Clinical picture

Sloughing esophageal mucosa

A 52-year-old man presented with 3-week history of passing bright red blood per rectum. His medical history was significant for hypertension, gastro-esophageal reflux disease and iron-deficiency anemia. He had a similar episode 3 years ago for which colonoscopy was done and showed hyperplastic polyp in transverse colon and non-bleeding internal hemorrhoids. He denied any history of nausea, vomiting, abdominal pain, food intolerance or change in appetite or weight. He had no history of nonsteroidal anti-inflammatory drug (NSAID) or bisphosphonate use, chemical irritants, hot beverages, autoimmune skin diseases and celiac disease. His social history was significant for smoking (20 pack-year history) and occasional alcohol use. He denied illicit drug abuse. His home medications were lisinopril and hydrochlorothiazide. On examination, vital signs were within normal limits except for sinus tachycardia (HR 105/min). There was significant pallor and 2/6 ejection systolic murmur was heard all over the precordium. Rectal examination was unremarkable and the fecal occult blood was negative upon testing. The remainder of the examination was unremarkable. Initial lab work-up showed severe iron-deficiency anemia with undetectable iron saturation. Hemoglobin level was 5.2 g/l (14.0–17.5) with mean corpuscular volume 67.6 fL. His complete metabolic profile and lactate dehydrogenase (LDH) level were within normal limits. During the hospital course, patient has received blood transfusions and i.v. iron. Esophagogastroduodenoscopy (EGD) revealed esophageal mucosa was peeling and plaque-like, findings consistent with esophagitis dissecans superficialis (EDS) (Figure 1). Also, salmon-colored mucosal extension from gastroesophageal junction to the distal esophagus consistent with Barrett’s esophagus was noted. Colonoscopy showed internal hemorrhoids with no active bleeding. Patient’s hemoglobin level improved and remained stable with no evidence of recurrent rectal bleeds. He was discharged home on omeprazole and was counseled to follow-up in the gastroenterology clinic for surveillance EGD in 2–3 months and if possible pursue capsule enteroscopy searching further if bleeding will recur.

Discussion

EDS or ‘sloughing esophagitis’ is extremely rare benign illness, with few case reports. It is a term applied to a rare endoscopic finding of unknown etiology characterized by sloughing of large fragments of the esophageal squamous mucosa that may be coughed up or vomited.1

Although the exact pathogenesis of EDS remains unexplained and the histopathologic features of EDS are inadequately described,1 an association with medications such as bisphosphonates and NSAIDs, skin conditions such as autoimmune bullous dermatosis (e.g. pemphigus vulgaris, mucous membrane pemphigoid, Stevens-Johnson syndrome and dermatitis herpetiformis),1,2 esophageal strictures, heavy smoking, physical trauma (e.g. hot beverages, chemical irritants and nasogastric intubation) and idiopathic has been reported.1,3,4 A more suggested hypothesis, supported by some similarities between the histologic findings in EDS and contact dermatitis, is that of a topical allergic reaction.1 No allergic antigens, however, have yet been proposed. General awareness of the endoscopic and histopathologic features of EDS may result in the detection of greater numbers of cases, eventually helping in determining the etiology of this rare condition.

Its usual symptoms are odynophagia and heartburn, and it can be associated with bleeding and obstruction of the esophageal lumen, mimicking a foreign body.3,5 The endoscopic features of EDS ranged from single or multiple white patches of peeling mucosa, extending from the mid to the distal esophagus to diffuse sloughing of the entire esophageal mucosa.1,5 Histologic findings of EDS may include prominent parakeratosis, orthokeratosis, desquamation of the squamous layer and a variable spectrum of epithelial necrosis and inflammation.4,5 Some of these histologic features...
can be found in other conditions: both parakeratosis and orthokeratosis are seen in the mucosa overlying esophageal strictures; inflammation and necrosis are common features of bacterial or fungal esophagitis; epithelial desquamation and detachment, usually the effect of endoscopic trauma or a processing artifact, are commonly seen in otherwise normal esophageal biopsies. Although the present patient has no comorbidities, this case represents the only case described of combined EDS and Barrett’s esophagus. Another explanation is that the sloughing mucosa might have been related to the fungal colonization of the detached epithelium.

EDS is a benign condition with good prognosis that resolves without lasting esophageal pathology. As is to be expected from the superficial nature of the epithelial separation, no case has subsequent stenosis or perforation occurred. Repeated cast formation, however, was a feature in few cases reviewed. A combination of acid suppression and the discontinuation of precipitating medications has been reported to result in the healing of EDS.

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References


