TRANS-ANAL/PERINEAL ENDOSCOPIC SURGERY FOR LOCALLY RECURRENT RECTAL CANCER

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INTRODUCTION

- The optimal surgical approach for locally recurrent rectal cancer (LRRC) remains controversial.
- The recent development of trans-anal total mesorectal excision has introduced an endoscopic trans-anal/perineal approach as a novel technique for LRRC.
- This thechnique addresses several challenges associated with LRRC surgery, such as intra-abdominal adhesions from previous surgeries, tumor fixation to adjacent organs, prolonged operative times, and a high risk of severe bleeding.

AIM

- To assess the safety and feasibility of endoscopic trans-anal/perineal surgery for LRRC, comparing its short-term outcomes with those of trans-abdominal surgery.

METHODS AND PROCEDURES

Single-center retrospective study

108 patients who underwent radical surgery for LRRC at National Cancer Center Hospital East from January 2008 to March 2022

58 patients
non-Ta/p group
(trans-abdominal surgery only**)**

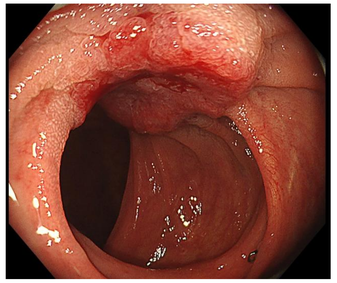
50 patients
Ta/p group
(endoscopic trans-anal/perineal surgery and trans-abdominal surgery**)**

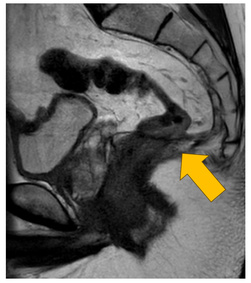
Short-term outcomes, including operative time, blood loss, complications, and R0 resection rates, were compared between the Ta/p and non-Ta/p groups.

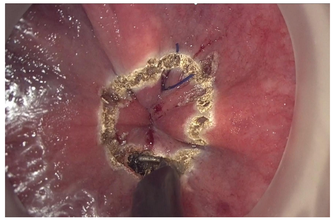
CONCLUSIONS

- Postoperative complication rates for endoscopic trans-anal/perineal surgery were comparable to those of trans-abdominal surgery, demonstrating that endoscopic trans-anal/perineal surgery is a safe and feasible option for LRRC.
- Additionally, this surgery showed advantages in terms of shorter operative time and reduced blood loss, suggesting it can be a promising surgery for LRRC.

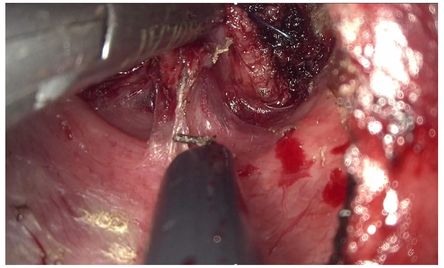
- **e.g., A case of anastomotic recurrence after low-anterior resection**



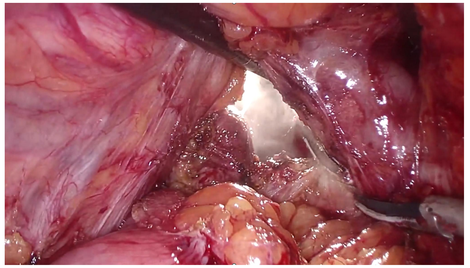




Trans-anal approach



Approach from the untouched area



Two-teams collaboration

RESULTS

- **Patients characteristics (n=108)**

*Median (range)

	Non-Ta/p (N=58)	Ta/p (N=50)
Age (years)*	62 (36-82)	62 (37-92)
Male	35 (60.3%)	37 (74.0%)
Local recurrence site		
Central	18 (31.0%)	16 (32.0%)
Anterior	9 (15.5%)	12 (24.0%)
Lateral	15 (25.9%)	9 (18.0%)
Posterior	16 (27.6%)	13 (26.0%)
Preoperative treatment		
None	25 (43.1%)	16 (32.0%)
Chemoradiotherapy	20 (34.5%)	26 (52.0%)
Chemotherapy	13 (22.4%)	8 (16.0%)

- **Surgery-related factors**

	Non-Ta/p (N=58)	Ta/p (N=50)
Abdominal approach		
Open	58 (100%)	20 (40%)
Laparoscopic	0 (0%)	30 (60%)
Open Conversion	-	4 (8.0%)
Surgical Procedure		
LAR/ ISR	12 (20.7%)	19 (38.0%)
APR	20 (34.5%)	18 (36.0%)
TPE	13 (22.4%)	6 (12.0%)
Other	13 (22.4%)	7 (14.0%)
Combined resection organs		
Urogenital organs	18 (31.0%)	12 (24.0%)
Sacral bones	8 (13.8%)	10 (20.0%)

- **Result**

*Median (range)

	Non-Ta/p (N=58)	Ta/p (N=50)	p value
Total operation time(min)*	441 (182-909)	380 (82-970)	0.032
Tumor resection time(min)*	292 (98-574)	225 (52-692)	0.003
Blood loss(ml)*	1155 (250-16938)	430 (3-5660)	<0.001
Intraoperative blood transfusion	31 (53.4%)	9 (18.0%)	<0.001
Postoperative complications			
All Grades	48 (82.8%)	37 (74.0%)	0.347
Clavien-Dindo 3≦	24 (41.4%)	17 (34.0%)	0.551
Re-operation	10 (17.2%)	3 (6.0%)	0.084
R0 rate	47 (81.0%)	44 (88.0%)	0.429