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## Klinikinė praktika

# Treatment of chronic colorectal fistula with the over-the-scope-clipping system: a case report

## Lėtinės kolorektalinės fistulės gydymas naudojant OTSC kabutes: klinikinis atvejis

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Anastomotic leakage in colorectal surgery is an infrequent but in some cases very serious or even lethal complication. The over-the-scope-clipping (OTSC) system (Ovesco), which was originally developed to treat intestinal perforation and was tested on animals, could be the answer for the patient with such situation. We present a case of 63-year-old man suturae insufficiency at the 40<sup>th</sup> post-operative day. The conservative treatment was long and unsuccessful. The lesion was then closed with two subsequent clips, and the patient recovered well without major interventions. The lesion showed a normal healing on the follow-up.

**Key words:** over-the-scope-clipping, colorectal cancer, suturae insufficiency, colorectal fistula

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Kolorektalinės anastomozės nesandarumas nėra dažna, tačiau labai sunki, neretai ir mirtina komplikacija. OTSC kabutės („Ovesco“) buvo sukurtos virškinamojo trakto perforacijoms gydyti. Pirmiausia išbandytos eksperimentuojant su gyvūnais. Šios kabutės gali būti vienas iš nesandarumo ir (ar) fistulių gydymo metodų. Aprašome atvejį, kai 63 metų vyrui po kolorektalinės operacijos atsirado žarnų siūlės nesandarumas. Konservatyvus gydymas buvo nesėkmingas. Defektas panaikintas naudojant dvi „Ovesco“ kabutes, kurios uždėtos skirtingu metu. Stebėjimo laikotarpiu defektas sugijo.

**Reikšminiai žodžiai:** „Ovesco“, kolorektalinis vėžys, siūlės nesandarumas, kolorektalinė fistulė

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## Introduction

All colorectal surgeons in their practice are faced with an anastomotic leakage after colorectal surgery. Anastomotic leakage after colorectal resection is a rare complication, but it has a significant mortality (6–22%) [1]. The standard treatment is a diverting ileostomy for 2–3 months with the subsequent recanalization only when a radiological contrast study shows that the fistula has disappeared [2]. About 6 years ago, a new over-the-scope clip system, called OTSC (Ovesco Endoscopy, Tübingen, Germany), appeared on the market. It was first tested on animal models and by treating lesions and bleeding from the GI tract [3, 4].

We report the case of a male patient with a suture insufficiency and a fistula after colorectal cancer surgery, which was successfully treated by endoscopy.

## Case report

A 63-year-old male was admitted to our institute, complaining of defecation with blood. Cancer in the middle part of the rectal ampulla was found during clinical examinations. After examination and multidisciplinary team consultation, neoadjuvant radiotherapy was applied.

After 5 days of a short course of radiotherapy (25Gy), a low anterior resection with a total mesorectal excision of the defunctioning ileostomy was performed. The distance from the anastomosis to the anal verge was 5 cm. The early postoperative period was uneventful, and the patient was discharged from the hospital on day 7.

On the 9<sup>th</sup> day after surgery, the patient was admitted complaining of urine retention, and transcutaneous epicytostomy was performed. Later, the patient complained of a dull pelvic pain, febrile temperature and some liquid discharge through the anus. On contrast proctography, a presacral sinus of 10 x 9 x 4 cm and a leakage of a short loop limb after side-to-end anastomosis of about 2 cm were found (Figure 1). On endoscopy, a defect in the bowel wall was seen (Figure 2). Since he had a defunctioning ileostomy, conservative therapy was prescribed. After 6 months of unsuccessful conservative management, the patient was offered a closure of the large bowel wall defect with the OTSC system. For a week he did not complain of any liquid discharge through the anus.



Figure 1. Contrast radiography showing a cave of 10 x 9 x 4 cm and a leak of about 2 cm

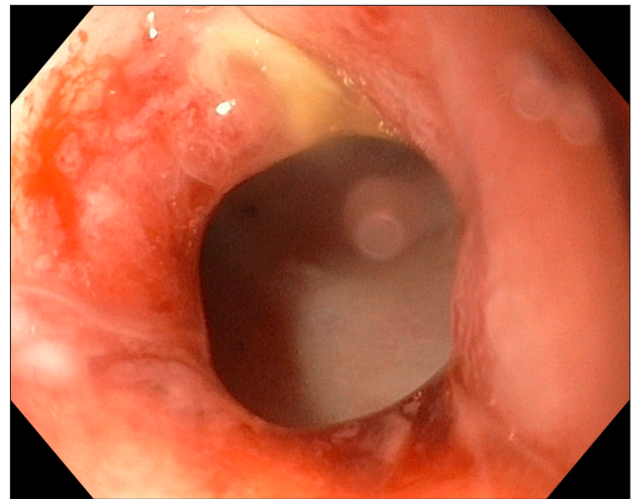


Figure 2. The same anastomotic defect seen on endoscopic evaluation

On the 30<sup>th</sup> day after clip application, the defect was still marked, but it was smaller. The OTSC clip was removed and another clip applied (Figures 3 and 4). The patient did very well, one month later the proctography was normal, and the ileostomy was closed.



Figure 3. Contrast radiography with liquid contrast after the OTSC system

## Discussion

For the patients after colorectal surgery who develop a leakage, the treatment becomes long and sometimes complicated. Defunctioning ileostomy is not enough in some cases. After the OTSC system application, the patient can be treated as an outpatient. In our case, only the second application of an OTSC clip was successful.

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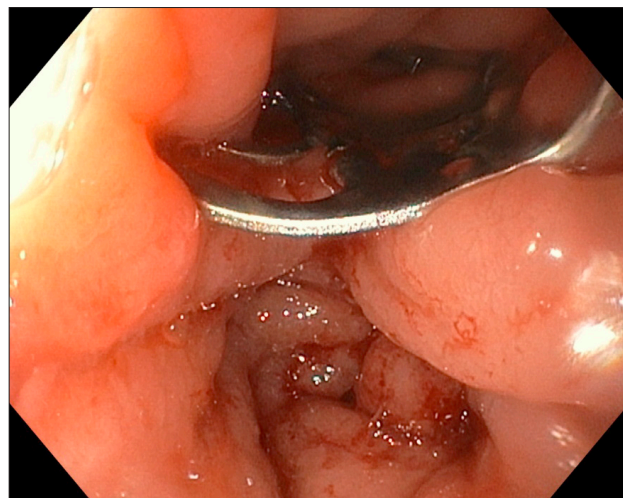


Figure 4. Endoscopic view

Looking through reports, the success rate of the OTSC system procedure for the insufficiency of anastomosis or colorectal fistulas was 50–100% [5], but only less than 10 successful reports of chronic colorectal fistulas were found [2, 6, 7]. In terms of cost, conservative therapy alone versus conservative therapy plus the OTSC clip are comparable.

In conclusion, the application of OTSC appears to be useful in the endoscopic management of colorectal postsurgical leaks and fistulas. Further prospective clinical studies are needed to confirm the value and efficacy of this clipping device.

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