Periodontal clinical manifestation of autoimmune disease

Gingival desquamation or desquamative gingivitis is a clinical sign in which gingiva is erythematous, fragile, and the epithelium detaches with minimum trauma, causing painful erosions either in free or attached gingiva and the mucosa. The patients are symptomatic or asymptomatic. Symptomatic patients have discomfort during tooth brushing, feeding, and gingival bleeding. Many autoimmune diseases may involve the mouth, as erythema, blisters, erosions, and ulcerations in the oral epithelium. The lichen planus, pemphigus vulgaris, and pemphigoid family are the most common dermatoses associated with oral lesions.

Some studies demonstrate that scarring pemphigoid or pemphigoid of mucous membranes is the most common cause of desquamative gingivitis. Its alterations in oral epithelium affect the periodontal health, leading to plaque accumulation and altering the periodontal parameters, including bleeding, clinical probing depth, and clinical level of insertion, resulting in misdiagnoses.

The previous history and the complete clinical examination are indispensable for proper treatment. Many times, oral epithelium is the single affected site or it shows the first clinical manifestations of the disease. The dentist should be aware to diagnose early and correctly prior to perform root scaling and polishing or to prescribe antimicrobials incompatible with this disease. The accurate diagnosis is extremely difficult, because the clinical signs of different autoimmune diseases are similar, e.g. necrotizing ulcerative gingivitis.

The autoimmune diseases behind desquamative gingivitis involve the formation of antibodies targeted to particular tissue elements of the skin and mucosae. The term pemphigoid, subdivided into bullous pemphigoid and pemphigoid of mucous membranes (or scarring pemphigoid), is used for bullous cutaneous immunological diseases in which antibodies are produced against subepithelial antigens, leading to the formation of blister below the epithelium and the detachment of the underlying lamina propria. The lesions commonly affect the mouth (85% of the cases), and the palate and gingiva are the most common affected sites with blisters that tear and cause superficial ulcers. It is worth emphasizing that ophthalmic injuries may also be present, reinforcing the need of multidisciplinary treatment.

The dentist plays an important role in the early diagnosis and treatment of oral manifestations of systemic diseases, taking into account the importance of the histopathologic examination and referral for multidisciplinary treatment of severe, generalized lesions resistant to topical therapy.

Carmen L Mueller Storrer
DDS, MS, PhD in Periodontics
Associate Professor of the Graduate Program in Dentistry
Positivo University, Curitiba, PR, Brazil

Lucimari Teixeira
DDS, MS student in Periodontics