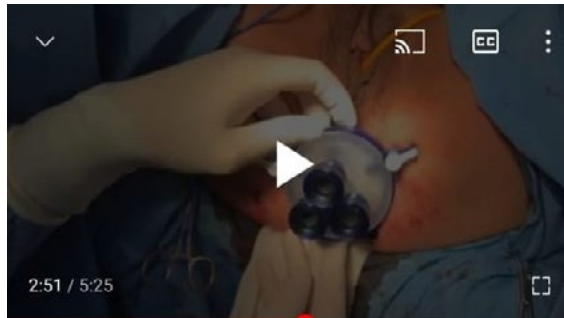


TaTME and Colo-anal Anastomosis with Pull-through Technique for Treatment of Low Rectal Cancer

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ABSTRACT

The surgical treatment of low rectal cancer represents a challenge for the treating team, who need to perform an oncologically safe procedure that entails a significant morbidity and a potential alteration of the postoperative continence that can alter the quality of life of patients. For all this, several techniques have been described to perform the coloanal anastomosis.

The case of a 52-year-old woman referred to colorectal surgery consultation for a tumor in the lower rectum is presented. Staging studies revealed a rmT4bN0 tumor, with invasion of the levator ani muscle, positive EMVI and positive circumferential resection margin. No distant disease. She underwent neoadjuvant treatment and 9 weeks after completion a new MRI showed rmT1sm3N0 tumor, without invasion of the levator ani muscle, negative EMVI and negative circumferential resection margin.

Surgical treatment was decided. The abdominal cavity was approached laparoscopically and after an abdominal exploration to rule out undiagnosed lesions, the inferior mesenteric vein was approached medially, and the splenic flexure taken down. Subsequently, a high ligation of the inferior mesenteric vessels was performed. After the end of the abdominal dissection which continues up to the peritoneal reflection, total excision of the mesorectum is carried out transanally, starting with an intersphincteric dissection, with and partial section of the internal anal sphincter.

Once both upper and lower approaches are joined, a pull-through anastomosis is performed. We chose this technique because it is less expensive (it does not require stapled instruments), reduces the rate of anastomotic fistula (more frequent in cases of radiated pelvis), does not require protective ileostomy (the delay in its closure can increase the incidence of anterior resection syndrome) and presents good functional results.

The anastomosis is performed following the principles described by Turnbull-Cutait with some modifications: we do not perform mucosectomy, or cardinal fixing stitches. The transanal exteriorized colon is sectioned 15 days after surgery (as an outpatient procedure).

The histopathology reported an adenocarcinoma of the lower rectum with low histological grade, intact mesorectal fascia and negative nodes (T1N0Mx).

Three months after surgery the patient presents adequate voluntary contraction and adequate continence.

Keywords: Cancer; Rectum; TaTME; Pull-through; Anastomosis; Coloanal

COMMENT

This is an interesting video presentation of a total mesorectal excision through laparoscopic and transanal approach with intersphincteric dissection for a low rectal cancer after neoadjuvant treatment, with the distinctive addition of the pull-through technique for the anastomosis. The quality of the images is superlative for this technique which requires great skill in laparoscopy.

As the authors describe, the pull-through technique has the potential advantage of a low definitive ostomy rate. However, in a multicenter randomized clinical trial published this year, its superiority over manual coloanal anastomosis with

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protective ostomy could not be demonstrated, with regards to short-term complications, or the oncological and functional results at one year.¹

In our surgical team, regardless of the anastigmatic technique to be used, we prefer not to extract the rectum through the anus due to the possibility of damaging the mesorectum, since the surgical specimens tend to be large. This maneuver could have the risk of an eventual tumor implantation and the disadvantage of preventing an optimal pathological study. Disadvantage that, in this case, the authors were able to overcome.

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