Autoimmune blisters in the gingiva

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DESCRIPTION

A 77-year-old woman presented with multiple gingival ulcers with a yellowish, erythematous appearance following the rupture of several blisters 3 months previously. The gingival ulcers resolved after 2 weeks; however, another blister occurred at a different region of the gingiva simultaneously. The blisters easily ruptured 1 day after onset, and painful ulcers developed in their place. Of note, this patient had gastric hyperacidity. Laboratory testing was positive for BP180 antibody, and negative for antidesmogleins 1 and 3. Biopsy of the blister was performed (figure 1). Histopathological findings indicated the presence of a subepithelial blister with an infiltrate consisting of lymphocytes, plasma cells and eosinophils. A final diagnosis of mucous membrane pemphigoid (MMP) was made with direct and indirect immunofluorescence assays.

Autoimmune bullous diseases (AIBDs) are caused by autoantibodies targeting structural proteins of the desmosomal and hemidesmosomal plaques of the skin and mucosa, leading to intraepithelial or subepithelial blistering.[1] The oral mucosa is frequently affected in patients with AIBDs such as MMP, pemphigus vulgaris and paraneoplastic pemphigus.[1] The main clinical features of AIBD include multiple painful erosions and ulcers due to bullous rupture. The clinical features of these diseases often overlap with other conditions such as some drug-induced diseases (eg, Stevens-Johnson syndrome), several systemic diseases (eg, oral lichen planus and Behcet's disease) and recurrent aphthous stomatitis. Therefore, the diagnosis cannot be made based on clinical features alone. For the diagnosis of AIBD, direct immunofluorescence on a biopsied sample from the affected mucosa, combined with indirect immunofluorescence and additional serological tests, is recommended.[1]

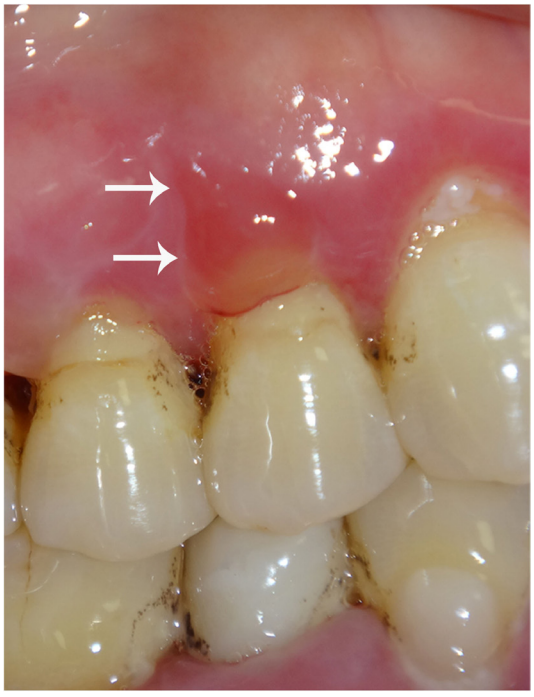

Figure 1 A photograph showing a teardrop-like gingival bullous (arrows) within a mucous membrane pemphigoid.

Patient's perspective

My gingival ulcers resolved after 2 weeks; however, another blister occurred at a different region of the gingiva simultaneously. The blisters easily ruptured one 1 after onset, and painful ulcers developed in their place.

Learning points

- The main clinical features of autoimmune bullous diseases (AIBDs) include multiple painful erosions and ulcers due to bullous rupture. The clinician rarely finds the bullous because the blisters easily ruptured 1 day after onset.
- The clinical features of these diseases often overlap with other conditions such as some drug-induced diseases (eg, Stevens-Johnson syndrome), several systemic diseases (eg, oral lichen planus and Behcet's disease) and recurrent aphthous stomatitis.
- For the diagnosis of AIBDs, direct immunofluorescence on a biopsied sample from the affected mucosa, combined with indirect immunofluorescence and additional serological tests, is recommended.

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REFERENCE

1 Rashid H, Lamberts A, Diercks GFH, *et al*. Oral lesions in autoimmune bullous diseases: an overview of clinical characteristics and diagnostic algorithm. *Am J Clin Dermatol* 2019;20:847–61.