

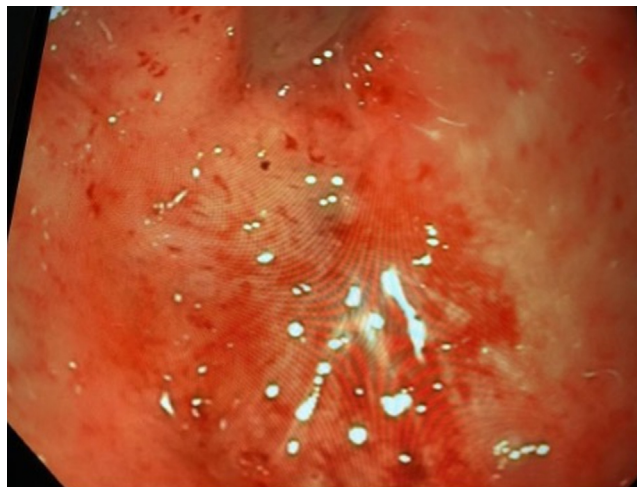
## Endoscopic management of severe colo-colonic anastomotic stricture

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Postsurgically severe anastomotic strictures that are completely closed can be a challenge to manage. Up until now, limited data are available regarding the successful management of completely closed strictures, especially of the colo-colonic type.<sup>1,2</sup>

We report a patient with a postoperative colo-colonic stricture that was successfully managed with advanced endoscopic maneuvers. The patient was referred to us after a flexible sigmoidoscopy revealed a completely closed anastomosis with no lumen, as shown in [Figure 1](#).

A 64-year-old man underwent a robotic-assisted sigmoid colon resection for complicated diverticulitis. The postoperative course was complicated by a contained leak and pelvic abscess. This was managed with a diverting loop ileostomy and abscess drainage. The patient then presented after 12 months to our center for ileostomy reversal. Preoperatively, flexible sigmoidoscopy showed complete closure of the anastomosis. The patient was referred to an advanced endoscopist for further management. Upon analyzing the stricture, it was decided to use a 20- × 10-mm lumen-apposing metal stent (LAMS) to resolve the colo-colonic anastomotic stricture. The indication for LAMS placement of anastomotic stricture is to prevent re-stricture with dilation alone. In addition to this, the dumbbell shape of the LAMS is ideal for short strictures with a lower probability of migration. As no lumen could be identified on endoscopic view, fluoroscopy was used to pass a guidewire into the proximal colon ([Fig. 2](#)). Once the wire was confirmed to be in the correct location, serial dilation was performed using the stone extraction balloon. The stone extraction balloon was used because it helps maneuver the wire, has a separate injection port for contrast, and has the capacity to go from a very small size of 8.5 mm to a relatively large size of 15 mm. The stone extraction balloon was used before the endoscopic balloon dilator because the length of the stricture was unknown. After dilation with the stone extraction balloon, an



**Figure 1.** Completely closed anastomosis because no lumen could be identified.



**Figure 2.** Guidewire being passed into the narrow stricture.

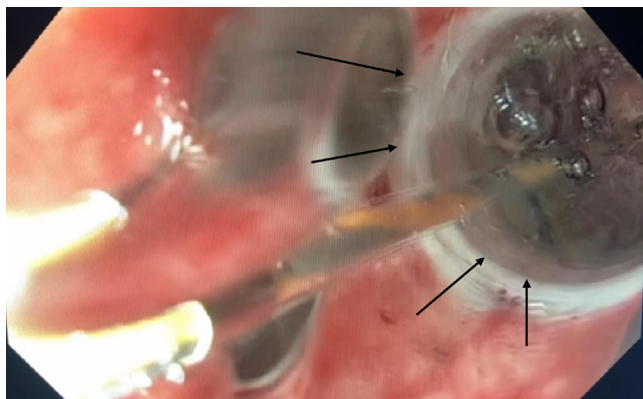
endoscopic balloon dilator was pushed across the stricture, as seen in [Figure 3](#). Since the LAMS cannot be introduced through a GIF standard upper scope channel, we decided to deploy the stent over the wire and reinsert the endoscope alongside the wire to obtain a visual as the stent is deployed ([Fig. 4](#)). The stent was successfully placed in the correct position without any difficulty, as the position was confirmed by fluoroscopic imaging. To prevent migration of the stent, endoscopic balloon dilation was performed to a maximum of 15 mm of inflation through the LAMS. A repeat gastrograffin enema 2 weeks later

*Abbreviations:* LAMS, lumen-apposing metal stent.

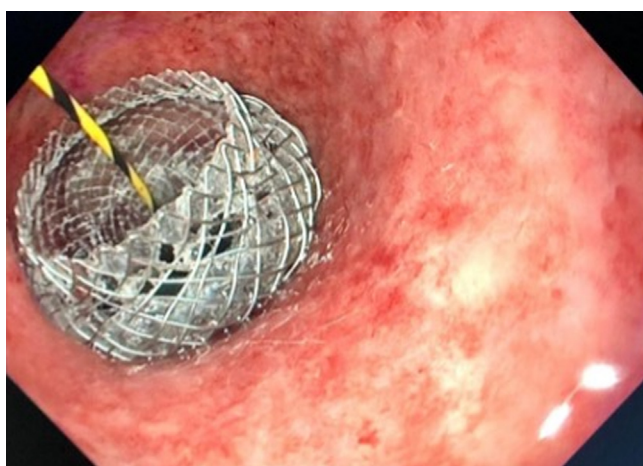
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<https://doi.org/10.1016/j.vgie.2022.12.009>

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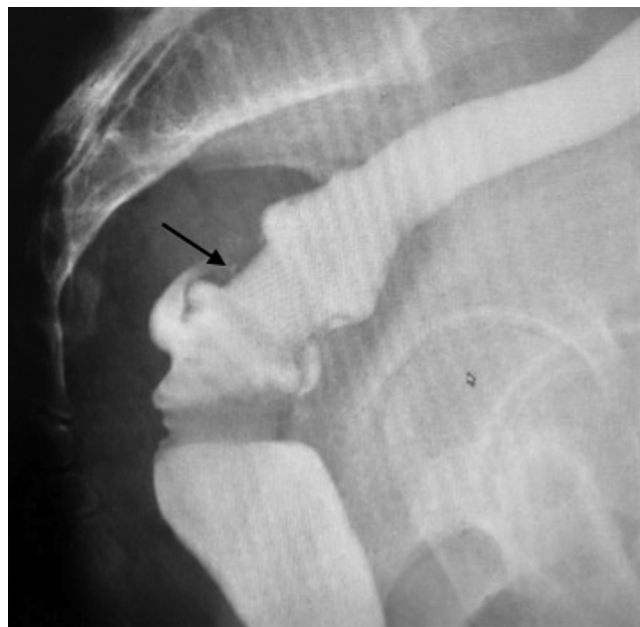
**Figure 3.** The passage of the stricture can be visualized through the endoscopic balloon dilator (*arrows*).



**Figure 4.** Lumen-apposing metal stent carefully placed at location of stricture.

demonstrated easy flow of contrast into the proximal colon through the apposing metal stent (Fig. 5). There are some adverse events associated with this endoscopic procedure that can develop because of stent migration and perforation. Some delayed complications may also develop, such as recurrent structuring and anastomotic ischemic ulceration.

Upon follow-up with the patient, the ileostomy was reversed within 1 week of the endoscopic intervention.



**Figure 5.** Follow-up imaging 2 weeks after placement of lumen-apposing metal stent (*arrows*).

The patient reported no symptoms of abdominal pain or gastrointestinal bleeding. After 4 weeks, the patient spontaneously passed the stent. A 6-month follow-up is scheduled with the patient (Video 1, available online at [www.giejournal.org](http://www.giejournal.org)).

## DISCLOSURE

*The authors disclosed no financial relationships.*

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