SPHINCTER PRESERVATION SURGERY TREATMENT OF RECTAL CANCER. OUR OWN EXPERIENCE.

Javier Ernesto Barreras González MD PhD, Jorge Gerardo Pereira MD, Haslen Cáceres Lavernia MD, Marianela Hernández Ascuy MD, Solvey Quesada Lemus BSN.
Department of Laparoscopic and Endoscopic Surgery, National Center for Minimally Invasive Surgery, Havana Medical University, Havana, Cuba.

Centro Nacional de CIRUGÍA DE MÍNIMO ACCESO

Background: Ideal treatment of rectal cancer includes controlling the cancer; minimizing trauma, morbidity, and mortality; and avoiding a colostomy with preservation of adequate function. Total mesorectal excision (TME) is the gold standard for oncologic resection in rectal cancers Sphincter preservation surgery (SPS) in the low pelvis has deterred surgeons because of its extreme difficulty and the challenge in obtaining adequate distal as well as circumferential margins.

Aims

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

Methods and procedures

This study was a retrospective review of a prospective database of patients with rectal cancer that underwent SPS by transanal endoscopic microsurgery (TEM), low and ultralow laparoscopic anterior resection (LAR) and Transanal TME (taTME) from January 2012 and July 2023 at a tertiary referral university-affiliated center specializing in endoscopic and laparoscopic surgery. All the patients underwent total mesorectal excision in laparoscopic group. The technology of TEM was used in endoscopic group and for taTME.

Results:

Table 1. Sphincter preservation procedures.

Procedures	N (%)
Transanal endoscopic microsurgery (TEM)	111 (28,3%)
Low anterior resection (LAR) with colorectal anastomosis	183 (46,7%)
Ultra-LAR with coloanal anastomosis	85 (21,7%)
Transanal total mesorectal excision (taTME)	13 (3,3%)
Total	392 (100%)

Table 2. Local recurrence, morbidity and survival (TEM Group)

Stage	Local recurrence (%)
T1	7,4%
T2 (after chemoradiotherapy)	7,1%
T3 (after chemoradiotherapy with complete clinical response)	2,4%
Variables	**(%)**
Overall incidence of Morbidity	8,1%
Overall estimated 5-year survival	97,7%
Disease-free survival rate	96,4%

Table 3. Stage, tumor localization, morbidity and mortality. (Laparoscopic Group)

Stage	N (%)
Stage I	65 (23,1%)
Stage II	123 (43,8%)
Stage III	81 (28,8%)
Stage IV	12 (4,3%)
Tumor Localization	**N (%)**
Low rectum	118 (42%)
Mid rectum	64 (22,8%)
High rectum	99 (35,2%)
Variables	**(%)**
Overall incidence of Morbidity	9,6%
Mortality	1,8%
Local recurrences	7,5%

Figure 1. Overall estimated 5-year survival

82.8%

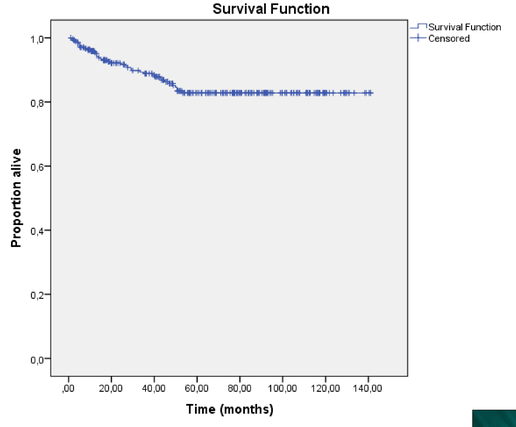
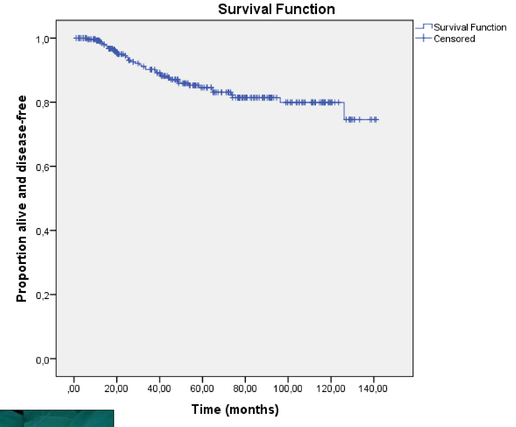
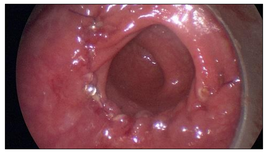


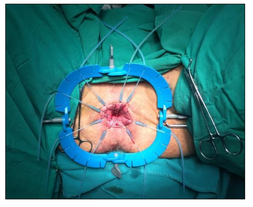
Figure 2. Disease-free 5-year survival

84.6%











Conclusion: Our experience has shown that performing minimally invasive surgical approach with sphincter preservation to treat rectal cancer appears to be an oncologically safe and effective procedure.