Insertion of a self-expanding metal stent for a stomal stenosis

Stenosis is one of the major complications of a gastrointestinal stoma, yet its treatment is not well established [1–3]. We report a case of stomal stenosis that improved after insertion of a temporary self-expanding metal stent (SEMS). A 61-year-old woman presented with a stoma that had been malfunctioning for 2 months. She had been diagnosed with recurrent cervical cancer and admitted 7 months previously because of life-threatening rectal bleeding. The bleeding had come from a branch of the internal iliac artery and had passed through a tract formed between the rectum and the recurrent cervical cancer by a necrotic abscess. She had been treated with emergent transarterial embolization and coiling and had subsequently undergone a T-loop transverse colostomy with stoma formation to prevent stool passing into the tract. For the past 2 months, however, her stools had been mainly passing out through her urethra and anus, rather than through the stoma.

A computed tomography (CT) scan revealed a tight stenosis at the stoma (Fig. 1). We therefore inserted a custom-built SEMS (morning glory-shaped distal end, partially covered, 8 cm in length, 22 mm in diameter; Hanarostent; M.I.Tech, Seoul, South Korea) into the stomal tract. The SEMS was fixed to the stomal opening with a baseplate for stomal care (SenSura Click; Coloplast Ltd., Hong Kong, China) (Fig. 2). She was commenced on a stool softener and the SEMS was passed from the stomal tract with the stool 3 days later.

We reinserted another custom-built, large-sized SEMS (distal flared, fully covered, 12 cm in length, 28 mm in diameter; Hanarostent; M.I.Tech) into the stomal tract using fluoroscopic guidance (Fig. 3). The SEMS was fixed to the stomal opening with a surgical thread, a plastic ring, and a baseplate for stomal care (Fig. 4). Following this, her stools were mainly passed through the SEMS, which was kept in position for 2 weeks (Fig. 5). Although the functioning of her stoma was maintained for over 2 months, the patient died because of cancer complications.

Fig. 1 Computed tomography (CT) scan demonstrating a tight stenosis at the stoma (white arrow) in: a axial view; b sagittal view.

Fig. 2 Photographs during and after insertion of the self-expanding metal stent (SEMS) showing: a the morning glory-shaped, external end of the SEMS; b the baseplate for stomal care, to which the external end of the SEMS was fixed.

Fig. 3 Fluoroscopic views during the insertion of the second self-expanding metal stent (SEMS) showing: a the SEMS being inserted; b the expanded SEMS in situ.
Fig. 4 Photographs of the stoma showing: a the external end of the large-sized, distal-flared SEMS after suturing to the plastic ring; b the baseplate for stomal care in position around the stoma and SEMS.

Fig. 5 Abdominal radiograph showing the position of the self-expanding metal stent (SEMS; black arrow) after insertion.

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