

Colonic duplication with heterotopy of gastric mucosa

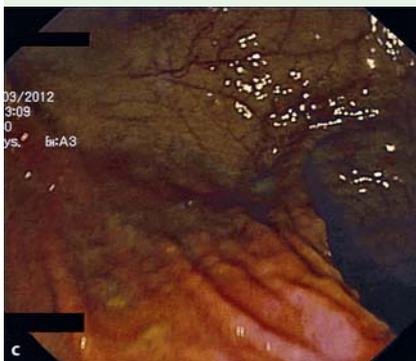
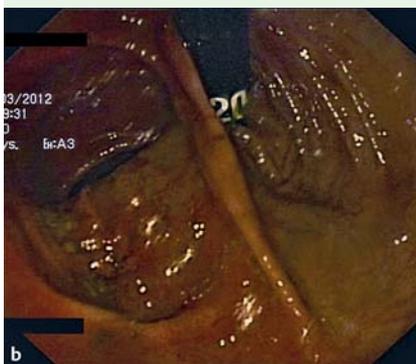
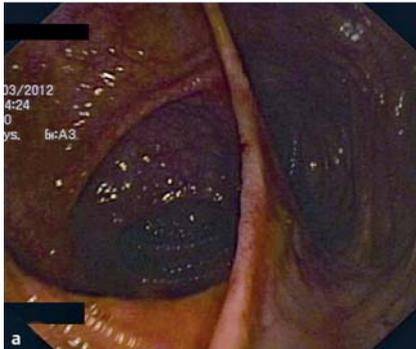


Fig. 1 Colonic duplication seen in endoscopy in a 48-year-old man with frequent motions. **a** Distal double lumen of descending colon. **b** Proximal double lumen of transverse colon in retroflexion. **c** Macroscopic view of gastric heterotopy in duplicated colon.

Gastrointestinal duplications are rare congenital anomalies, occurring in 1/5000 livebirths [1,2]. However, colonic duplications are extremely rare with only 7% of duplications involving the colon [3]. Heterotopy of gastric mucosa is a congenital lesion that often accompanies

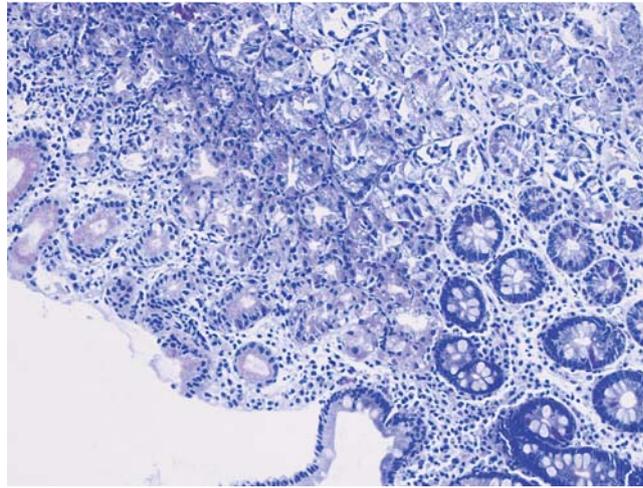


Fig. 2 Microscopic view of gastric heterotopy in the colon. Numerous fundic glands are present in deeper portion of the mucosa, with gastric foveolae on the surface. Some intestinal crypts, with Paneth's cells typical of the proximal colon, are visible in the lower right portion of the photomicrograph (hematoxylin and eosin, original magnification $\times 100$).

intestinal duplication [4]. In the case of symptomatic duplications, surgery is the treatment of choice, especially when complicated by ileus or hemorrhage [5]. Here we present an unusual case of large-bowel duplication in a patient with chronic diarrhea.

A 48-year-old man having four to six motions daily was seen in the outpatients clinic. On examination, infection was excluded and Crohn's disease was suspected. The patient was referred to the gastroenterology department. Routine blood tests did not reveal any abnormalities. Esophagogastroduodenoscopy showed longitudinal ulceration at the duodenal bulb. Histological examination revealed chronic nonspecific duodenitis with foci of granulation tissue but no granulomas. Following these investigations, a colonoscopy was done, which revealed an unusual presentation of the large intestine. A structure seen at the outer edge of the anus seemed like the orifice of a perianal fistula. At the start of the procedure, the colonoscope was inserted into the descending colon, where a double distal lumen was observed (Fig. 1a). The colonoscope was inserted first into the right lumen and, then into the left one, and each time it reached the cecum and terminal ileum. In the cecum, the scope was retroflected, revealing a proximal

double lumen (Fig. 1b). Along with colonic duplication, mucosal changes including edema, nodulation, and salmon-like color were also noted (Fig. 1c). Microscopically, extensive heterotopy of the gastric mucosa was observed (Fig. 2). To identify precisely the extent of the duplication, barium enema was carried out (Fig. 3). As a perianal fistula was suspected, transrectal ultrasound examination was also done (Fig. 4). Prior to this report, a likely association between Crohn's disease and large-bowel duplication has not been described.

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Competing interests: None

A. Madro¹, K. Celinski¹, B. Prozorow-Krol¹, C. T. Lozowski¹, L. Buk², J. Swatek³, J. Pilat⁴, M. Slomka¹

¹ Department of Gastroenterology with Endoscopic Unit, Medical University, Lublin, Poland

² Department of Radiology and Telemedicine, Medical University, Lublin, Poland

³ Department of Clinical Pathomorphology, Medical University, Lublin, Poland

⁴ Department of Surgery, Transplantology and Clinical Nutrition, Medical University, Lublin, Poland



Fig. 3 Colonic duplication seen on barium enema film. The duplicated bowel stretched from one-third of the distal colon as far as the flexure of the descending colon and the sigmoid colon.

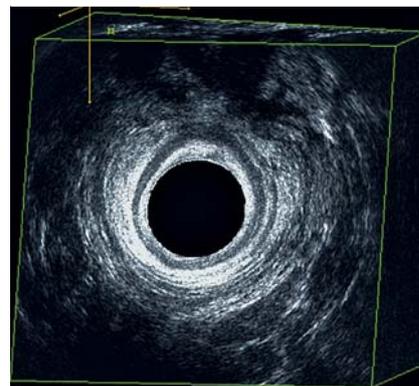


Fig. 4 Transrectal ultrasound examination showing the perianal fistula.

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Corresponding author

A. Madro
 Department of Gastroenterology
 with Endoscopic Unit
 Medical University
 Jaczewski Street 8, 20–954
 Lublin
 Poland
 Fax: +48817244535
agnieszka.madro@wp.pl