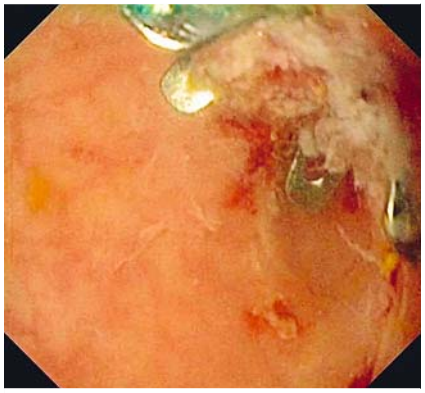
Endoscopic closure of a fistula between an ileal conduit and an ileal handle localized between two uretero-ileal anastomoses

▶ **Fig. 1** Endoscopic view of the ileal conduit.

▶ **Fig. 2** Endoscopic view of the fistula (c) between the right (a) and left (b) uretero-ileal anastomoses.



▶ **Fig. 3** An over-the-scope clip was deployed to close the leak.

Cystectomy is the gold standard treatment for patients with bladder cancer. Urinary diversion with ileal conduit and uretero-ileal anastomoses, as described by Bricker, is the most widely used surgical therapy because of the lower risk of postoperative complications in elderly patients and in those with co-morbidities. The Bricker technique involves the use of a segment of the ileum as a conduit to the skin, with a successive uretero-ileal-cutaneous anastomosis for each ureter [1]. The endoscopic approach to construction of the ileal conduit for urological obstruction is rarely reported [2]. We present the case of a patient who underwent cystectomy with a Bricker uretero-ileal-cutaneous anastomosis, who developed a fistula between the ileal conduit and an ileal handle.

In May 2015, the patient underwent cystectomy with a Bricker uretero-ileal-cutaneous anastomosis because of bladder transitional cell carcinoma. In October 2016, stool appeared in the drainage. The patient underwent radiological examination with contrast medium at another hospital, which revealed a fistula between the ileal conduit and an ileal handle. The patient was referred to our unit and an ileal conduit endoscopy (▶ **Fig. 1**) was performed using a gastroscope, which showed stool leakage from an orifice between the two ureteral anastomoses (▶ **Fig. 2**). An 11/6 traumatic-teeth over-the-scope clip (OTSC), 9 mm in diameter, was placed to close the leak (▶ **Video 1**), using an OTSC anchor to grasp the fistula (▶ **Fig. 3**). Stool no longer appeared in the drainage 24 hours after OTSC placement. No adverse events occurred, and the patient was discharged 3 days after the procedure.

There are no reports in the literature of the endoscopic closure of a fistula between the ileal conduit and an ileal handle. The current case demonstrates successful closure using an OTSC, which avoided damage to the uretero-ileal anastomoses. The OTSC is an excellent endoscopic therapeutic and conservative option in this particular and rare adverse event.

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Competing interests

None

Video 1

▶ Video 1: Placement of an over-the-scope clip to seal the fistula between the ileal conduit and an ileal handle, which was located between the two ureteral anastomoses.

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