

Heterotopic gastric mucosa (HGM), which results from embryonic tissue displacement, can be found throughout the length of the gastrointestinal tract. Heterotopic gastric mucosa in the rectum is uncommon, and few cases have been described in children [1–3].

We report a case of a child of 4.5 years with recurrent rectal bleeding, tenesmus, diarrhea, and abdominal pain. He underwent colonoscopy, which showed an ulcer of diameter 1 cm covered by a whitish membrane, 15 cm from the anal verge. Histological findings confirmed a solitary rectal ulcer. The child apparently responded well to medical therapy with mesalazine enema, but the abdominal pain and diarrhea with bleeding recurred. Colonoscopy showed two sessile polypoid lesions, 1.5 cm in diameter, on the posterior rectal wall, within 5 cm from the anal verge (Figure 1). Histological examination of biopsies revealed colonic mucosa associated with gastric corpus-fundic mucosa (Figure 2). A definitive diagnosis of heterotopic gastric mucosa was made. On scintigraphy, there was increased uptake of ^{99m}Tc -pertechnetate in the stomach and in the rectum. Omeprazole (1 mg/kg per day) promptly resolved the clinical features with healing of the rectal ulcer [4]. Endoscopic ultrasound (Olympus EU-M30S ultrasonic generator and Olympus UM-3R 20 MHz ultrasonic radial mini-probe; Olympus, Tokyo, Japan) confirmed thickening of the mucosal layer without deeper infiltration.

Mucosectomy was carried out 8 months after diagnosis with a dentate electrocautery snare (Olympus SD-16U), in retroversion, aided by chromoendoscopy with 0.5% methylene blue, which confirmed heterotopic gastric mucosa and defined the borders of the lesion. Endoscopy after 6–12 months demonstrated absence of heterotopic gastric mucosa. After 24 months, a residual area of heterotopic gastric mucosa was found and removed.

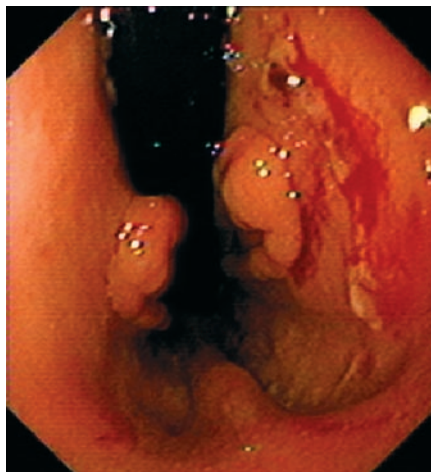


Figure 1 Sessile polypoid lesions, seen with the endoscope in retroversion.

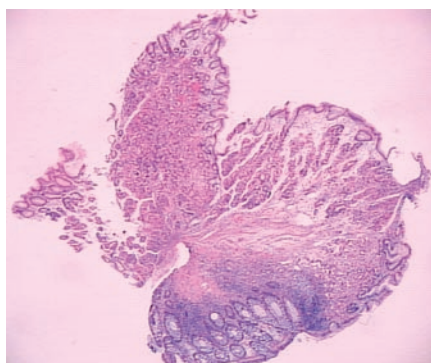


Figure 2 Histological appearance showing colonic mucosa (goblet cells) associated with gastric corpus-fundic mucosa (gastric glands with parietal and principal cells). (Hematoxylin and eosin (H&E); original magnification $\times 5$.)

Endoscopic excision is one of the suggested treatments for this condition, especially in children, to warrant normal growth and to avoid malignant degeneration [5]. Since this type of lesion can occur anywhere in the alimentary tract, long-term follow-up of all patients is recommended.

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References

- 1 Wiersma R, Hadley GP, Govender D, Grant HW. Rectal gastric heterotopia in infancy. *J Pediatr Surg* 2002; 37: 1481–1482
- 2 Taylor AL. The epithelial heterotopias of the alimentary tracts. *J Pathol Bacteriol* 1927; 30: 415–449
- 3 Devereaux CE, Devereaux RG. Heterotopic gastric mucosa of the rectum with a review of the literature. *J Clin Gastroenterol* 1994; 19: 41–45
- 4 Murray FE, Lombard M, Dervan P et al. Bleeding from multifocal heterotopic gastric mucosa in the colon controlled by an H2 antagonist. *Gut* 1988; 29: 848–851
- 5 Panigrahi D, Johnson AN, Wosu NJ. Adenocarcinoma arising from gastric heterotopia in the jejunal mucosa of a beagle dog. *Vet Pathol* 1994; 31: 278–280

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