

Paracetamol-induced perforation of the esophagus in a patient with eosinophilic esophagitis



Fig. 1 Lateral esophagogram showing retention of contrast dye at the end of the proximal third of the esophagus consistent with foreign body retention.

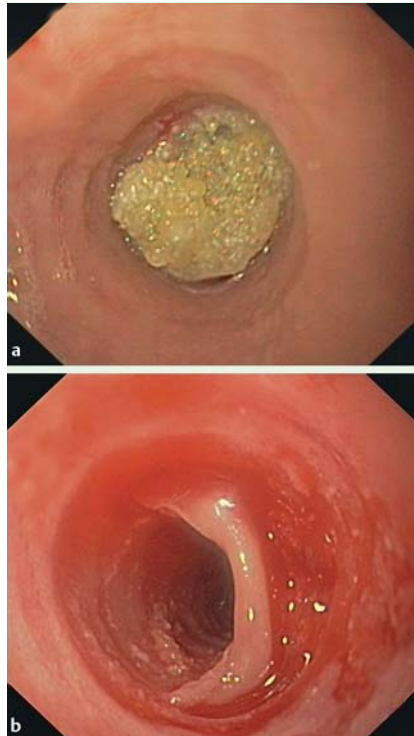


Fig. 2 Endoscopic aspect of the proximal esophagus prior to (a) and after (b) mobilization of the retained tablet. A soft tissue membrane becomes visible and the mucosal surface bleeds after contact with the endoscope.



Fig. 3 Coronal reconstruction of thoracic computed tomography showing mediastinal air (arrows) in the cervical and paratracheal soft tissue.

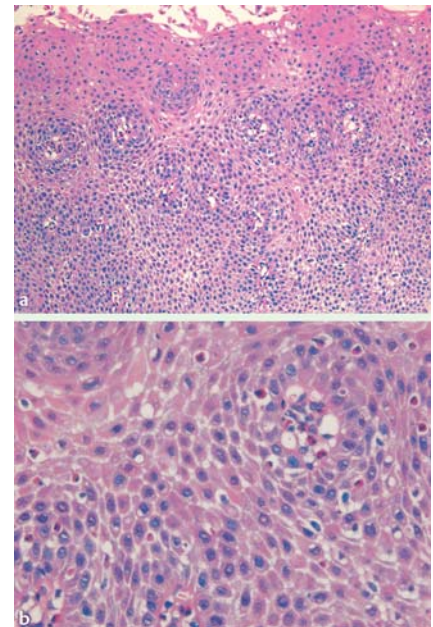


Fig. 4 Microphotographs of esophageal biopsy specimen. A typical aspect of eosinophilic esophagitis is shown, with more than 20 eosinophilic granulocytes per high-power field in the squamous epithelium of the esophageal mucosa, elongation of the papillae, dilatation of the intercellular spaces and basal cell hyperplasia. (Hematoxylin and eosin staining, original magnification: a $\times 200$; b $\times 600$.)

A 41-year-old female patient admitted herself to the emergency room with dysphagia 18 hours after ingesting a tablet of paracetamol. She had suffered from multiple episodes of dysphagia before. As shown in **Fig. 1**, an upper gastrointestinal series radiograph taken after admission revealed obstruction of the proximal third of the esophagus. Emergency esophagoscopy revealed a dilated esophagus and the tablet at the end of the oral third of the esophagus (**Fig. 2a**). After the tablet was gently mobilized, a membranous stricture and moderate hemorrhage became visible (**Fig. 2b**). The patient subsequently developed chest pain, and computed tomography (**Fig. 3**) showed mediastinal air consistent with perforation. The patient improved under conservative therapy and was discharged 5 days later. On day 40 she presented again with dysphagia and underwent manometry of the esophagus, which

showed no evidence of motility disorders. Esophagogastroduodenoscopy (EGD) revealed multiple, small, nodular lesions in the esophagus. Biopsies showed eosinophilic esophagitis (**Fig. 4**). Relapsing dysphagia and bolus obstruction of the esophagus are frequent symptoms in patients with eosinophilic esophagitis [1]. The disease presents with esophageal rings and segmental stenosis of the esophagus [2], which might predispose to bolus impaction. Conversely, esophageal biopsies taken in patients presenting with bolus obstruction reveal eosinophilic esophagitis in up to 50% of cases [3]. This is the first case of combined pill-induced and eosinophilic esophagitis leading to perforation despite minimal endoscopic manipulation. In eosinophilic esophagitis, the rate of perforation following rigid esophagoscopy is as high as 20% [4], but it has also been described following flexible EGD without

intervention [5]. Thus, eosinophilic esophagitis might increase the fragility of the esophageal wall, and great care is needed in the endoscopic treatment of patients presenting with a history of relapsing bolus obstruction.

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