Colorectal anastomotic dehiscence: an endoscopic modified-stent solution

A 64-year-old man with multiple comorbidities (obesity and metabolic syndrome, dilated cardiomyopathy, type 2 diabetes mellitus, chronic renal insufficiency, obstructive sleep apnea syndrome, and colonic diverticula) underwent anterior resection for distal rectal cancer with protective ileostomy. A few days later, enteral juice was flowing from surgical drains; an urgent endoscopy with fluoroscopy showed the presence of a small (8-mm) anastomotic leak, which was managed conservatively. At 1-month follow-up, endoscopy showed the presence of a small (8-mm) anastomotic leak, which was managed conservatively. At 1-month follow-up, endoscopy showed a 75% anastomotic dehiscence with intraluminal migration of a drain (Fig. 1). The patient’s clinical condition worsened and, after multidisciplinary discussion, an endoscopic trans-anastomotic fully covered metal stent placement was planned.

The ideal stent had to have a large bore, be sufficiently long, and to have an antimigration system. A large-bore over-the-wire stent with a double antimigration system appeared to have these features (head diameter 32 mm, body diameter 24 mm, length 18 cm, BETA stent; Taewoong Medical, Gyeonggi-do, South Korea) (Fig. 2). As the stent was developed for the treatment of postbariatric surgery leak, specific measures were taken to ensure its antimigration activity and to place the larger stent flare proximally in the colon. On the back table, the stent was released inside a 32-Fr tube; the tube and enclosed stent were then turned round, and the stent was reassembled by inserting the original release system but through the opposite end of the stent (Fig. 3).

With the patient under deep sedation, and using endoscopic and radiologic control, the stent was easily released across the anastomotic dehiscence (Fig. 4). Enteric flow through the abdominal drain immediately stopped, allowing removal of the drain 1 week later. The stent was removed 3 months later, and endoscopy showed complete anastomotic dehiscence resolution (Fig. 5). The patient remained asymptomatic during the 8-month follow-up.
Anastomotic dehiscence is the “Achilles’ heel” of resectional colorectal pathology, and is the most common cause of postoperative morbidity and mortality [1–3]. This case report describes a new, alternative nonsurgical method for treating a severe complication, such as colorectal anastomotic dehiscence, using a modified large-bore fully covered stent (Video 1).

Endoscopy_UCTN_Code_TTT_1AQ_2AG

Competing interests: None

Antonino Granata1, Gabriele Curcio1, Dario Ligresti1, Ilaria Tarantino1, Luca Barresi1, Davide Cintorino2, Mario Traina1

1 Endoscopy Service, Department of Diagnostic and Therapeutic Services, IRCCS-ISMETT (Istituto Mediterraneo per i Trapianti e Terapie ad Alta Specializzazione), Palermo, Italy

2 Abdominal Surgery and Organ Transplantation Unit, Department for the Treatment and Study of Abdominal Diseases and Abdominal Transplantation, IRCCS-ISMETT, Palermo, Italy

References

Bibliography
DOI http://dx.doi.org/10.1055/s-0042-117221
Endoscopy 2016; 48: E313–E314
© Georg Thieme Verlag KG
Stuttgart · New York
ISSN 0013-726X

Corresponding author
Antonino Granata, MD
Endoscopy Service
IRCCS-ISMETT
Via Tricomi 5
90127 Palermo
Italy
Fax: +39-091-2192400
agranata@ismett.edu

Video 1
Endoscopic modified-stent solution for the treatment of colorectal anastomotic dehiscence.

Fig. 5 The sealed anastomosis: a endoluminal view; b X-ray view.