

# Not All Roads Lead to the Cecum: A Rare Case of Colonic Duplication in an Adult

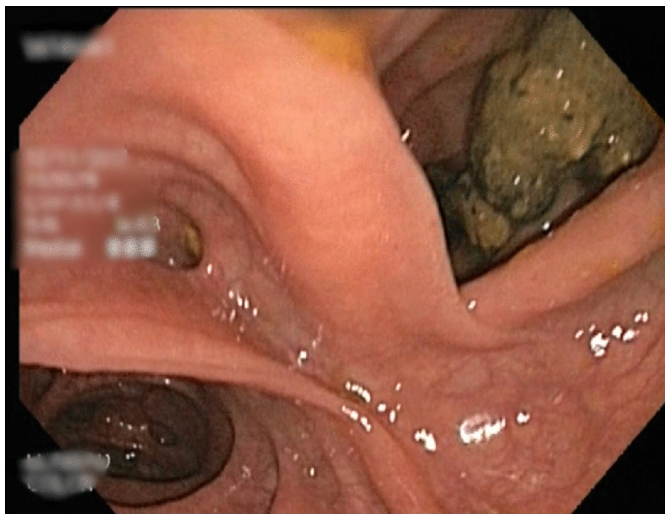
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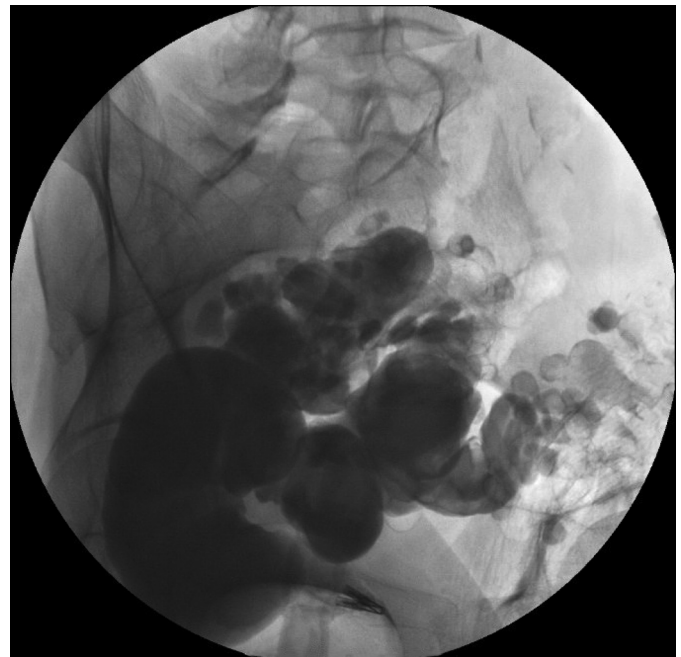
## CASE REPORT

A 73-year-old man presented with bright red blood per rectum 5 days after transrectal ultrasound (TRUS) and prostate biopsy for prostate cancer. On presentation, his blood pressure was stable at 130/89 mm Hg, and his heart rate was 110 beats/min. Rectal examination revealed blood clots. His hemoglobin was 10.4 g/dL (baseline 14 g/dL). Urgent flexible sigmoidoscopy showed active oozing at the low anterior wall of the rectum, which matched with the location of the prostate biopsy site. Two metallic clips were placed at the oozing site for hemostasis. Due to a significant amount of blood in the sigmoid colon, other proximal causes of bleeding couldn't be ruled out. A follow-up colonoscopy 6 weeks later revealed severe sigmoid colon diverticular disease. At 20 cm from the anal verge, the colon appeared to diverge into 2 separate lumens (Figure 1). One lumen was blind and extended for 25 cm, and the other lumen led to the cecum (Video 1). Diverticular disease was also noted in the blind duplicated lumen. Barium enema showed a potential branching point of the sigmoid colon, but the anatomy was difficult to evaluate due to severe diverticular disease (Figure 2). Four years prior to this presentation, the patient underwent a colonoscopy, but the duplication was not reported.

Duplication of the colon is a rare congenital anomaly that may or may not communicate with the bowel. It is typically diagnosed in childhood, but it may remain unrecognized until adulthood.<sup>1</sup> Duplication of the colon or rectum is the least common,



**Figure 1.** Colonoscopy showing divergence of the colon into 2 separate lumens 20 cm from the anal verge.



**Figure 2.** Barium enema showing potential branching point of the sigmoid colon.

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**Video 1.** Colonoscopy showing colonic duplication. Watch the video: [http://s3.gi.org/media/links/ajg/Masadeh\\_Video.mp4](http://s3.gi.org/media/links/ajg/Masadeh_Video.mp4).

representing less than 15% of total gastrointestinal duplications.<sup>2</sup> Al-Jarroof et al.<sup>3</sup> reported a case of sigmoid duplication presenting with abdominal pain, and Mourra et al.<sup>4</sup> reported a case series of 7 patients with colon duplication presenting with abdominal pain ( $n = 4$ ) and colonic obstruction ( $n = 3$ ). Our case presented with iatrogenic bleeding attributed to transrectal prostate biopsy, and the duplication of the sigmoid was an incidental finding.

Most duplications of the colon are symptomatic and are thus detected early in life. Patients most commonly present with intestinal obstruction due to external compression of the normal adjacent bowel by the enlarging duplication. Volvulus and perforation are other possible presentations.<sup>5</sup> Although most reported cases in the literature have symptomatic presentation, we consider our case as an incidental finding. Colon duplication remains a rare colonic finding, but it could be underdiagnosed or underreported.

## DISCLOSURES

**Author contributions:** All authors contributed equally to the manuscript. M. Masadeh is the article guarantor.

**Financial disclosure:** None to report.

**Informed consent** was obtained for this case report.

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## REFERENCES

1. Gross RE, Holcomb GW Jr, Farber S. Duplications of the alimentary tract. *Pediatrics*. 1952;9(4):448-68.
2. Puligandla PS, Nguyen LT, St-Vil D, Flageole H, Bensoussan AL, Nguyen VH, Laberge JM. Gastrointestinal duplications. *J Pediatr Surg*. 2003;38(5):740-4.
3. Al-Jarroof AH, Al-Zayer F, Meshikhes AWA. Case of sigmoid colon duplication in an adult woman. *BMJ Case Rep*. 2014;2014.
4. Mourra N, Chafai N, Bessoud B, Reveri V, Werbrouck A, Tiret E. Colorectal duplication in adults: Report of seven cases and review of the literature. *J Clin Pathol*. 2010;63(12):1080-3.
5. Carr SL, Shaffer HA Jr, de Lange EE. Duplication of the colon: Varied presentations of a rare congenital anomaly. *Can Assoc Radiol J*. 1988;39(1):29-32.