

Inadvertent placement of a palliative colonic stent through a malignant colocolonic fistula, resulting in absolute large bowel obstruction

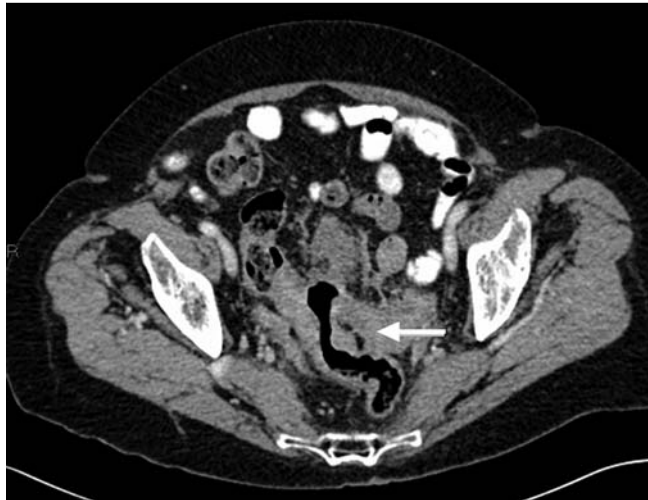


Fig. 1 Contrast-enhanced computed tomography (CT) scan of the abdomen and pelvis, demonstrating extensive mucosal thickening of the sigmoid colon (arrow) causing narrowing of the bowel lumen.



Fig. 2 Lateral view of water-soluble contrast enema. There is a stricturing lesion in the sigmoid colon (arrow).



Fig. 3 Fluoroscopic screening of colonic stent insertion with satisfactory stent placement across the level of obstruction. Free passage of contrast through the stent is opacifying the presumed more-proximal sigmoid colon.

Emergency surgery for malignant large bowel obstruction has high morbidity and mortality [1]. Alternatively, SEMSs may palliate an obstruction or act as a “bridge to surgery” [2]. Stent placement has a complication rate of around 25% [3]; complications include perforation, migration, and blockage [4,5].

An 84-year-old woman was referred with constipation. A computed tomography (CT) scan demonstrated a sigmoid tumor with metastases (● Fig. 1). Flexible sigmoidoscopy and biopsies demonstrated a rectosigmoid adenocarcinoma. She subsequently developed acute bowel obstruction.

A gastrograffin enema demonstrated that the tumor was amenable for stenting (● Fig. 2). Under colonoscopic and fluoroscopic guidance, a self-expandable metal stent (SEMS) (24×120mm Niti-S colonic uncovered stent; Taewoong Medical, Korea) was positioned across the tumor (● Fig. 3).

Following the stenting procedure, the patient’s symptoms were unresolved. A gastrograffin enema demonstrated contrast failing to pass proximal to the stent (● Fig. 4 and ● Fig. 5). Flexible sigmoidoscopy was then performed; the stent appeared correctly situated but blocked

with feces, which was endoscopically irrigated and cleared. However, the patient’s condition worsened and she proceeded to laparotomy 5 days after stent placement.

At laparotomy, there was gross colonic distension with cecal necrosis and perforation. The tumor was fistulating from the rectosigmoid into proximal sigmoid, with the stent lying into the closed loop of distal sigmoid colon. A palliative subtotal colectomy and end-ileostomy was performed. Remarkably, the patient’s post-operative course was without complication, and she died at home 4 months later.

The staging gastrograffin enema failed to delineate the fistula. Contrast must be seen to enter the proximal bowel before proceeding. Here the guide wire was passed only into the distal sigmoid, thereby into the blind loop. Fluoroscopic visualisation of the guide wire passing to the splenic flexure would ensure the stent was deployed into the true lumen. Colonic fistulae should be an indication for stenting, and a correctly deployed stent within the true lumen of the proximal colon will lead to successful management.

Endoscopy_UCTN_Code_CPL_1AJ_2AF

Competing interests: None

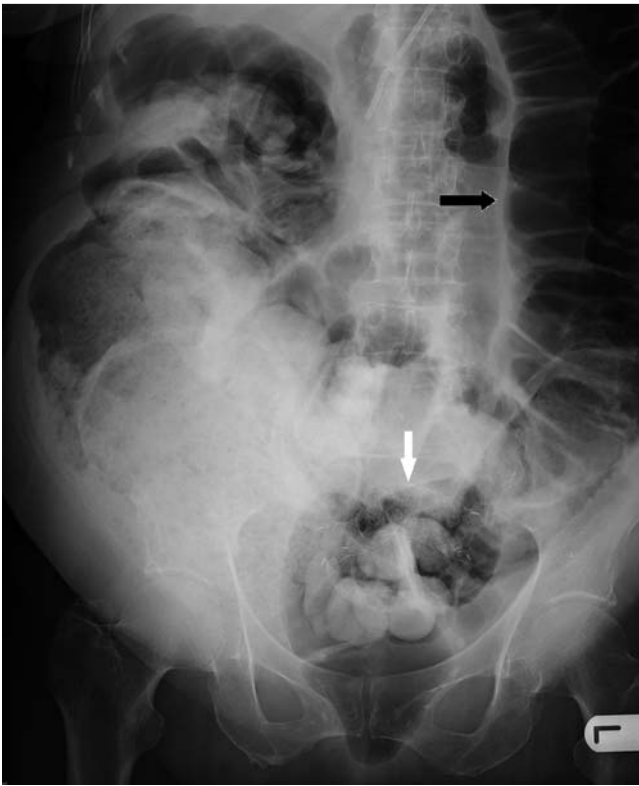


Fig. 4 Plain abdominal X-ray showing significantly dilated large bowel loops (black arrow) proximal to the sigmoid colon stent (white arrow), which appears to remain in a satisfactory position, fully opened out.

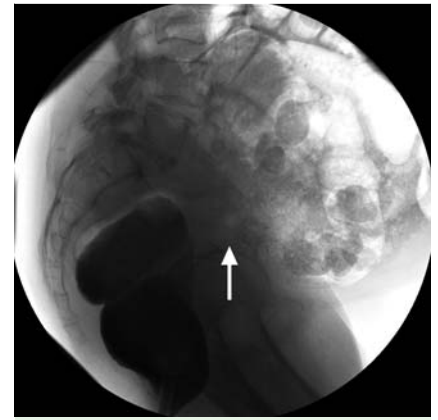


Fig. 5 Lateral view of water-soluble contrast enema with stent in situ. There is no passage of contrast through the stent (arrow), and there is dilatation of more-proximal large bowel loops, in keeping with complete obstruction.

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References

- 1 Finan P, Smith J, Trivella M et al. National Bowel Cancer Audit 2010. NHS Information Centre
- 2 Watt AM, Faragher IG, Griffin TT et al. Self-expanding metallic stents for relieving malignant colorectal obstruction: a systematic review. *Ann Surg* 2007; 246: 24–30
- 3 Small AJ, Coelho-Prabhu N, Baron TH. Endoscopic placement of self-expandable metal stents for malignant colonic obstruction: long-term outcomes and complication factors. *Gastrointest Endosc* 2010; 71: 560–572
- 4 Suzuki N, Saunders BP, Thomas-Gibson S et al. Colorectal stenting for malignant and benign disease: outcomes in colorectal stenting. *Dis Colon Rectum* 2004; 47: 1201–1207

- 5 Sebastian S, Johnston S, Geoghegan T et al. Pooled analysis of the efficacy and safety of self-expanding metal stenting in malignant colorectal obstruction. *Am J Gastroenterol* 2004; 99: 2051–2057

Bibliography

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