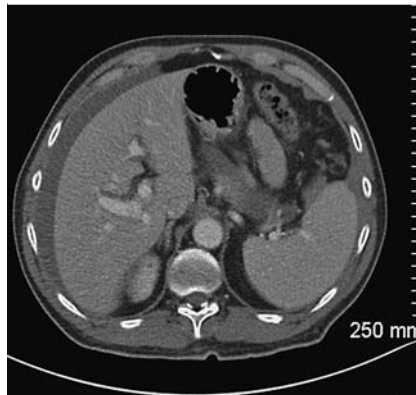


## Hemoperitoneum after endoscopic mucosal resection for Barrett's esophagus

A 67-year-old man was referred for Barrett's esophagus, Prague classification C8M8, with high grade dysplasia (HGD). A first endoscopic mucosal resection (EMR) using the Duette system (Wilson Cook Medical, USA) allowed removal of half of the circumference of the Barrett's area. The remaining Barrett's zone was resected 1 month later, without perioperative adverse events (● Fig. 1). However, 4 hours after the endoscopy, the patient complained of thoracic and abdominal pain, without subcutaneous emphysema or signs of peritonitis. A computed tomography scan (● Fig. 2) revealed a perisplenic, perihepatic, and pelvic hemoperitoneum; this was associated with an acute fall in hemoglobin (2g/dL) requiring a transfusion. In the event, the patient's course was spontaneously favorable without hemorrhagic shock or recurrence of bleeding. He did not need additional interventions and he recovered fully within 7 days. The pathological analysis confirmed Barrett's esophagus with low grade dysplasia (LGD) and some HGD areas, and with safe resection margins. As well as focal EMR [1], complete eradication of Barrett's esophagus using EMR techniques is an effective and safe method, with a perforation rate of between 0% and 9.5% of cases and a bleeding rate of between 0% and 2.56% [2–9]. The major limitation is the incidence of secondary stenosis (0% to 50% of cases). To date, this is the first reported case of hemoperitoneum after an EMR procedure. This complication might be have been caused by injury, during submucosal injection or suction, to gastric vessels located in the splenogastric ligament. Hemoperitoneums caused by splenic injury are mainly reported after colonic surgery, when excessive traction of the peritoneal attachments had led to mobilization of the splenic flexure and capsular and hilar bleeding [10–12]. More rarely, colonoscopy can also be complicated with splenic injury [13]. Some authors describe patient-related risk factors of male sex and peripheral vascular disease [10]. In conclusion, hemoperitoneum after EMR is a very rare complication, but awareness of it is needed in order to prevent delayed diagnosis and to provide appropriate care.



**Fig. 1** Endoscopic view of esophageal endoscopic mucosal resection (EMR) for Barrett's esophagus.



**Fig. 2** Computed tomography (CT) scan showing hemoperitoneum.

Endoscopy\_UCTN\_Code\_CPL\_1AH\_2AZ

**Competing interests:** None

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DOI <http://dx.doi.org/10.1055/s-0033-1359161>  
*Endoscopy* 2014; 46: E15  
 © Georg Thieme Verlag KG  
 Stuttgart · New York  
 ISSN 0013-726X

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