected local antibiotic and antifungal agents are necessary. Corticosteroid cream is often used as well, with good results. Moisturizing gels or lip balms may also be administered to protect the lips from dehydration or sun damage. The lesions usually subside within 1 or 2 weeks. If the lesions persist, then further investigation, possibly including patch testing to eliminate an allergic cause, should be conducted. Recurrences are not rare, especially when the patient continues the traumatic habit; in these cases, psychotherapy may be in order.

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