



2020 Annual Meeting

August 2 - 4, 2020 | Mackinac Island, MI
Grand Hotel

14. TRANSANAL TOTAL MESORECTAL EXCISION ACHIEVES EQUIVALENT ONCOLOGIC RESECTION COMPARED TO LAPAROSCOPIC APPROACH BUT WITH FUNCTIONAL CONSEQUENCES

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Background: Management of distal rectal cancers balances optimal oncologic resection with reestablishing intestinal continuity while maintaining acceptable bowel function. Total mesorectal excision (TME) has become the gold standard in rectal cancer surgery and a laparoscopic approach is common in experienced centers. Transanal total mesorectal excision has been gaining popularity due to potential benefits over laparoscopic total mesorectal excision. The objective of this study was to compare transanal with laparoscopic TME for distal rectal cancer by a single surgeon at our institution. Primary outcome measures included adequacy of oncologic resection. Perioperative measures and postoperative complications were secondarily examined.

Methods: A retrospective review of all proctectomy for distal rectal cancer (< 6 cm from anal verge) by a single surgeon was performed between January 2014 and September 2019. Patients were grouped by transanal total mesorectal excision (taTME) versus laparoscopic total mesorectal excision (laTME). Demographic, operative, and postoperative data were analyzed and compared using student's t-test or Fisher exact test.

Results: There were 20 taTME and 30 laTME patients (Table). The abdominal portion of both taTME and laTME procedures was performed robotically. There was one conversion to open procedure in each group. All patients had protective loop ileostomy at the time of proctectomy. Compared to laTME, taTME patients had more distal tumors although there was no difference in pathologic distal resection margin or frequency of positive distal margin. Operative times were longer for taTME, but there was no difference in length of stay, lymph node harvest, or frequency of pelvic abscess or anastomotic leak. There was a higher rate of postoperative fecal incontinence in taTME patients.

Conclusion: Transanal TME provides equivalent oncologic resection compared to laTME with similar anastomotic healing and complication rates. Transanal approach may allow successful resection of more distal tumors with the consequence of higher incidence of postoperative fecal incontinence. We conclude that taTME should be reserved for the most distal tumors, when achieving a negative distal resection margin may be compromised by the laTME approach.

	taTME	laTME	p value
n	20	30	
BMI	28.35 ± 1.18	28.59 ± 1.03	0.882
Distal tumor distance from anal verge (cm)	3.09 ± 0.47	4.66 ± 0.24	0.0029
Operative time (min)	285.8 ± 11.8	256.6 ± 8.7	0.048
Conversion to open	1 (5%)	1 (3.3%)	0.9999
Length of stay (days)	4.2 ± 0.6	4.7 ± 0.5	0.492
Pathologic distal margin (cm)	1.16 ± 0.16	1.40 ± 0.21	0.4162
Positive distal margin	1 (5%)	2 (6.6%)	0.9999
Lymph node harvest	17.5 ± 1.6	18.1 ± 1.2	0.7723
Fecal incontinence	6 (30%)	2 (6.6%)	0.0427
Pelvic abscess or leak	1 (5%)	4 (13.3%)	0.6359