



IMAGE OF THE MONTH

Bowel perforation after pneumatic dilatation: Management with fully covered self-expandable metallic stent



Perforación colónica tras dilatación neumática: manejo con prótesis metálica autoexpandible totalmente recubierta

María Pilar Ballester Ferré*, David Martí-Aguado, Vicente Sánchez Soler,
Andrés Peña Aldea

Digestive Disease Department, University Clinic Hospital of Valencia, University of Valencia Valencia, Spain

Clinical case

We present a 75-year-old man with a 20 mm length × 8 mm width colonic stenosis after radiotherapy for prostatic adenocarcinoma at 15 cm of anal margin. In the second pneumatic dilation (12–15 mm) a perforation was produced (Fig. 1). The patient was treated with a guided 20-130-23 mm covered self-expandable metallic stent (CSEMS). Four days after, the patient reported tenesmus. A new endoscopy showed the migration of the stent with the leakage still covered. A second CSEMS “stent in stent” was placed (Fig. 2). After 10 days both prostheses were removed with perforation and stenosis resolution (Fig. 3).

Due to the increase in the number of colonoscopies, its associated perforations have raised.¹ CSEMS use in colonic perforations has been anecdotally reported.² On the other hand, CSEMS represents a stabilised therapeutic option for colonic stenosis.³ An advantage of CSEMS is that it can be easily removed; however, the probability of migration is up to 42%.⁴ Thus, perforations of the proximal colon or without stenosis represent a non-candidate for the use of CSEMS. In conclusion, CSEMS can be an effective therapeutic option for the management of distal colonic perforation in a patient with post-radiotherapy stenosis, allowing the resolution of both perforation and stenosis.

* Corresponding author.

E-mail address: mapibafe@gmail.com (M.P. Ballester Ferré).

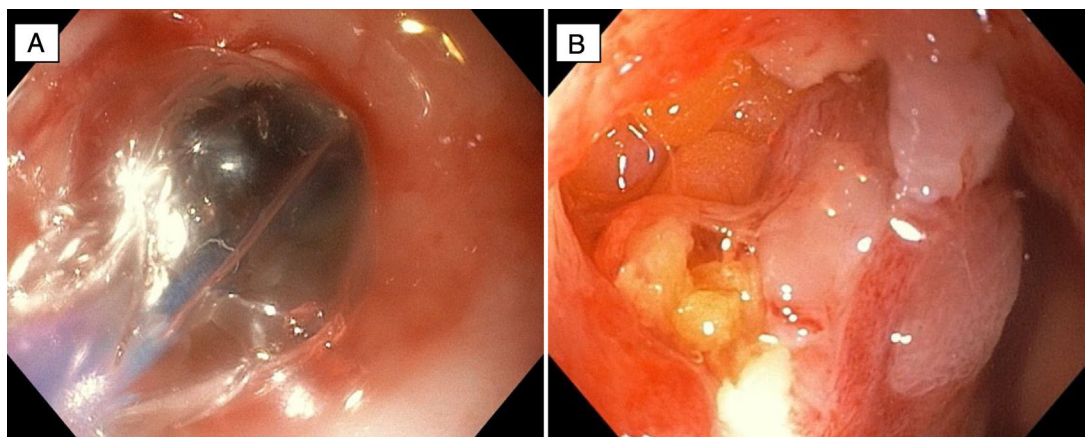


Figure 1 (A) Pneumatic dilatation. (B) 15 mm colonic perforation with epiploic fat visualization.

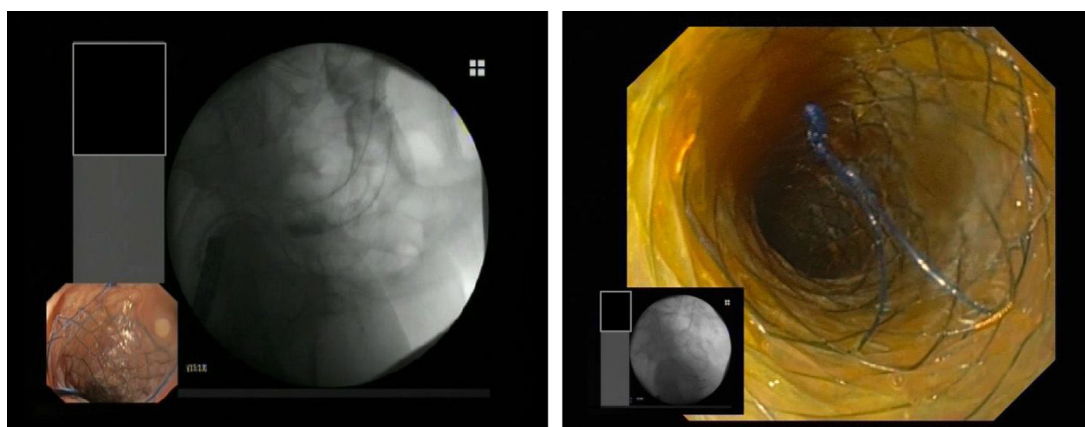


Figure 2 Perforation covered with the CSEMS. Second CSEMS "stent in stent" placed proximal to the previous one.

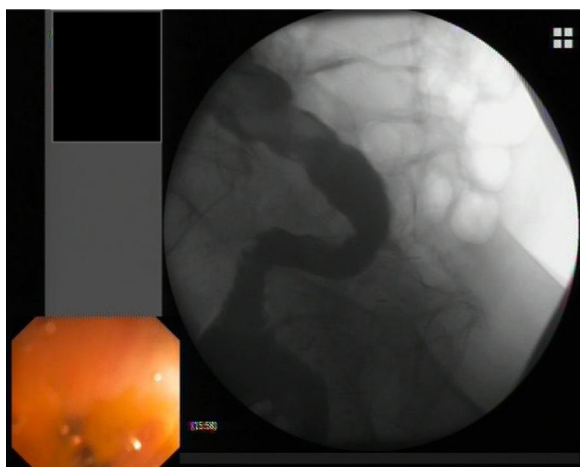


Figure 3 Absence of leakage and initial stenosis resolution demonstrated with contrast injection.

Conflict of interest

The authors declare no conflicts of interest.

Acknowledgments

To all the endoscopy team, doctors, nursing and auxiliaries.

References

1. Paspatis GA, Dumonceau JM, Barthet M, Meisner S, Repici A, Saunders BP, et al. Diagnosis and management of iatrogenic endoscopic perforations: European Society of Gastrointestinal Endoscopy (ESGE) Position Statement. *Endoscopy*. 2014 Aug;46:693–711.
2. Kim SW, Lee WH, Kim JS, Lee HN, Kim SJ, Lee SJ. Successful management of colonic perforation with a covered metal stent. *Korean J Intern Med*. 2013;28:715–7.
3. van Hooft JE, van Halsema EE, Vanbiervliet G, Beets-Tan RG, DeWitt JM, Donnellan F, et al. Self-expandable metal stents for obstructing colonic and extracolonic cancer: European Society of Gastrointestinal Endoscopy (ESGE) Clinical Guideline. *Endoscopy*. 2014;46:990–1002.
4. Arezzo A, Bini R, Lo Secco G, Verra M, Passera R. The role of stents in the management of colorectal complications: a systematic review. *Surg Endosc*. 2017;31:2720–30.