Esophagitis dissecans superficialis due to severe methotrexate toxicity

Fig. 1 Skin ulcers in a 56-year-old woman treated with methotrexate without folic acid for seronegative inflammatory arthritis. Multiple shallow ulcers, which were 1–2 cm in diameter and had red “beefy” bases, are shown in the gluteal folds and on the inner thighs.

Esophagitis dissecans superficialis (EDS), also referred to as “sloughing esophagitis”, is associated with the sloughing of large fragments of the esophageal squamous mucosa and is a rare endoscopic finding. The etiology is often unclear but it may result from thermal, chemical, or physical insults and has been reported in association with systemic diseases such as the autoimmune bullous dermatoses (pemphigus and pemphigoid) and certain medications [1–4].

A 56-year-old woman presented with a 1-month history of severe odynophagia, skin ulcers for 2 months (● **Fig. 1**), oral ulcers for 4 months, and marked pancytopenia with folate deficiency. She was known to have seronegative inflammatory arthritis and had been treated with methotrexate without folic acid for at least 6 years. An upper gastrointestinal endoscopy revealed findings consistent with EDS (● **Fig. 2**). An evaluation for

Fig. 2 Upper gastrointestinal endoscopy showing sloughing of large fragments of the esophageal squamous mucosa.

other possible causes was negative and she was treated for presumed methotrexate toxicity. Intravenous “rescue” folic acid, folic acid, and discontinuation of the methotrexate along with nutritional support resulted in improvement of the odynophagia and pancytopenia within 1 week and total resolution of her symptoms, the oral and skin ulceration, and the pancytopenia within 4 weeks. This is the first documented case of methotrexate toxicity presenting with EDS, skin and oral ulceration, and pancytopenia [4–6]. The diagnosis of EDS is made endoscopically and histopathologically. Endoscopy reveals an esophagus that seems filled with “gift-wrap paper” or with vertical fissures and sloughing of the whitish superficial epithelium. The histopathological findings are well described [2], but it is important for accurate diagnosis to give relevant clinical or endoscopic information to the pathologist [1,2]. A high index of suspicion for methotrexate toxicity is necessary in patients on chronic methotrexate therapy who complain of odynophagia, particularly if they have associated risk factors (hypoalbuminemia, low folate levels, concomitant infections, concomitant use of more than five medications, and lack of folate supplementation) [5,7,8]. Methotrexate toxicity may be associated with EDS.

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