Self-expandable metallic stent deployment across the ileocecal valve in a patient with an acute colonic obstruction

Although self-expandable metallic stent (SEMS) deployment is a treatment option for proximal malignant colonic obstructions, it remains a challenging procedure [1–3]. When the malignant colonic obstruction is close to the ileocecal valve, it is impossible to maintain a 2.0 cm safety margin on the oral end of the SEMS [1–3]. This article describes the deployment of SEMS across the ileocecal valve in a patient with acute malignant colonic obstruction.

A 71-year-old man with abdominal distension and pain was referred to our department. Abdominal computed tomography revealed dilatation of the small intestine caused by a tumor close to the ileocecal valve. Urgent SEMS deployment was carried out to decompress the small intestine (Video 1), but maintaining the 2.0 cm safety margin at the oral end of the SEMS was impossible (Fig. 1). We then attempted to advance the guidewire across the ileocecal valve. In such cases, the guidewire trajectory must be bent at 90° to pass through the ileocecal valve. Therefore, we first advanced a bendable catheter (SwingTip; Olympus, Tokyo, Japan) with a long flexible-tip guidewire (0.025-inch, Visi-Glide 2; Olympus, Tokyo, Japan). However, the guidewire became coiled in the cecum [5]. We then used an ultra-hydrophilic coated guidewire (0.032-inch, Radifocus Guide Wire M; Terumo, Tokyo, Japan), which was able to pass through the ileocecal valve. Finally, we deployed two SEMSs (each 12 cm, Niti-S Enteral Colonic Uncovered Stent; Tae-woong Medical, Gimpo-si, South Korea) across the ileocecal valve under the guidewire without any complication (Fig. 1 b, c, Fig. 2). The patient underwent primary laparoscopic surgery 2 weeks after the intestinal decompression.

A bendable catheter with an ultrahydrophilic coated guidewire facilitates the deployment of SEMS across the ileocecal valve in patients when the malignant colonic obstruction is close to the valve. This procedure enables primary laparoscopic surgery and prevents the need for transnasal long intestinal tube insertion and secondary surgery after decompression of the stoma.

Endoscopy_UCTN_Code_CCL_1AC_2AD

Competing interests

The authors declare that they have no conflict of interest.

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References


Takahama Takuya et al. Self-expandable metallic stent… Endoscopy | © 2022. The Author(s).
Igarashi Y, Tada T, Shimura J et al. A new cannula with a flexible tip (Swing Tip) may improve the success rate of endoscopic retrograde cholangiopancreatography. Endoscopy 2002; 34: 628–631


Bibliography

Endoscopy
DOI 10.1055/a-1934-9704
ISSN 0013-726X
published online 2022
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Fig. 2 Abdominal computed tomography (CT) following the day of the procedure. A CT scan reveals self-expandable metallic stents deployed across the malignant colonic obstruction and ileocecal valve. The edematous ileum/cecum and fluid collection indicates ischemic changes due to acute malignant colonic obstruction.

Fig. 1 Self-expandable metallic stent (SEMS) deployment across the ileocecal valve.

a Guidewire negotiation using a bendable catheter plus ultrahydrophilic coated guidewire. The guidewire successfully passes the ileocecal valve and advances into the small intestine.

b Malignant colonic obstruction is close to the ileocecal valve and also appears to invade the area around the ileocecal valve. As a result, the small intestine is distended.

c Colonic uncovered stents are successfully deployed across the ileocecal valve.