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Giant fundic adenoma responsible for symptomatic gastric intussusception: failure of endoscopic resection to prevent prolapse recurrencee

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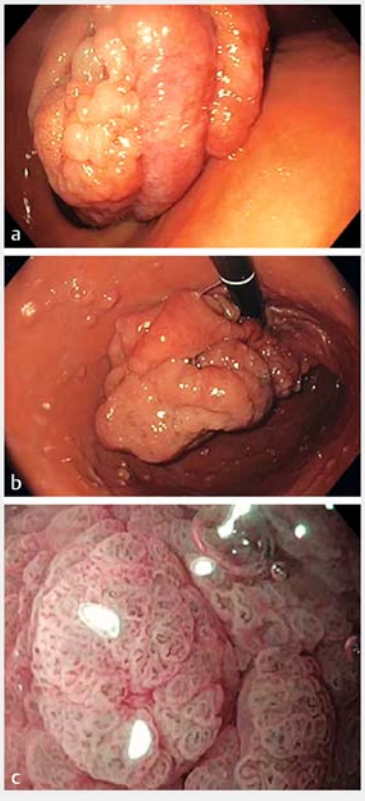
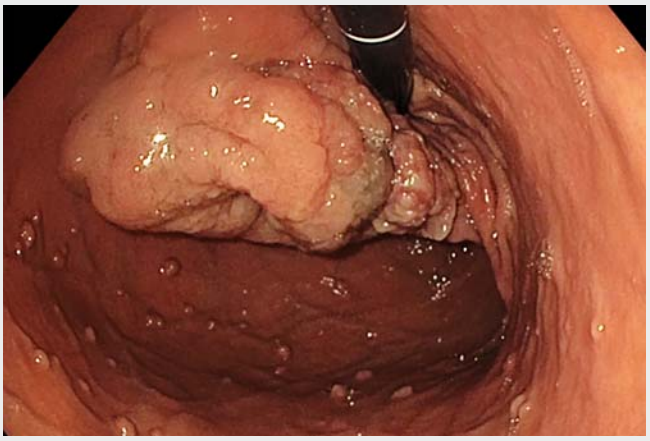
A 68-year-old woman had intermittent symptoms of nausea and anorexia associated with dyspepsia for 3 months. Computed tomography (CT) scan revealed gastric intussusception on mass syndrome with suspicion of stomach volvulus (▶ **Fig. 1**). A large subcardial polyp was diagnosed on upper gastrointestinal endoscopy, after sufficient stomach insufflation made it possible to reduce the intussusception, and revealed a voluminous 15-cm tumor with an almost circumferential flat base, with a polypoid



▶ **Fig. 1** Giant adenoma with adenocarcinoma component. **a** Endoscopic view of the intussusception through the pylorus. **b** The lesion after reduction of intussusception thanks to inflation. **c** Narrow band imaging aspect showing irregularity of the lesion.

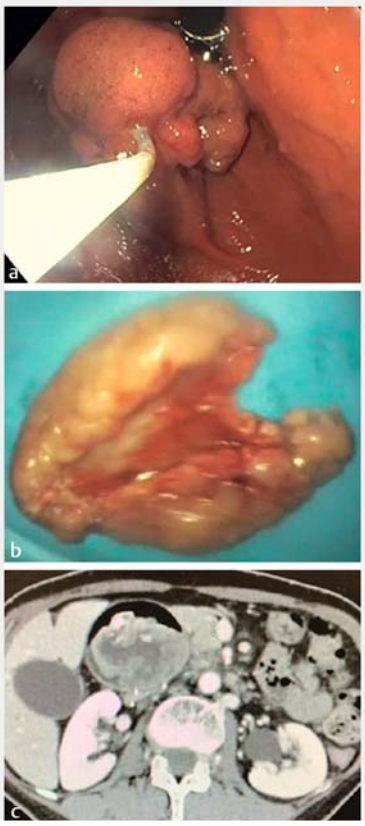


Video 1 Gastric intussusception due to a giant adenoma of the fundus.

range within it (▶ **Video 1**). Endoscopic reduction was performed for approximately 1 minute in front of this large and misplaced lesion, which could not be resected endoscopically with endoscopic submucosal dissection because of the fundic location. Piecemeal endoscopic mucosal resection (EMR) was done (25-mm SD snare, Olympus, Japan) with Endocut I current on the polypoid components to assess the lesion's histology and reduce the weight effect on the gastric wall (▶ **Fig. 2**). More than 10 pieces were resected before the procedure was stopped because the lesion was so widespread. The aim was to achieve histological assessment and remove the heavy nodular part of the lesion to evaluate the effect of intussusception, but complete resection in a single session appeared difficult and risky.

Histological assessment, performed on emergently, revealed a well-differentiated intramucosal adenocarcinoma on a tubular adenoma. Despite resection of the weighty components of the lesion, intussusception recurred on Day 1 after endoscopic resection and laparoscopic total gastrectomy with carcinological lymph node dissection was finally performed on Day 1 because of the adenocarcinoma on the EMR specimen. Final histology of the surgical specimen revealed only low-grade dysplasia on the flat remaining components that were not resected during EMR.

In adults, gastroduodenal intussusception is rare, and represents less than 10 % of cases of digestive intussusception [1]. The symptoms are long standing, intermittent, and nonspecific. Generally, they are associated with an underlying tumor tract in the gastric wall through the pylorus and duodenum [2–4]. Most reported cases have been due to large hyperplastic polyps in the fundus, but such a large adenoma with intramucosal adenocarcinoma rarely presents with intussusception. Finally, although EMR results in weight reduction, it should not be performed in these cases because it does not appear to prevent further prolapse or new intussusception. Rather, surgery should be proposed as first-line treatment.



▶ **Fig. 2** Attempted use of EMR and evolution. **a** Piecemeal EMR of the large polypoid components. **b** Example of 7-cm specimen. **c** Recurrence of intussusception on Day 1 after EMR.

Competing interests

The authors declare that they have no conflict of interest.

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