



## Case Report

# The Use of Endo-SPONGE® in Anastomotic Leaks after TME for Middle-Low Rectal Cancer without Ileostomy

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### Abstract

Anastomotic leaks are a frequent complication in patients undergoing low rectal resection and TME for rectal cancer. There have been many methods of the treatment of rectal anastomotic leaks, including: medical management, ileostomy, endosponge, endovac. A men 49 years old, had a rectal cancer approximately 8-10 cm from the anal margin. The patient underwent robotic anterior rectal resection with TME (Total mesorectal excision). No protective ileostomy was performed. On the second postoperative day was noted a leakage of enteric fluid from the drainage was noted, it was decided for conservative treatment with Endosponge application.

**Keyword:** Anastomotic leak, rectal cancer, endosponge, ileostomy, tme.

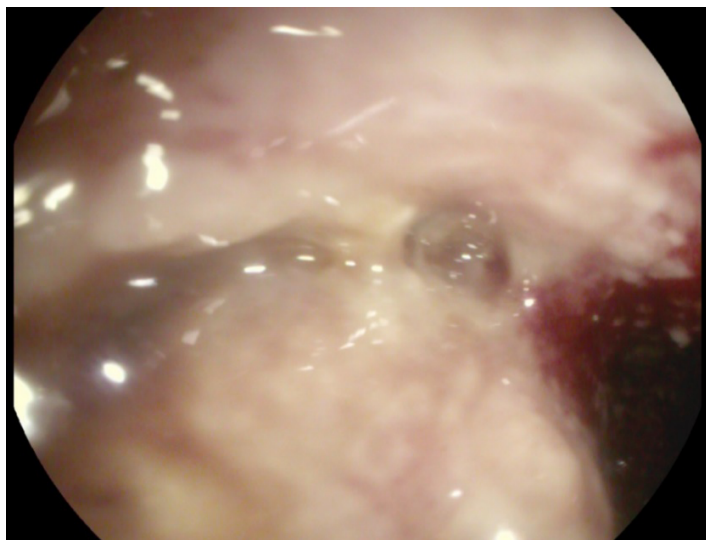
### Introduction

Anastomotic leaks are a frequent complication in patients undergoing low rectal resection and TME for rectal cancer. The reported anastomotic leak rates is 3-19% [1]. Anastomotic leaks have some can have consequences for patients [2]. The choice of the treatment of leaks can also affect the general and oncological outcomes [3]. There have been many methods of the treatment of rectal anastomotic leaks, including: medical management, ileostomy, endosponge, endovac. The most feared complication is peritonitis. Patients with general peritonitis require a laparotomy, washing, draining and resection of the anastomosis with ileostomy o colostomy [4]. The procedure is a major physiological insult for the patients. The use of an endoluminal vacuum system as a treatment option for rectal anastomotic leaks has been suggested as a minimally invasive method of treatment with a higher success rate.

### Case report

A men 49 yeras old, performs colonoscopy for rectal bleeding which documents a formation approximately 8-10 cm from the anal margin. The patient undergoes biopsies, which demonstrate the presence of rectal adenocarcinoma. A staging computed tomography and magnetic resonance imaging are performed, demonstrating the presence of a T2 N+ intraperitoneal tumor. The patient underwent robotic anterior rectal resection with TME (Total Mesorectal Excision), after discussion at the gastroenterological GOM. No protective ileostomy was performed and a perianastomotic abdominal drain was placed. After the surgery the patient had early canalization. On the second postoperative day was noted a leakage of enteric fluid from the drainage was noted. After gastroenterological consultation, it was decided for conservative treatment with Endosponge application. The patient underwent 10 treatments, each every 4 days.

During the hospitalization the patient was monitored and the reduction of the anastomotic fistula flow was noted, until complete closure. At the end of the treatment the patient was subjected to abdominal CT scan, which demonstrated clinical improvement.



**Figure 1:** Anastomotic dehiscence after treatment.

## Discussion

In the literature, the rate of anastomotic leakage in rectal anastomoses has been reported to be 7-11% [5,6]. The use of endosponge medical therapy in the treatment of these patients has shown that the rate of resolution was 11.8%. Most of the studies are small number case series or single case report with many bias. In these manuscripts it has been demonstrated that patients who started the treatment early (within 6 weeks from onset) have significantly higher rate of success. In the case of chronic leak and late therapy start, the cavity is less susceptible to vacuum therapy. Furthermore, the use of radiotherapy prior to surgery not only increases the risk of anastomotic leak but also influences the success rate of Endosponge therapy [7,8]. In literature, it is described to perform ileostomy with endosponge therapy [9,10]. In our work, we treated the fistula without making ileostomy.

## Conclusion

In selected patients with anastomotic leakage after middle-low rectal resection, Endosponge appears to be a good solution, even without making an ileostomy. EndoSPONGE® works best when therapy is started early and in patients without preoperative radiotherapy. Treatment with Endosponge without making an ileostomy, requires further evaluation with more cases.

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