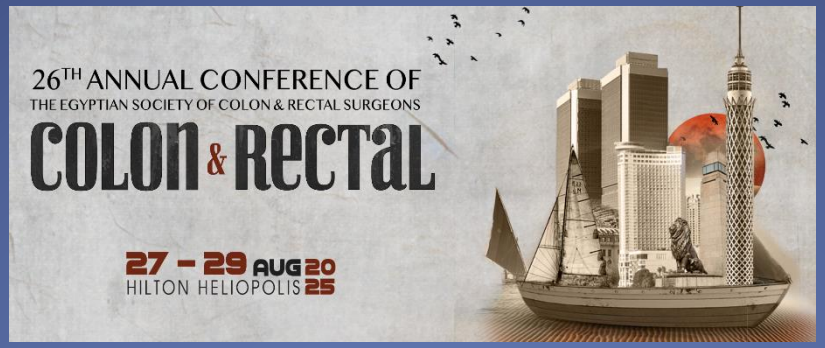
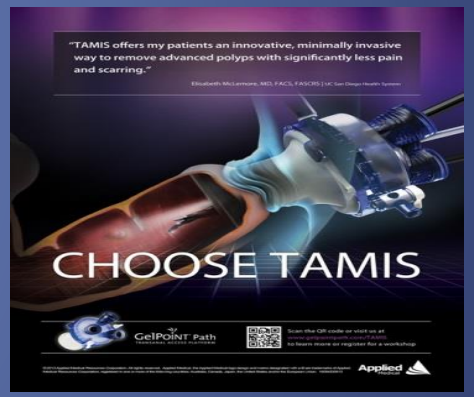
KSCRS
Kuwait Society of Colorectal Surgeons



Egyptian Society of Colon & Rectal Surgeons
ESCRS

TAMIS Overview



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President of Kuwait society of colorectal surgeons (KSCRS)
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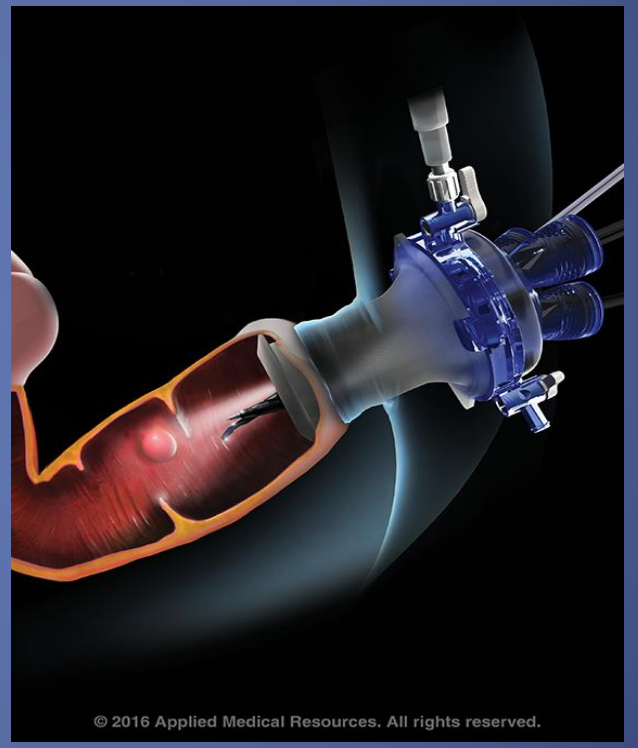
TAMIS

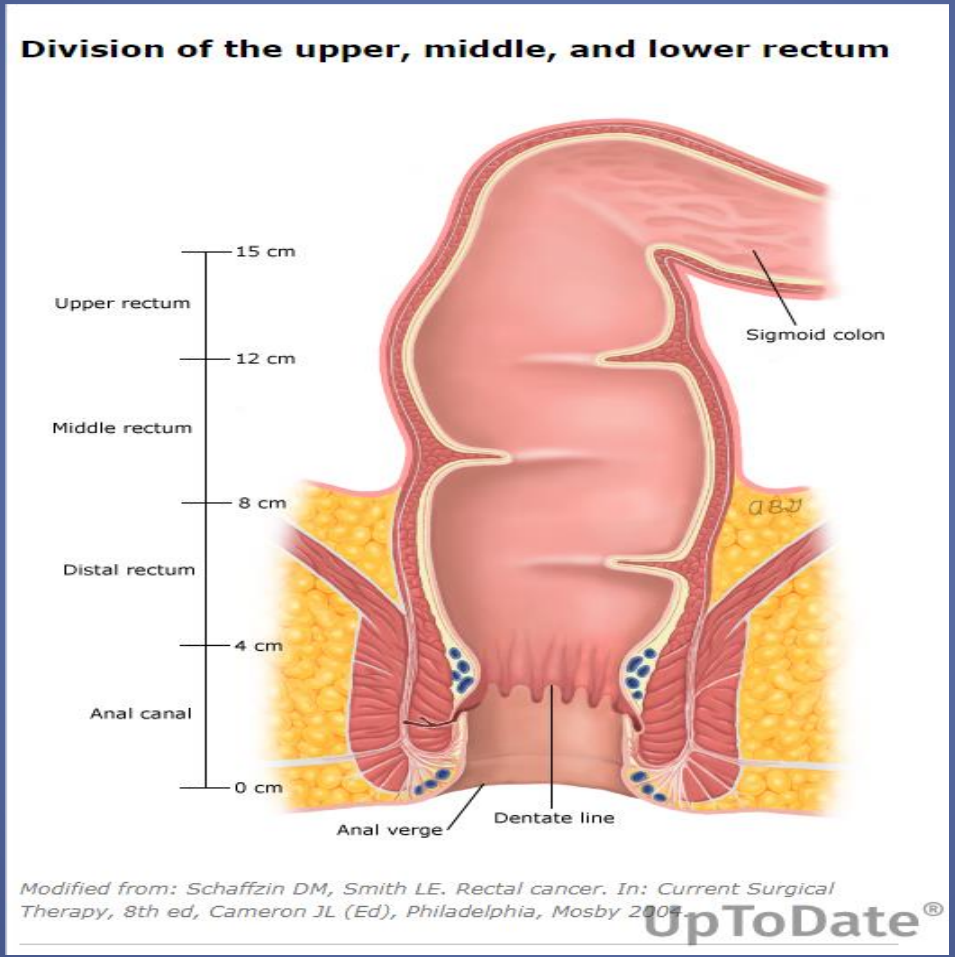
- No disclosure

TAMIS

- What is it ?
- Platforms
- Data and overview
- Surgical technique



TAMIS

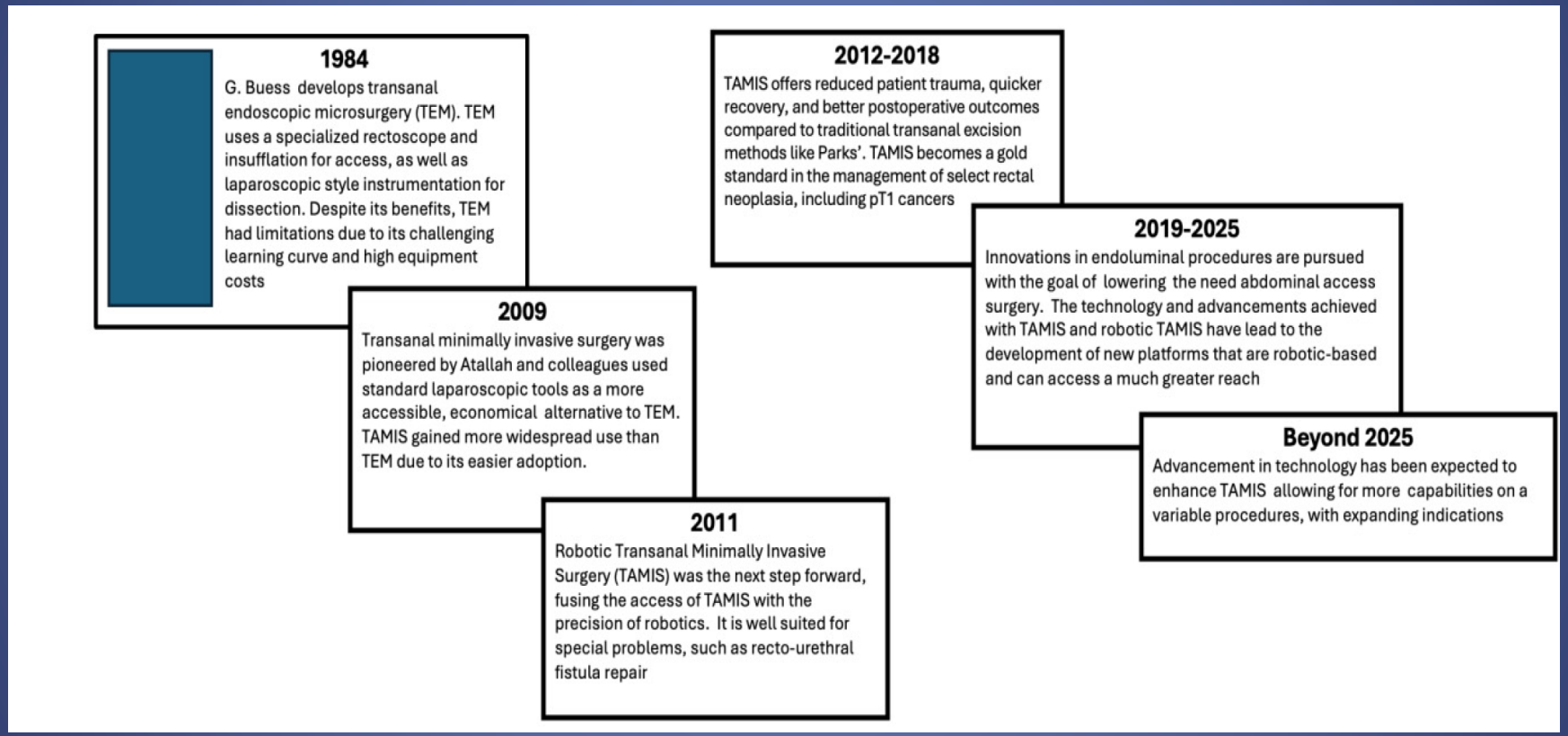

Division of the upper, middle, and lower rectum
15 cm
Upper rectum
12 cm
Middle rectum
8 cm
Distal rectum
4 cm
Anal canal
0 cm
Sigmoid colon
Anal verge
Dentate line
Modified from: Schaffzin DM, Smith LE. Rectal cancer. In: Current Surgical Therapy, 8th ed, Cameron JL (Ed), Philadelphia, Mosby 2004
UpToDate®

TAMIS

- Transanal endoscopic surgery (TES) or operation (TEO), first described in 1984 by Buess
- Refers to the concept of performing intra-luminal excision of a rectal lesion using specialized equipment .
- TES maintains a stable pneumorectum and allow precise instrumentation for tissue dissection, resection, and rectal wall defect re apposition.

Buess G et al . Chirurg. 1984;55:677–680

TAMIS



Turk J Colorectal Dis 2025;35(2):33-40

TAMIS

- Transanal minimally invasive surgery (TAMIS)
  - Minimally invasive access to the rectum
  - Many platforms available
  - platform uses ordinary laparoscopic instruments to achieve high-quality local excision
    - Flexible platform

    - TEM (Transanal Endoscopic Microscopy)
    - TEO (Transanal Endoscopic Operation)
      - » Rigid platform
  - All now under TES (Trans anal Endoscopic Surgery)

TAMIS

- Currently available TAMIS access platforms (Single incision surgery)
- Device Company
- GelPOINT Path Transanal
- Access Platform™ Applied Medical Inc

- Gloveport (Hong Kong, China) and Alexis™

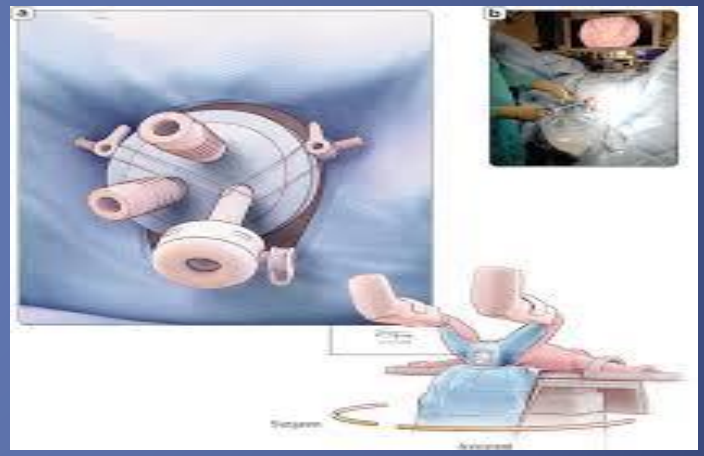
- SILS™: single-incision
- laparoscopic surgery Covidien

- SSL™: single-site laparoscopic Ethicon Endo-Surgery

- TriPort™ Olympus

TAMIS PLATFORM

- GELPOINT- Path



TAMIS

- GLOVEPORT

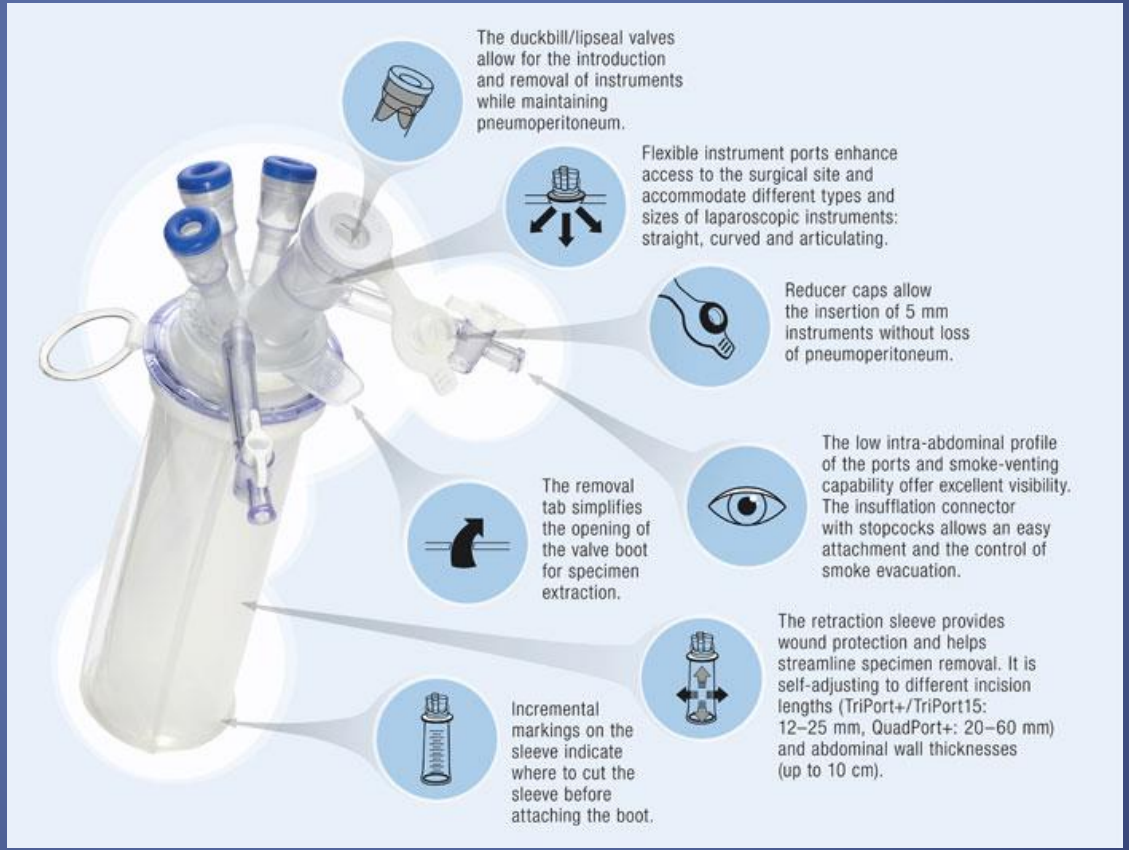
TAMIS

- Covidien

- Ethicon

TAMIS

- TRIPORT



TEM - TEO

TAMIS

- Compared with conventional transanal excision (TAE), TEM has been associated with
  - better quality resection, a lower local recurrence rate, and better survival, especially in cases of histologically appropriate stage I (T1) rectal cancer.
- In long-term follow-up studies,
  - TEM excision of rectal tumors has been shown to have similar morbidity and mortality rates to conventional transanal excision.
- Despite proven superior excision quality, TEM never became widely adopted (high cost and long learning curve)

Dis Colon Rectum. 2005;48:270-284.

TAMIS

- In 2010, Atallah et al
  - Proposed the use of standard laparoscopic instruments and a single-port laparoscopic platform to perform transanal surgery. This technique was named transanal minimally invasive surgery (TAMIS)
  - TEM and TAMIS show considerable differences in terms of cost, learning process, and technical applicability.
  - TAMIS does not require costly specialized instrumentation, as in TEM, has enabled it to be performed by much easily.

Surg Endosc. 2010;24:2200-2205.

TAMIS

- Indications
- Benign disease
  - Rectal polyps (adenomas)
  - Rectal stenosis or stricture
  - Solitary rectal ulcer
  - Rectal endometriosis
  - Tailgut cyst
  - Rectourethral fistula repair
  - Rectovaginal fistula repair
  - Pelvic abscess drainage

Dis Colon Rectum. 2008;51:1026-1031.

TAMIS

- Indications
  - Malignant lesions —
    - local excision acceptable treatment for T1N0 rectal cancers (with low-risk pathologic features, including:
      - Moderately to well-differentiated tumor
      - Absence of lymphovascular invasion and
      - absence of perineural invasion
  - For local excision of cT0 lesions after neoadjuvant therapy

Ann Surg Oncol. 2012;19:384-391.
Ann Surg. 2007;245:726- 733
Dis Colon Rectum. 2008;51:1026-1031.

TAMIS

- Contraindications
  - Tumors involving >50 percent of the luminal circumference, >5 cm in size , big size lesion
  - A study of TES considered technically challenging lesions to be ≥5 cm in diameter, involving ≥50 percent of the lumen, or ≥10 cm from the anal verge → associated with worse outcomes, including increased local recurrence, peritoneal perforation, tumor fragmentation, rectal stenosis, and incomplete resection

Surg Endosc. 2012;26:3127-3132.

TAMIS

- TEM in early stage (T1) rectal cancer cases provides high survival rates and low recurrence rates in appropriately selected patients and to be comparable to radical resection

ANZ J Surg. 2021;91:2827.

Dis Colon Rectum. 2008;51:1026-1030.

TAMIS

- A comparative overview of key TAMIS series summarizing clinical data from five major studies.
  - Patient cohorts ,27 to 200 individuals,
  - Average tumor sizes (1.6-5.3 cm), and the distance from the anal verge 6 to 8.1 cm.
  - Operative times durations 52 to 115 minutes.
  - Follow-up 14.4 to 53 months.
    - Postoperative complication rates 6% to 22%,
    - Local recurrence rates remained low (0%-6%).
    - Positive margin rates between 3.3% and 7%,
    - overall postoperative morbidity remained below 11% .
- Reinforcing its role as a safe and effective modality for both benign and selected malignant rectal neoplasms.

Turk J Colorectal Dis 2025;35(2):33-40

TAMIS

Table 1. Summary of key clinical studies evaluating transanal minimally invasive surgery for rectal neoplasms

Study	Lee et al.[42]	Albert et al.[43]	Castaño Llano et al.[44]	Kang et al. [45]	Duggan et al.[46]
Year published	2009	2013	2019	2019	2023
Patient size, n	200	50	27	30	168
Gender (men/women)	112/88	37/17	17/10	19/11	101/67
Average age (years)	65	64	68	55	68
Average tumor size (cm)	2.9	2.8	5.3	1.6	4.8
Distance from anal verge (cm)	7.2	8.1	7.0	7.0	6.0
Operation time (min)	69.5	74.9	115	52	N/A
Follow-up (months)	14.4	20	32	53	17
Complication rate (%)	16	6	22	13.33	8.3
Local recurrence (%)	6	4	0	3.8	1.6
Positive margin (%)	7	6	4	3.3	4
Postoperative morbidity (%)	11	8	0	0	11
Cases	Adenoma, adenocarcinoma	Benign and malignant lesions, NETs	Low-/high-grade adenomas, NETs, fibrosis	NET, adenoma, rectal cancer, stenosis	Adenoma, ypT0-T2, carcinoid, maltoma

NET: Neuroendocrine tumor, N/A: Not available, R0: Complete (margin-negative) resection

Turk J Colorectal Dis 2025;35(2):33-40

TAMIS

- Advantage
  - When compared to conventional transanal excision, TES provides:
    - a superior quality resection, with a lower incidence of margin positivity
    - reduced specimen fragmentation
    - reduced local recurrence with equivalent associated morbidity
    - less postoperative pain, shorter hospital stays, and improved patient comfort

Colorectal Dis.2011;13:762–767.

TAMIS

- When compared to advanced colonoscopic techniques such as endoscopic mucosal resection (EMR) and endoscopic submucosal dissection (ESD) , TES remains superior with respect to lesion recurrence
- Further more , compared to ESD , TAMIS provide deeper and more oncological resection

Surg Endosc. 2014;28:427–438
Endoscopy. 2011;43:941–949

TAMIS

- TAMIS when compared to TEO
  - Easier to use and shorter set up
  - Less expensive
  - equivalent result
  - less injury to the anal sphincter
  - Less strict in regard of patient position
  - broader accessibility , greater instrument flexibility by utilizing conventional laparoscopic tools

TAMIS

- Compared to the gold standard of radical surgery,
  - local procedures for strictly selected early rectal cancers should lead to identical oncological results and even better outcomes regarding morbidity, mortality, and quality of life
  - Organ preservation: Enables rectal-sparing treatment in selected early-stage cancers and benign neoplasms, reducing the need for radical surgery and lowering the risk of low anterior resection syndrome(LARS)

J Gastrointest Oncol. 2015 Jun;6(3):296-306

TAMIS

Also :

- Robotic adaptation: Robotic-assisted TAMIS increases precision and dexterity, especially in challenging pelvic anatomy.
- Feasibility in hybrid approaches: Can be combined with TAE for low-lying or partially concealed lesions.

TAMIS

- Disadvantages
  - Learning curve: Although TAMIS is less technically complex than TEM, it still requires experience in laparoscopic techniques and familiarity with transanal platforms.
  - Equipment requirements: Requires dedicated transanal platforms (e.g., SILS, GelPOINT) and reliable insufflation and imaging systems.
  - Closure difficulties: Intrarectal suturing, particularly for large or awkwardly located defects, can be technically challenging.

TAMIS

- Disadvantage cont.
  - Patient selection limitations: Not suitable for bulky tumors, advanced-stage cancers, or patients with severe comorbidities or contraindications to general anesthesia.
  - Limited access for some tumor locations: Lesions obscured by rectal folds or located too proximally may require conversion or hybrid techniques.

TAMIS

- A review of TAMIS
  - 33 retrospective studies and case reports, 3 abstracts
  - Published on TAMIS for local excision of rectal neoplasms (n = 390)
  - Wide variety of pathology

Tech Coloproctol. 2014 Sep;18(9):775-88

TAMIS

- 152 lesions were excised for benign disease including adenomas and high-grade dysplasia's (39 %)
  - 209 for malignancy for carcinomas in situ and adenocarcinomas (53.5 %)
  - 29 (7.5 %) other pathology,
  - (23/29) neuroendocrine lesions (carcinoid)
  - Remaining resections (n = 6) were for mucucele, gastrointestinal stromal tumor, melanoma, and fibrosis (benign scar)
- Advanced transanal platform a safe and effective method for resecting benign neoplasms and early-stage malignancies of the mid and distal rectum

Tech Coloproctol. 2014 Sep;18(9):775-88

TAMIS

- Transanal Minimally Invasive Surgery (TAMIS) for Rectal Lesions: A Systematic Review

  - Review the effectiveness and safety of TAMIS for the treatment of rectal lesions.
  - The MEDLINE, Web of Science, and Cochrane Library databases
  - The primary outcomes positive margin rate, recurrence rate, conversion rate, range of applications, and complication rates.

Hepatogastroenterology 2015 Jun;62(140):863-7.

TAMIS

- Results: 12 studies including 155 patients
- Mean size of rectal lesions was 3.3 cm (range 0.2-10 cm) and mean distance from the anal verge was 7.4 cm (range 0-20 cm).
- Low and mid rectal lesions mainly to avoid peritoneal entrance during excision.
- TAMIS appears to be an effective and safe treatment for rectal lesions.

Hepatogastroenterology 2015 Jun;62(140):863-7.

TAMIS

- Transanal Minimally Invasive Surgery (TAMIS) in Qatar: initial experience
  - Retrospective
  - TAMIS for benign and early malignant rectal lesions between Jan 2015 and Sept 2019,
  - feasibility, fragmentation of specimen, operative time, length of stay (LOS) post-operative complications, and margin negativity.

BMC Surg2020 Jun 19;20(1):138

TAMIS

- The average (LOS) is 1.5 days (1-6 days)
  - 7 patients benign adenomas, 5 patients adenocarcinoma, 3 patients neuroendocrine tumors, 1 patient hyperplastic polyp, and 1 patient inflammatory polyp.
  - No fragmentation occurred
- TAMIS feasible and safe even in a relatively low-volume colorectal unit. Using this tool, many patients can avoid unnecessary radical surgery.

BMC Surg2020 Jun 19;20(1):138

TAMIS

- T1N0 rectal cancer — T1N0 rectal cancer without high-risk features, TES is an acceptable treatment option that is associated with better functional outcomes compared with transabdominal radical resection.
  - A randomized trial , TEM was compared with transabdominal resection in 50 patients who had endorectal ultrasound-staged T1N0 rectal cancers.
  - The five-year local recurrence (4 percent) and overall survival rates (96 percent) were identical between the two groups. Other outcome measures, such as hospital length of stay, blood loss, operative time, and overall early morbidity, were in favor of TEM.

Dis colon rectum 2010;53:16

TAMIS

- Further more T1
  - T1 rectal cancers subclassified into three categories: sm1, sm2, and sm3, based on the depth of submucosal invasion.
  - Data showed that when the depth of submucosal invasion was <1000 micrometers (sm1), the rate of nodal involvement was 0 to 1.8 percent, whereas the rate of nodal involvement was 12.8 to 13.8 percent when the depth of submucosal invasion was ≥1000 micrometers (sm2 or sm3) .
  - ASCRS and European Society for Medical Oncology (ESMO) recommend local excision for T1 rectal cancers that are sm1 but proctectomy with total mesorectal excision for those that are sm2 or sm3 .

Ann Oncol 2017 ; 28iv 22
Surg today 2014; 44:2000

TAMIS

- T2N0 rectal cancer
  - Because of high recurrence and lower survival rate after local as compared with transabdominal excision of T2N0 rectal cancers, transabdominal surgery (TME) is the standard of care for these cancers.
  - Local excision should only be performed in such patients if they are not candidates for abdominal surgery because of medical reasons or if the procedure is being performed as a part of a clinical trial.

- In early small series, patient unfit for or declined radical resection and employed non standardized chemo- or radiation therapy protocols, the recurrence rates of T2N0 rectal cancer after local excision were much higher than those of T1 lesions.

Endosc 2011;25:1222
Colorectal Dis 2009 11:270

TAMIS

- T1-3N0 rectal cancer , TEM application
  - patients with T1-3N0 rectal cancer underwent neoadjuvant chemoradiation therapy followed by local excision (most often TEM).

- CARTS study, 55 patients with T1-3N0 rectal cancer underwent long-course neoadjuvant chemoradiation. those with significant clinical response (tumor downsizing) underwent TEM
- 30 of 55 patients (55 percent) were ypT0-1 on TEM specimen and required no further surgery. After follow-up of 17 months, only one patient (of 30) developed a local recurrence and underwent salvage abdominal perineal resection.

Br J Surg2015; 102:853
JAMA Surg 2019;154:47

Transanal endoscopic surgery (TES) for T1N0 rectal cancer

Series	Year	Platform	Number of patients	Recurrence (percent)	Follow-up (mean months)
Winde[1]	1996	TEM	24	4.1	40.9
Heintz[2]	1998	TEM	44	4.5	52
Lee[3]	2003	TEM	25	4.1	31
Floyd[4]	2006	TEM	53	7.5	34.1
Ganai[5]	2006	TEM	21	19	43
Bretagnol[6]	2007	TEM	31	9.7	34
Baatrup[7]	2009	TEM	72	13	–
Jeong[8]	2009	TEM	17	0	37
Allaix[9]	2009	TEM	38	0	60
De Graaf[10]	2009	TEM	80	24	42
Palma[11]	2009	TEM	34	5.9	86.5
Tsai[12]	2010	TEM	51	9.8	53.9
Doornebosch[13]	2010	TEM	88	20.5	–
Steinhagen[14]	2011	TEM	12	0	33
Ramirez[15]	2011	TEM	53	7.5	71
Lezoche[16]	2011	TEM	51	0	97
Stipa[17]	2012	TEM	86	11.6	85
Albert[18]	2013	TAMIS	16	6.3	20.9

Outcomes of transanal endoscopic surgery (TES) for T1N0 rectal cancer in various studies are presented in this table.

TEM: transanal endoscopic microsurgery; TAMIS: transanal minimally invasive surgery.

References:

1. *Winde G, Nottberg H, Keller R, et al. Surgical cure for early rectal carcinomas (T1). transanal endoscopic microsurgery vs. anterior resection. Dis Colon Rectum 1996; 39:969.*
2. *Heintz A, Morschel M, Junginger T. Comparison of results after transanal endoscopic microsurgery and radical resection for T1 carcinoma of the rectum. Surg Endosc 1998; 12:1145.*
3. *Lee W, Lee D, Choi S, Chun H. Transanal endoscopic microsurgery and radical surgery for T1 and T2 rectal cancer. Surg Endosc 2003; 17:1283.*
4. *Floyd ND, Saclarides TJ. Transanal endoscopic microsurgical resection of pT1 rectal tumors. Dis Colon Rectum 2006; 49:164.*
5. *Ganai S, Kanumuri P, Rao RS, Alexander AI. Local recurrence after transanal endoscopic microsurgery for rectal polyps and early cancers. Ann Surg Oncol 2006; 13:547.*
6. *Bretagnol F, Merrie A, George B, et al. Local excision of rectal tumours by transanal endoscopic microsurgery. Br J Surg 2007; 94:627.*
7. *Baatrup G, Breum B, Qvist N, et al. Transanal endoscopic microsurgery in 143 consecutive patients with rectal adenocarcinoma: Results from a Danish multicenter study. Colorectal Dis 2009; 11:270.*
8. *Jeong WK, Park JW, Choi HS, et al. Transanal endoscopic microsurgery for rectal tumors: Experience at Korea's national cancer center. Surg Endosc 2009; 23:2575.*
9. *Allaix ME, Arezzo A, Caldart M, et al. Transanal endoscopic microsurgery for rectal neoplasms: Experience of 300 consecutive cases. Dis Colon Rectum 2009; 52:1831.*
10. *De Graaf EJ, Doornebosch PG, Tollenaar RA, et al. Transanal endoscopic microsurgery versus total mesorectal excision of T1 rectal adenocarcinomas with curative intention. Eur J Surg Oncol 2009; 35:1280.*
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12. *Tsai BM, Finne CO, Nordenstam JF, et al. Transanal endoscopic microsurgery resection of rectal tumors: Outcomes and recommendations. Dis Colon Rectum 2010; 53:16.*
13. *Doornebosch PG, Ferenschild FT, de Wilt JH, et al. Treatment of recurrence after transanal endoscopic microsurgery (TEM) for T1 rectal cancer. Dis Colon Rectum 2010; 53:1234.*
14. *Steinhagen E, Chang G, Guillem JG. Initial experience with transanal endoscopic microsurgery: The need for understanding the limitations. J Gastrointest Surg 2011; 15:958.*
15. *Ramirez JM, Aguilella V, Valencia J, et al. Transanal endoscopic microsurgery for rectal cancer. long-term oncologic results. Int J Colorectal Dis 2011; 26:437.*
16. *Lezoche G, Guerrieri M, Baldarelli M, et al. Transanal endoscopic microsurgery for 135 patients with small nonadvanced low rectal cancer (iT1-iT2, iN0): Short- and long-term results. Surg Endosc 2011; 25:1222.*
17. *Stipa F, Giaccaglia V, Burza A. Management and outcome of local recurrence following transanal endoscopic microsurgery for rectal cancer. Dis Colon Rectum 2012; 55:262.*
18. *Albert MR, Atallah SB, deBeche-Adams TC, et al. Transanal minimally invasive surgery (TAMIS) for local excision of benign neoplasms and early-stage rectal cancer: Efficacy and outcomes in the first 50 patients. Dis Colon Rectum 2013; 56:301.*

Transanal endoscopic surgery (TES) for T2N0 rectal cancer

Series	Year	Platform	Number of patients	Chemoradiation	Recurrence (percent)	Follow-up (months)
Endreseth[1]	2005	TEM	5	None	20	24
Ganai[2]	2006	TEM	4	Adjuvant	50	44
Jeong[3]	2009	TEM	6	Adjuvant	16.7	37
Tsai[4]	2010	TEM	17	Selective	23.5	42.8
Lezoche[5]	2011	TEM	84	Neoadjuvant	4.7	97
Amann[6]	2015	TEM	53	Variable	20.8	33.9

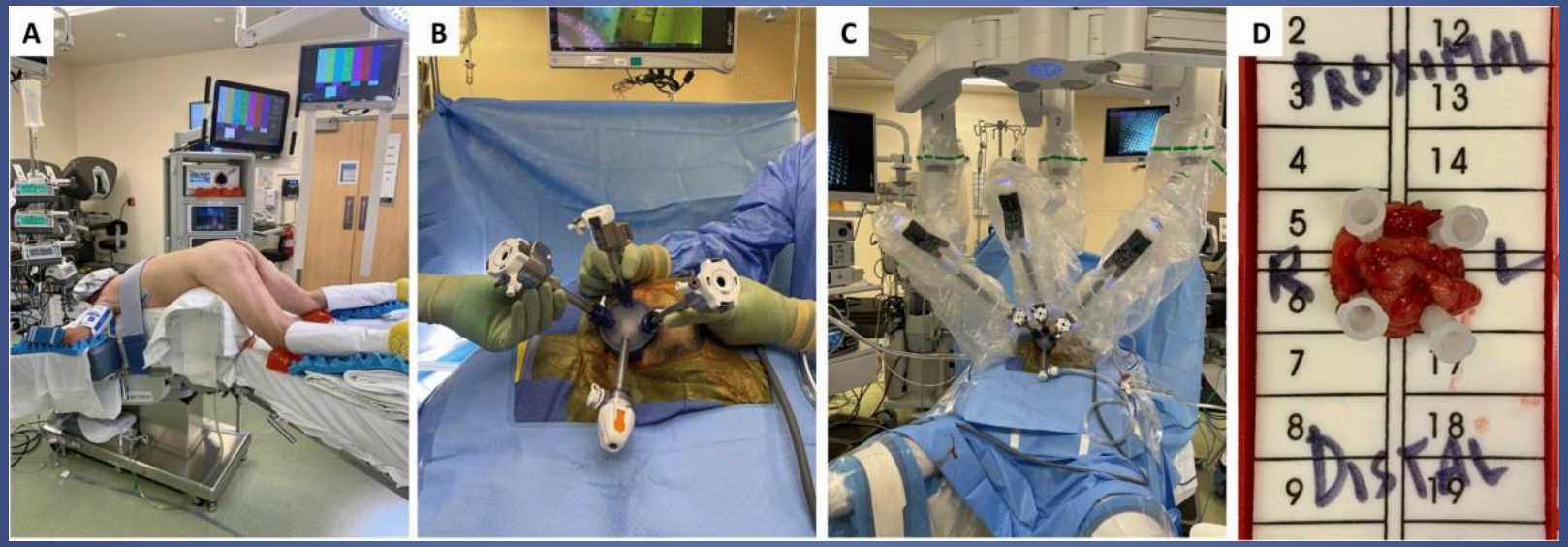
Outcomes of transanal endoscopic surgery (TES) for T2N0 rectal cancer in various studies are presented in this table.

TEM: transanal endoscopic microsurgery.

References:

1. *Endreseth BH, Wibe A, Svinsas M, et al. Postoperative morbidity and recurrence after local excision of rectal adenomas and rectal cancer by transanal endoscopic microsurgery. Colorectal Dis 2005; 7:133.*
2. *Ganai S, Kanumuri P, Rao RS, Alexander AI. Local recurrence after transanal endoscopic microsurgery for rectal polyps and early cancers. Ann Surg Oncol 2006; 13:547.*
3. *Jeong WK, Park JW, Choi HS, et al. Transanal endoscopic microsurgery for rectal tumors: Experience at Korea's national cancer center. Surg Endosc 2009; 23:2575.*
4. *Tsai BM, Finne CO, Nordenstam JF, et al. Transanal endoscopic microsurgery resection of rectal tumors: Outcomes and recommendations. Dis Colon Rectum 2010; 53:16.*
5. *Lezoche G, Guerrieri M, Baldarelli M, et al. Transanal endoscopic microsurgery for 135 patients with small nonadvanced low rectal cancer (iT1-iT2, iN0): Short- and long-term results. Surg Endosc 2011; 25:1222.*
6. *Amann M, Burghardt J, Stratz C, et al. Transanal endoscopic microsurgery in treatment of small rectal T1 high-risk, T2 and T3 carcinomas combined with radiochemotherapy. Eur Surg 2015; 47:226.*

TAMIS



Robotics TAMIS

TAMIS

- Robotic TAMIS
  - The surgical robot has been used for transanal excision via the single port robotic platform and a gel port.
- Robotic TAMIS offers a three-dimensional view that is superior to that of the original TEM platform, access to wristed instruments, and freedom from the need for "lesion posterior" positioning.

TAMIS

- Robotic transanal minimally invasive surgery (R-TAMIS)
  - A retrospective review of electronic medical records at the Mayo Clinic from September 2017 to April 2020.
  - Clinical documentations for patients undergoing R-TAMIS.
  - Patient demographics, intraoperative data (procedure time, tumor size and distance), complications, and pathology reports were reviewed.

Updates Surg2022 Jun;74(3):1011-1016.

TAMIS

- A total of 28 patients underwent R-TAMIS. Median follow-up was 23.65 months.
- 16. patients underwent R-TAMIS for endoscopically unresectable rectal polyps,
  - 8: rectal adenocarcinoma,
  - 2: rectal gastrointestinal stromal tumor,
  - 2: rectal carcinoid tumor.
- size of the lesions 4.1 cm (range 0.2-13.8 cm).
- location : 7.8 cm (range 0-16 cm) from the anal verge.
- operative time : 132.5 ± 46.8 min.
- R-TAMIS is a safe, feasible, and effective technique for the surgical treatment of a variety of rectal pathology. A hybrid technique can be used for the resecting tumors extending into the anal canal.

Updates Surg2022 Jun;74(3):1011-1016.

TAMIS

- N J O'Sullivan et al
  - Robotic transanal minimally invasive surgery (R-TAMIS): current evidence in the treatment of early rectal neoplasia
  - 18 studies, 317 participants included in the analysis.
  - Overall complication rate : 9.7%.
  - Clear margins (R0) reported in 96.2% of patients.
  - Local recurrence :2.2%

- Superiority of R-TAMIS in the local excision of rectal lesions. (complication, margin negativity and recurrence rates)

Int J Colorectal Dis. 2024 May 9;39(1):71.

TAMIS surgical technique

TAMIS

- TES ideal for local excision of lesions in the mid- to proximal rectum up to 15 cm from the anal verge.
- Lesions in the very distal rectum (<5 cm from anal verge) are best excised with conventional transanal excision (TAE) because they may be obscured by the TES platform.

TAMIS

- Platform chosen according to the surgeon discretion
- Transanal access platforms that provide a stable working space while preserving the pneumorectum.
  - For example, devices such as the GelPOINT® Path Transanal Access Platform allow effective surgical field control through a reliable seal
- Long, thin, and articulating instrument laparoscopic insufflators, camera systems, and vessel-sealing devices-facilitate precise dissection and surgical maneuvers in the narrow rectal space.
  - endoscopic ultrasound can be used

TAMIS

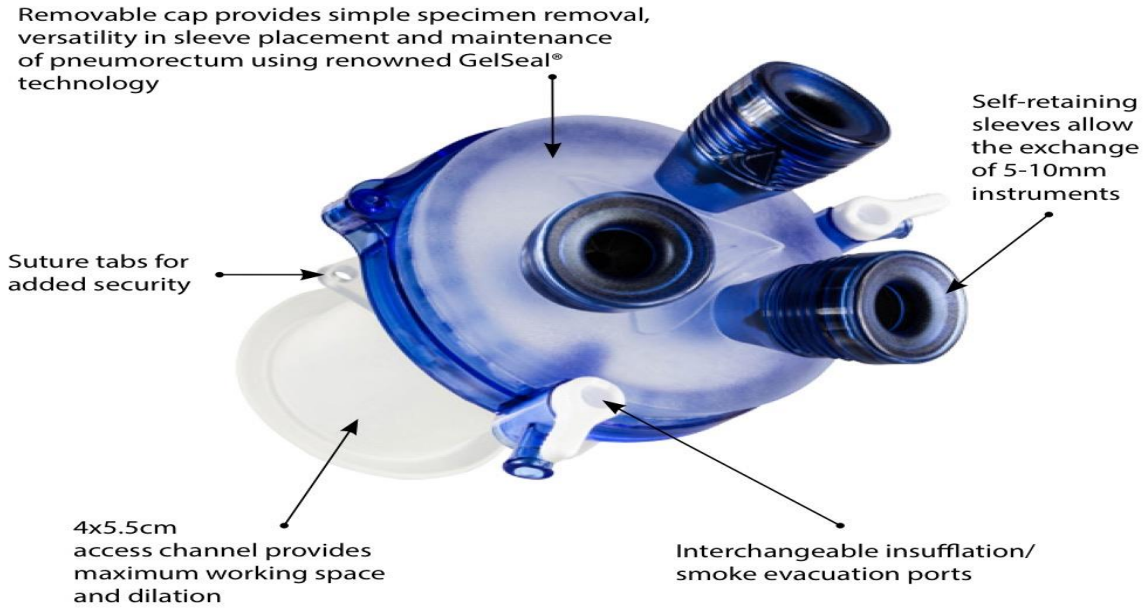
- SURGICAL TECHNIQUES
  - Preparation
    - A full bowel preparation the day before surgery, intravenous prophylactic antibiotics within one hour of incision, and prophylaxis against venous thromboembolism.

TAMIS

- Anesthesia
  - general or spinal anesthesia.
- Patient position — is critical ,
  - a rigid proctoscopy should be done to determine both the level of the lesion within the rectum and its anatomic orientation (ie, anterior, posterior, or lateral).
- Resection — marking done using cautery
  - For malignant lesions, the goal of TES is to achieve a full-thickness excision of the tumor down to the mesorectal fat with at least 1 cm of margin circumferentially.
  - For benign lesions, dissection is ideally carried out in the submucosal plane.
- The specimen
  - Should be oriented
- Closure —
  - The defect typically closed with absorbable sutures transversely to avoid narrowing the lumen.

TAMIS

GelPOINT® Path
TRANSANAL ACCESS PLATFORM



Model Number	Description	Size	Quantity
CNO11	GelPOINT Path	4cm x 5.5cm	1/BOX
GelPOINT Path Components			
GelSeal Cap		7.5cm diameter	1
Access Channel with Introducer		4cm x 5.5cm	1
Self-Retaining Sleeves		10mm	3
Obturator		10mm	1

TAMIS

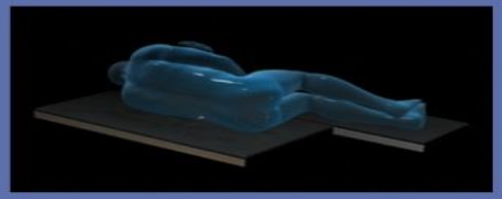
TRADITIONAL LITHOTOMY POSITION

- Facilitates comfortable sitting position for the surgeon
- Most advantageous for anesthesiologist
- Legs should be abducted and flexed past 90 degrees at the hips to provide optimal exposure of the perianal region and create sufficient space for instrument manipulation

MODIFIED PRONE POSITION

- May be helpful for anterior lesions
- Degree of upper-body downward tilt depends on patient's body habitus and circulatory status
- Legs should be abducted and flexed at the hips

RIGHT OR LEFT LATERAL DECUBITUS POSITION



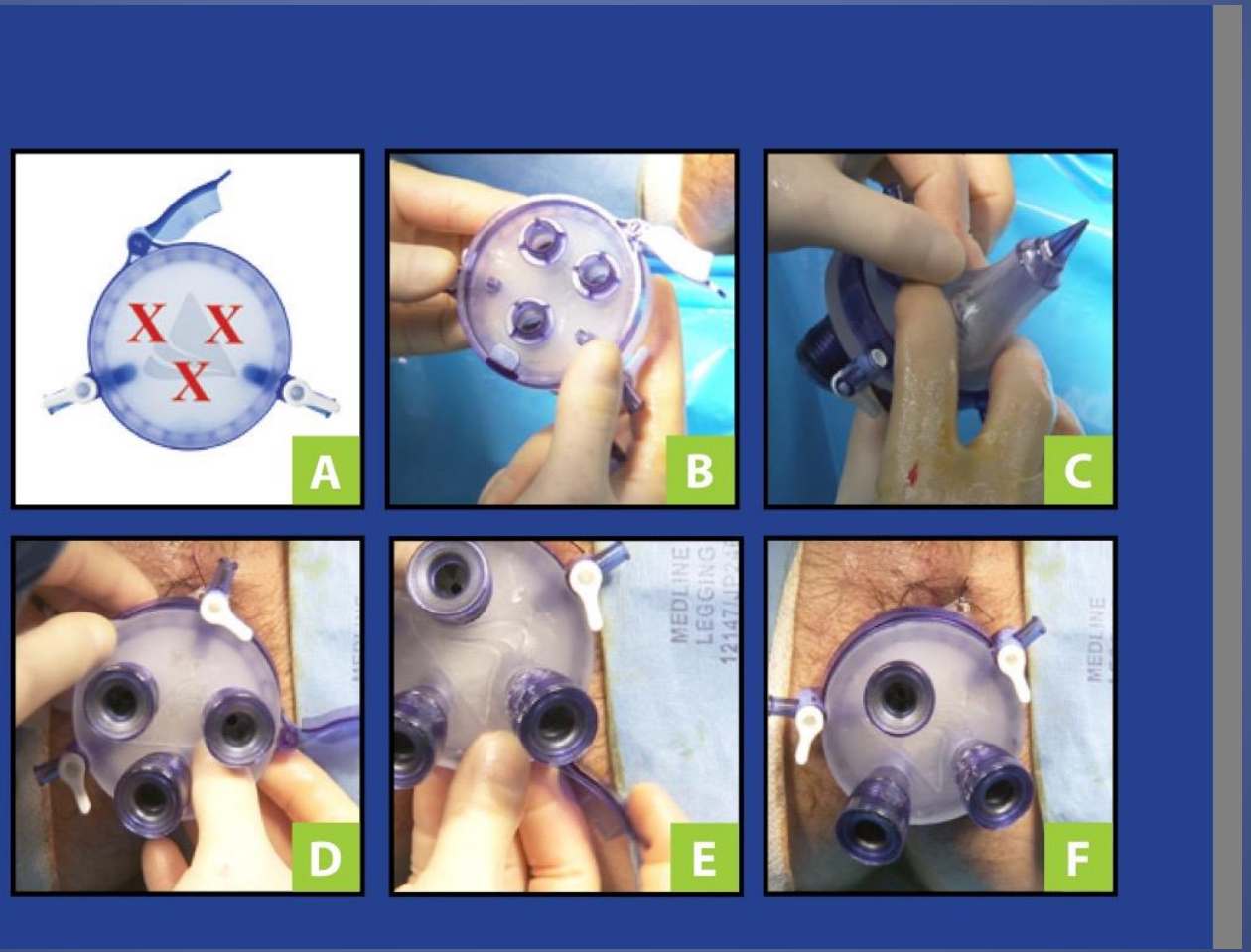
- May be advantageous for obese patients to facilitate pneumorectum
- Legs should be abducted and flexed at the hips, upper leg is secured to contoured rest on anterior side of table while lower leg is placed on leg rest of table and angled forward beneath the hip

STEPS: PATIENT POSITIONING

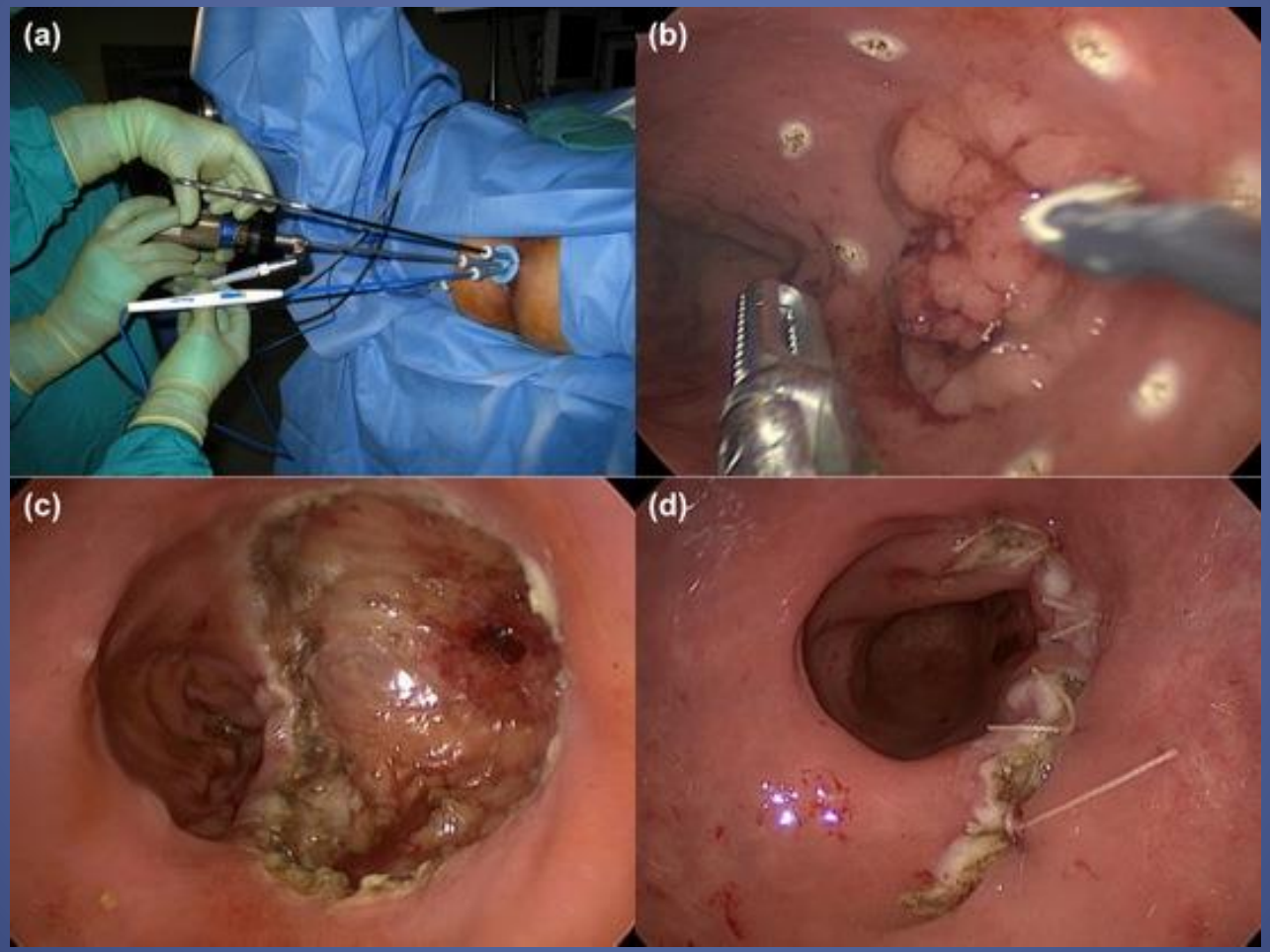
TAMIS

1. Apply generous lubrication to access channel and introducer. Pre-dilate the anus using standard transanal surgery techniques.
2. Manually (A) or using forceps (B), compress access channel in a folded form and place into anus until flange is securely seated behind levator sling (C).
3. Introducer may be inserted to aid in placing the access channel into position (D).
4. Hold access channel in place while suturing through suture tabs to secure (E).
5. Access channel is now fully placed (F).

TAMIS

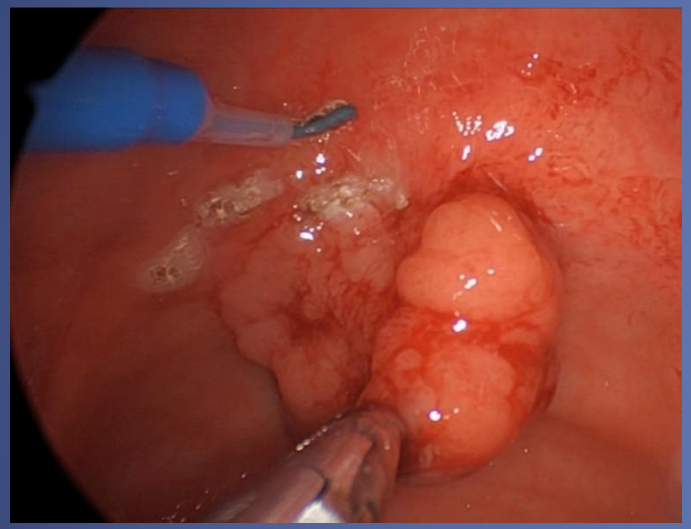


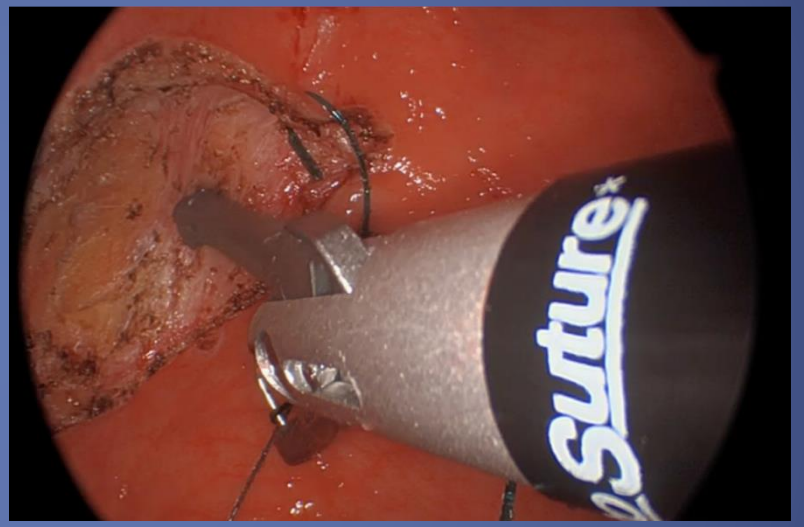
TAMIS

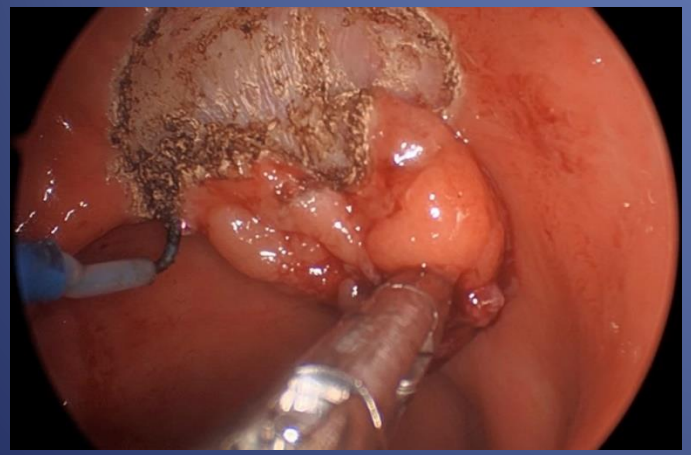


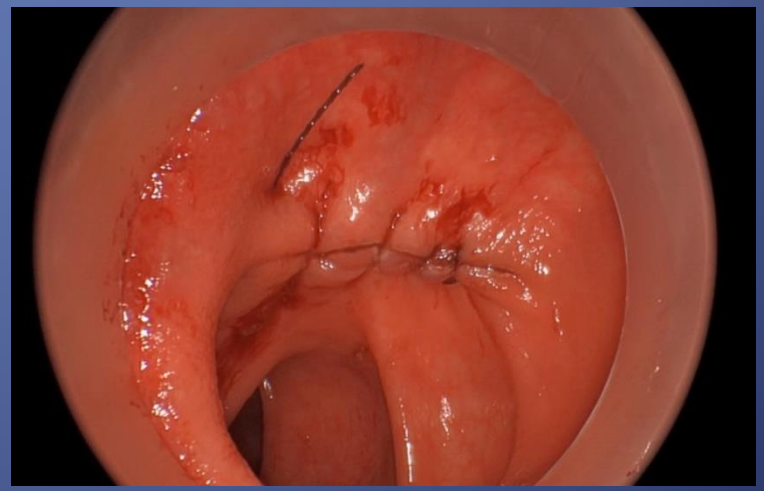
TAMIS

- Turk J Colorectal Dis 2025;35(2):33-40









Case Reports

Transanal Minimally Invasive Surgery (TAMIS), First in Kuwait: A Case Report

Abdullah A AlHaddad et al. Gulf J Oncolog. 2018 Jan.

Abstract

Transanal Minimally Invasive Surgery (TAMIS) is a one of new platform used to help and achieve better outcome in using transanal approach for the treatment of rectal neoplasm. High definition camera and high tech equipment are used to perform this kind of surgery. The main benefit of using this approach is to provide the best outcome or the patient compared to the traditional transanal approach. This platform can be used for a variety of cases, benign and malignant tumor and for the benign condition. We report the first TAMIS perfo b rmed in the Kuwait and probably in the Middle East with 2 years of follow up. We had no complication and patient returned home and to normal activity in next day. More studies needed to validate this technique.

TAMIS

- Conclusion
  - TAMIS is a minimally invasive surgery using different platforms
  - Can be used for benign and malignant neoplasm of the rectum .
  - It is reproducible , safe , feasible and durable
  - Provide better visualization and has equivalent or better oncological result compared to other localized resection
  - Less complications and anal sphincteric injury
  - Utilized for total mesorectal excision with comparable result with standard procedure

TAMIS

- Conclusion
  - Careful patient selection, meticulous surgical planning, and continuous refinement of techniques and instrumentation are paramount to optimizing TAMIS outcomes and ensuring safe and effective application.
  - Advances in surgical technologies and the integration of robotic platforms enhance and optimize the TAMIS procedure , Leading to improve patient outcomes
  - TAMIS offers distinct advantages over traditional transanal excision (TAE) while also providing a more accessible and versatile alternative to other endoscopic techniques such as TEM, TEO, and ESD.

THANK YOU