Late presentation of a giant gastrogastric fistula following gastric bypass, treated with a colic over-the-scope clip after unsuccessful surgical repair

Gastrogastric fistula (GGF) is a potential complication of Roux-en-Y gastric bypass and results in failure to achieve long-term weight loss [1]. Revision surgery can be technically challenging and is associated with high morbidity [2]. Endoscopic repair using suture systems [1–3], plugs, clips, fibrin glue, temporary stenting, or coagulation have been reported [2], with high success rates mainly in small GGF (less than 10 mm) [3, 4]. We report the successful treatment of a giant chronic GGF using a colic over-the-scope clip (OTSC; Ovesco Endoscopy GmbH, Tübingen, Germany) after failed revision surgery.

A 43-year-old woman underwent gastric bypass 4 years previously. After an initial period of weight loss, the patient started to regain weight 6 months after surgery. An endoscopy performed 3 years later showed persistence of the GGF, which was confirmed by endoscopy (Fig. 1a–c).

A colonoscope was loaded with a 14/6 t OTSC. After placing the patient in the left lateral position, the head being in hyperextension, the instrument was gently introduced, under direct vision, and gradually advanced through careful maneuvering. When the fistula was reached the edges were aspirated (with the endoscope in partial retroflexion) (Fig. 2a, b), and the OTSC was deployed (Fig. 3a, b). The contrast medium study performed through the endoscope verified the watertight closure of the GGF (Fig. 4). The patient was discharged the next day.

Upper gastrointestinal series performed 30 days later showed the OTSC still in place with no fistula visible (Fig. 5). Following the procedure, the patient started to lose weight again.

Fig. 1 Giant chronic gastrogastric fistula following gastric bypass. a Endoscopic view. b Radiological contrast medium study through the scope showing the presence of the fistula. c Passage of the endoscope through the fistula.

Fig. 2 Colonoscope loaded with the 14/6 t over-the-scope clip aspirating the fistula’s edges. The scope is in partial retroflexion.

Fig. 3 The over-the-scope clip in place. a Radiographic view. b Endoscopic view.

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Upper gastrointestinal series performed 30 days later showed the OTSC still in place with no fistula visible (Fig. 5). Following the procedure, the patient started to lose weight again.
In conclusion, endoscopic closure of a giant chronic GGF using a colic OTSC, when carried out by expert hands, should be considered as a reliable and safe therapeutic option after unsuccessful repair surgery.

Competing interests: None

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Fig. 4 Contrast medium study through the endoscope showing watertight closure of the gastrogastric fistula.

Fig. 5 Upper gastrointestinal series study showing the over-the-scope clip still in place 30 days later, and disappearance of the fistula.