

Jejunal Stent-in-Stent for Recurrent Malignant Occlusion Using Single-Balloon Enteroscopy

Ana Ponte^a Rolando Pinho^a Adélia Rodrigues^a Luísa Proença^a
 Alexandre Costa^b João Carvalho^a

Departments of ^aGastroenterology and ^bGeneral Surgery, Centro Hospitalar Vila Nova de Gaia, Vila Nova Gaia, Portugal

Keywords

Deep enteroscopy · Stents · Malignant occlusion

Prótese-sobre-prótese jejunal para recorrência de oclusão maligna usando enteroscopia de mono-balão

Palavras Chave

Enteroscopia profunda · Próteses · Oclusão maligna

We describe the case of a 75-year-old man previously submitted to palliative stenting of an occlusive jejunal stenosis secondary to malignant compression from a peritoneal implant of a metastatic cholangiocarcinoma (Fig. 1) [1]. After remaining asymptomatic for 5 months after stenting, the patient was admitted with a 4-day history of persistent vomiting and abdominal pain. Single-balloon enteroscopy (SIF-Q180; Olympus, Tokyo, Japan) was performed for diagnostic evaluation and further therapeutic management, revealing gastric and duodenal stasis. The enteroscope was advanced to the proximal jejunum where the previously placed noncovered self-ex-

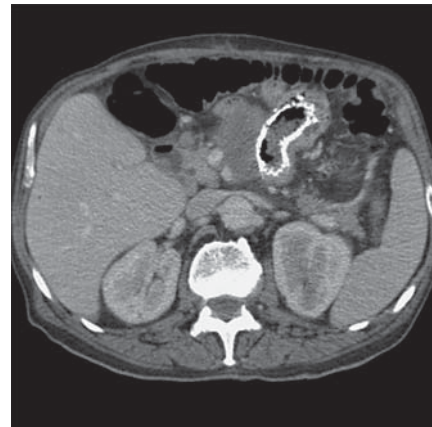


Fig. 1. Computed tomography scan depicting a palliative SEMS of a jejunal stenosis secondary to malignant compression from a peritoneal implant.

pandable metallic stent (SEMS) was identified. Despite remaining properly positioned inside the stenosis (Fig. 2a), the lumen of the proximal part of the SEMS was partially occluded by tumor ingrowth (Fig. 2b). The enteroscope was advanced into the SEMS through the stenosis, and a 0.035-inch guidewire was then advanced into the first SEMS (Fig. 2c). The overtube (ST-SB1; Olympus)

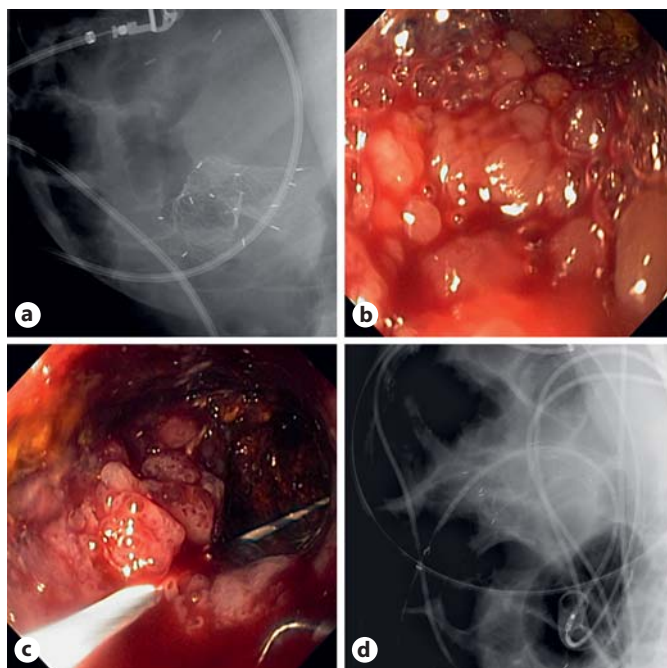


Fig. 2. **a** Fluoroscopic image revealing the first SEMS. **b** Endoscopic image revealing tumor ingrowth inside the SEMS. **c** Endoscopic image depicting tumor ingrowth and the guidewire positioned inside the first SEMS. **d** Fluoroscopic image documenting the positioning of a second SEMS delivery system inside the first SEMS, OTW, and through the overtube, after removal of the enteroscope. OTW, over-the-wire.

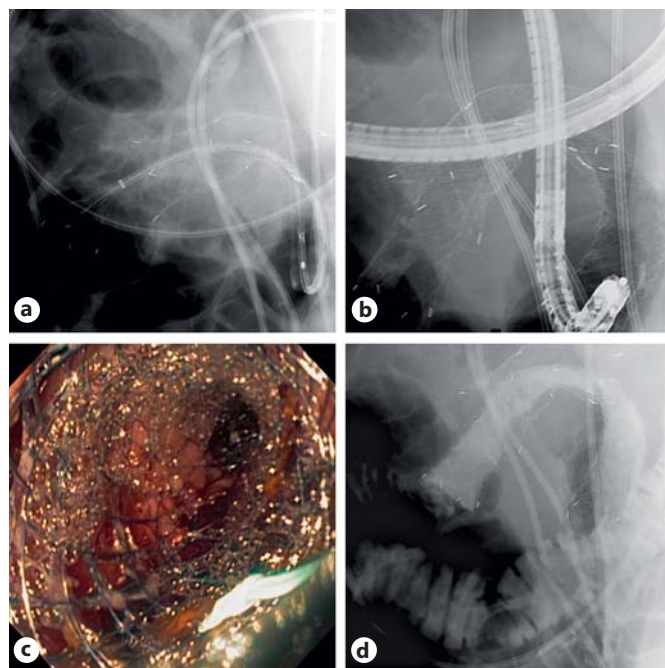


Fig. 3. **a** Fluoroscopic image showing the release of the second SEMS inside the first SEMS. **b** Fluoroscopic image depicting the complete deployment of the second SEMS. **c** Endoscopic image revealing the complete deployment of the second SEMS. **d** Fluoroscopic image revealing luminal patency with passage of oral contrast to the jejunal loops located distal to both SEMS.

was positioned at the proximal end of the first SEMS. After withdrawing the enteroscope leaving the guidewire in place, a second noncovered SEMS (Hanarostent, DNZL-20-140-230; M.I. Tech Co., Seoul, Republic of Korea) was easily advanced over-the-wire (OTW) through the overtube (Fig. 2d) and subsequently deployed inside the first SEMS under fluoroscopic guidance (Fig. 3a–d), while the overtube was slightly pulled back (the same technique used in the deployment of the first SEMS). The palliative stent-in-stent resulted in immediate resolution of the occlusive symptoms and resumption of oral diet with tolerance.

Placement of SEMS using deep enteroscopy is technically challenging because enteral stents have a delivery system which is larger and shorter than the working channel of the enteroscope, thus preventing the use of the through-the-scope technique, which is the preferred approach in strictures located distant from the insertion route [2–5]. To overcome these limitations, the adaptation of an overtube to the OTW technique may prevent kinking of the delivery system, as the overtube will have

a similar role to a working channel [2]. This modified OTW technique allows the placement of SEMS in the small bowel using deep enteroscopy [1].

Statement of Ethics

Protection of human and animal subjects: the authors declare that no experiments were performed on humans or animals for this study.

Confidentiality of data: the authors declare that they have followed the protocols of their work center on the publication of patient data.

Right to privacy and informed consent: the authors declare that no patient data appear in this article.

Disclosure Statement

The authors have nothing to disclose.

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