



Combined robotic and transanal total mesorectal excision with hysterectomy for rectal cancer

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Background

Surgical resection of rectal cancer has the strongest impact on oncologic outcomes. Surgeons are still struggling with difficult patients such as males, obese individuals, or those with narrow pelvis. Combination of a robotic approach with a transanal approach (transanal total mesorectal excision (TaTME)-Cecil approach) could be the solution, allowing more precise dissection in the deep and narrow pelvic cavity [1]. The robotic system has the advantages of high-definition three-dimensional vision and articular instruments. The following video shows a combined robotic and transanal approach for locally advanced rectal cancer.

Intervention

A 74-year-old female patient diagnosed with rectal cancer 14 cm from the anal verge with uterine infiltration by computed tomography (CT) scan (cT4bN0) had a high anterior resection with hysterectomy and bilateral salpingoophorectomy using a combined approach with abdominal robotic-DaVinci approach and transanal partial mesorectal excision (TaPME).

The patient was placed in the Lloyd Davies position. A GelPoint was introduced transanally and five abdominal robotic trocars were positioned. After release of the left parietocolic, mesenteric vessels were sectioned with Ligasure™, followed by a medial to lateral dissection. Dissection continued into the pelvis and mesocolon and the colon was transected with a stapler, followed by the dissection of the posterior side of the rectum and rendez-vous with the transanal team.

The transanal approach allows the dissection of the mesorectum after sectioning the rectal wall, progressing from down to up until the peritoneal reflection. Dissection progressed verifying uterine invasion and a hysterectomy and bilateral oophorectomy via a robotic abdominal approach was performed, with an en bloc resection of the rectum.

Finally, the specimen was removed, and an end-to-end colorectal anastomosis was performed.

Outcomes

Operative time was 145 min. The postoperative course was uneventful and the patient was discharged on the 4th postoperative day. Pathological examination confirmed a mucinous adenocarcinoma of the rectum (pT4bN0), with invasion of the uterine wall, negative margins and a complete mesorectum.

Conclusions

TaTME is a safe alternative to standard laparoscopic TME even in patients with locally advanced tumours, allowing oncological resection with free circumferential margins. The use of robotic assistance may be helpful in difficult cases and when working on narrow spaces.

Compliance with ethical standards

Conflict of interest The authors declare that they have no conflict of interest.

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Ethical approval All procedures followed were in accordance with the ethical standards of the responsible committee on human experimentation (institutional and national).

Informed consent Informed consent was obtained from the patient for being included in the study.

excision (taTME) with laparoscopic instruments and abdominal robotic surgery in rectal cancer. *Tech Coloproctol* 21(3):233–235. <https://doi.org/10.1007/s10151-017-1597-9> (Epub 2017 Mar 6)

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Reference

1. Bravo R, Trépanier JS, Arroyave MC, Fernández-Hevia M, Pigazzi A, Lacy AM (2017) Combined transanal total mesorectal