TRANSANAL TOTAL MESORECTAL EXCISION AND TRANSANAL ENDOSCOPIC INTERSPHINCTERIC RESECTION IN LOW RECTAL CANCER: A SINGLE-CENTER RETROSPECTIVE STUDY

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Background: Total mesorectal excision (TME) is the gold standard for oncologic resection in low and mid rectal cancers. In obese and male patients with advanced low and mid rectal cancers, laparoscopic approach to TME can be hampered by poor visibility, inadequate retraction, and distal margin delineation. Transanal TME (taTME) may help overcome the difficulties with adequate visibility, retraction, and distal margin delineation encountered in abdominal approaches to low proctectomy. TaTME was developed to optimize the circumferential resection and distal margins. Intersphincteric resection (ISR) is an alternative for ultra-low rectal cancer. Transanal intersphincteric resection (taISR) technique combines the advantages of taTME in terms of surgical field exposure with the benefits of ISR in surgical precision.

Aims

To assess the surgical and short-term oncological outcomes of patients with low and mid rectal cancer who underwent taTME and taISR at National Center for Minimally Invasive Surgery in Havana, Cuba.

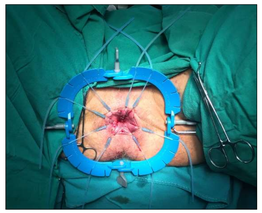
Methods and procedures

This study was a prospective review of patients with low and mid rectal cancer that underwent taTME and taTME with taISR from April 2019 to February 2022 at a tertiary referral university-affiliated center specializing in laparoscopic surgery. We performed taTME uses the technology of transanal endoscopic microsurgery (TEM) and laparoscopic surgery for the abdominal approach.

Results:

Table 1. Patient, tumor characteristics and surgical outcomes

Men	**10**
Age (years) median (range)	56,7 (28–56)
Tumor size (cm) median (range)	4 (2-5)
Neoadjuvant radiochemotherapy	10 (100%)
Total operative time (min) median (range)	180 (120–240)
Estimated blood loss (ml)	58 ml (40-100)
Hospital stay (days) median (range)	5 (3-14)



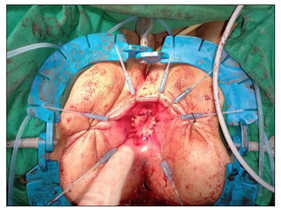


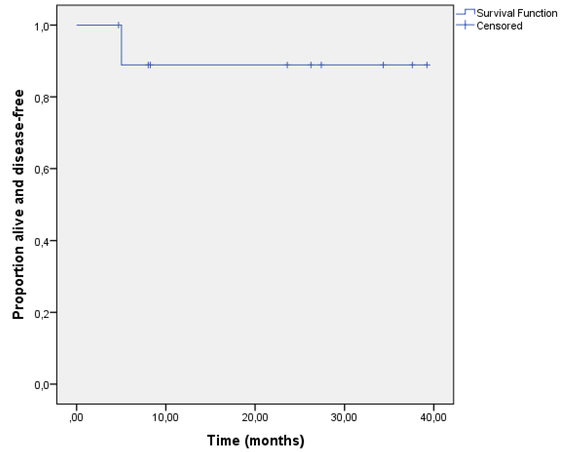
Table 2. Stage, tumor localization and Laparoscopic procedures

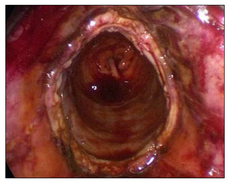
Stage	N (%)
Stage II	7 (70%)
Stage III	3 (30%)
Tumor Localization	**N (%)**
Low rectum	7 (70%)
Mid rectum	3 (30%)
Laparoscopic procedures	**N (%)**
Laparoscopic low anterior resection with taTME and colorectal anastomosis	3 (30%)
Laparoscopic ultralow anterior resection with taISR-taTME and coloanal anastomosis	7 (70%)

Table 3. Morbidity, mortality and local recurrence

Variables	N (%)
Morbidity	2/10
Clavien Dindo Grade II	1 rectal abscess solved with medical treatment
Clavien Dindo Grade IIIa	1 stenosis that received endoscopic treatment
Variables	**N (%)**
Mortality	No
Local recurrences	No
Overall estimated 3-year survival	88,9%

Figure 1. Overall estimated 3-year disease-free survival







Negative circumferential resection margin and distal resection margin were reached in all patients and the mean number of harvested lymph nodes was, 11 (range 7-12).

Conclusion: Our experience has shown that performing taTME and taISR to treat low and mid advanced rectal cancer after neoadjuvant radiochemotherapy, appears to be an oncologically safe and effective procedure.