

Gastric barotrauma

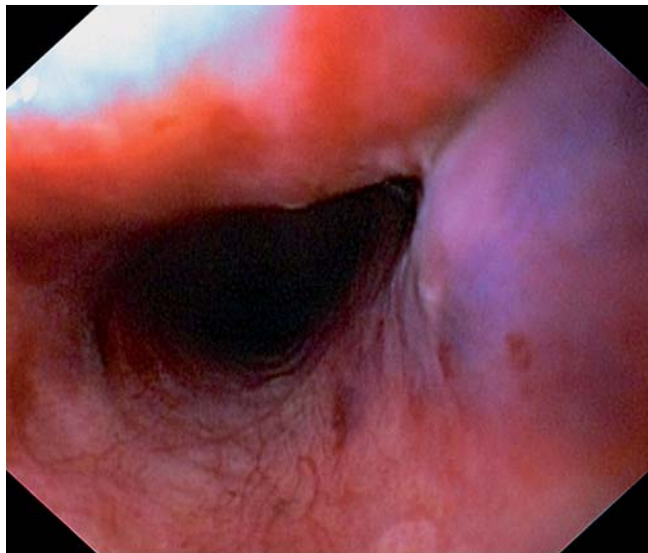


Fig. 1 Hematoma in the proximal esophagus.



Fig. 2 Longitudinal tears in the lesser curvature of the proximal gastric body.



Fig. 3 Closer view of the tears in the gastric body.

A 67-year-old woman with anti-neutrophil cytoplasmic antibody (ANCA)-positive vasculitis and related renal involvement was admitted to the emergency department with hemoptysis and respiratory failure. She had signs of respiratory distress, a peripheral O₂ saturation of 76%, hypotension and tachycardia. Noninvasive positive pressure ventilation was performed, but poor adaptation of the patient led to orotracheal intubation. During this procedure, after bag-mask ventilation, the esophagus was intubated twice with positive pressure, due to technical difficulties. Effective invasive ventilation was afterwards achieved. On the following day, the patient remained in the intensive care unit and an upper digestive endoscopy was performed because blood in the nasogastric tube and a fall in the patient's hemoglobin level were detected. A proximal esophageal hematoma was observed, compatible with trauma from the ventilation tube (▶ Fig. 1) and tortuous longitudinal tears were seen in the lesser curvature of the proximal gastric body (◀ Fig. 2, ◀ Fig. 3). These lesions were suggestive of gastric barotrauma, a condition that arises when sudden gaseous distension of the gastric cavity occurs at high pressure and can lead to transmural rupture of the gastric wall. Thus, most of the cases described in the medical literature were approached surgically [1]. Barotrauma occurs in the lesser gastric curvature, probably because this part of the stomach has a lower capacity for distension, owing to the lack of mucosal folds [1,2]. Gastric barotrauma has been reported after bag-mask ventilation, noninvasive positive pressure ventilation, air swallowing during diving and cardiopulmonary resuscitation [1–4]. In the present case, conservative management was successful.

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