



# TRANSANAL TOTAL MESORECTAL EXCISION (TA TME) EARLY EXPERIENCE OF KASR ALAINY

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## OVERVIEW

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Transanal total mesorectal excision (TaTME) is a new modality that can be used to for rectal resection that is gaining world wide popularity.

According to the National Institute of health and Care Excellence (NICE), the TaTME can be used for excision of rectum in benign conditions as Ulcerative colitis and Chron's and also in malignant conditions.



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Transanal total mesorectal excision (TaTME) aims to improve the clinical outcome of rectal resection, and to reduce the length of stay in hospital and morbidity after surgery. It may facilitate proctectomy that would be difficult by an open or laparoscopic approach in people with a narrow pelvis or high body mass index, or where the position of the tumor is low in the rectum.



## THE PROCEDURE

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The transanal part of this procedure starts with insertion of a purse-string suture to close the rectal lumen, followed by a full thickness rectotomy.

After identification of the total mesorectal excision (TME) plane, the dissection progresses proximally until connection is made with the dissection from above.

The specimen can be removed through the transanal platform or, if the tumour is large, through the abdomen using a small incision



## LITERATURE REVIEW

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In a systematic review published in Colorectal disease journal in January 2016, Smillis et al stated that TaTME is a feasible and reproducible technique, with good quality of oncological resection.

### **A systematic review of transanal total mesorectal excision: is this the future of rectal cancer surgery?**

C. Simillis, R. Hompes , M. Penna, S. Rasheed, P. P. Tekkis

First published: 4 January 2016 [Full publication history](#)

DOI: [10.1111/codi.13151](https://doi.org/10.1111/codi.13151) [View/save citation](#)

[World J Gastroenterol](#) 2015 Nov 7; 21(41): 11700–11706  
Published online 2015 Nov 7. doi: [10.3748/wjg.v21.i41.11700](https://doi.org/10.3748/wjg.v21.i41.11700)

PMCID: PMC4631971

### **Transanal total mesorectal excision: A valid option for rectal cancer?**

[Nicolaas C. Buichs](#), [Gary A. Nicholson](#), [Frederic Ris](#), [Neil J. Mortensen](#), and [Roel Hompes](#)



Also in an article published in world journal of gastroenterology on November 2015, the authors states that Although the experience with TaTME is still limited, it might be a promising alternative to laparoscopic TME, especially for difficult cases where laparoscopy is too demanding. The preliminary data on complications and short-term oncological outcomes are good, but also emphasize the importance of careful patient selection

## Transanal Total Mesorectal Excision for Rectal Cancer: Outcomes after 140 Patients

Antonio M. Lacy, MD, PhD  Marta M. Tasende, MD, Salvadora Delgado, MD, PhD, María Fernández-Hervía, MD, María Jiménez, MD, PhD, Boja De Lacy, MD, Antoni Castells, MD, PhD, Raquel Bravo, MD, Steven D. Wexner, MD, PhD, FACS, Richard J. Heald, MD, PhD, FACS

Altmetric  54

DOI: <http://dx.doi.org/10.1018/j.jamcolausg.2015.03.058> |  CrossMark



Lastly in an article published in the journal of the American college of surgeons August 2015, the authors declare that Pathologic analysis after experience with 140 patients showed a very good macroscopic quality of TME specimens, which is the most important prognostic factor in rectal cancer. Intraoperative outcomes regarding conversion, surgical times, and intraoperative complications are very satisfactory. Short-term morbidity and oncologic outcomes are as good as in other laparoscopic TME series.

## OUR EXPERIENCE

In the colorectal unit at Cairo university hospitals we started to consider TaTME in our rectal cancer patients.

We have done 4 cases of very low rectal cancer with preserved sphincter complex.

The decision is to do intersphincteric dissection + concomitant TaTME and laparoscopic low anterior resection





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In all cases we start with laparoscopic abdominal exploration for liver mets or peritoneal deposits.

Then we proceed for inter sphincteric dissection from the perineum till we preserve the external sphincter.

This is followed by insertion of the SILS port and continuing TaTME till we reach the abdominal cavity or about to reach it after identifying the Levator ani.

Then we continue the traditional well known laparoscopic approach for low anterior resection including high ligation of the IMA and IMV



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All cases have smooth post operative course except 1 patient who had necrotic anastomosis in which we convert to traditional abdominoperineal resection which we do not relate to the technique of TaTME

In all cases the proximal, distal and circumferential margins were free.

The LNR in all cases were acceptable and comparable to our cases of laparoscopic low anterior resection.



We use 3 different types of SILS port:

- 1- Covidien SILS port
- 2- Karl Storz port.



3- GelPOINT Mini Advanced Access Platform



## DIFFICULTIES



We encounter some difficulties during this early experience cases:

- 1- Narrow field of the operation.
- 2- Difficult manipulation of the instruments due to rigid ports and we found that using the GelPOINT Mini Advanced Access Platform gives wide range of movement for the working instruments.



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3- We found that the pressure of insufflation written in the literature which is 12 mmHg is insufficient , we think that 15 mmHg is good and helps the dissection.

4- Air leak from the perineum field to the abdomen insufflating the abdominal cavity after opening of the peritoneum, this makes further dissection difficult, this can be overcome by inserting a verrous needle into the abdominal cavity.

5- We believe that lateral dissection is more difficult than anterior and posterior dissection regarding reaching the proper plane.

## OUR RECOMMENDATIONS

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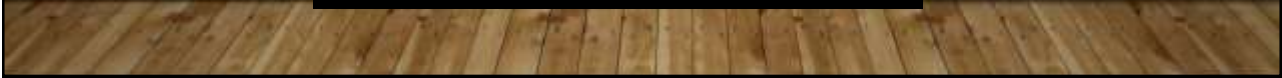
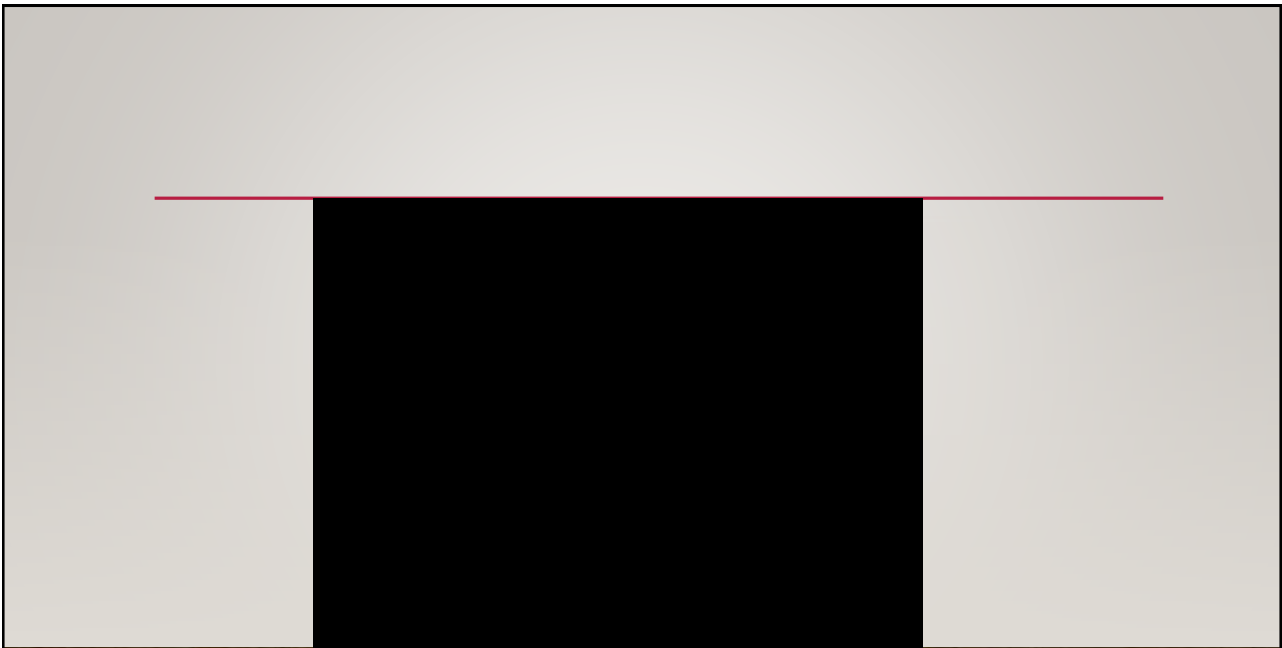


Although the experience with TaTME is still limited, it might be a promising alternative to laparoscopic TME, especially for difficult cases where laparoscopy is too demanding.

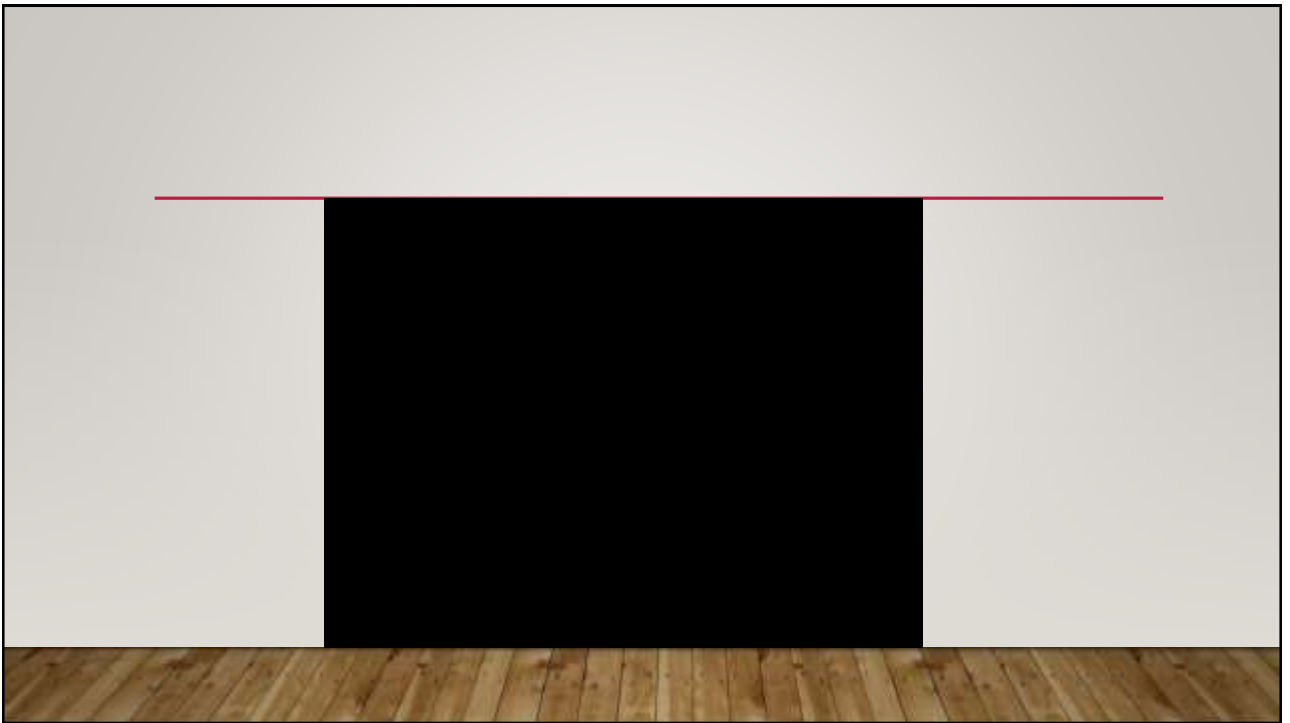
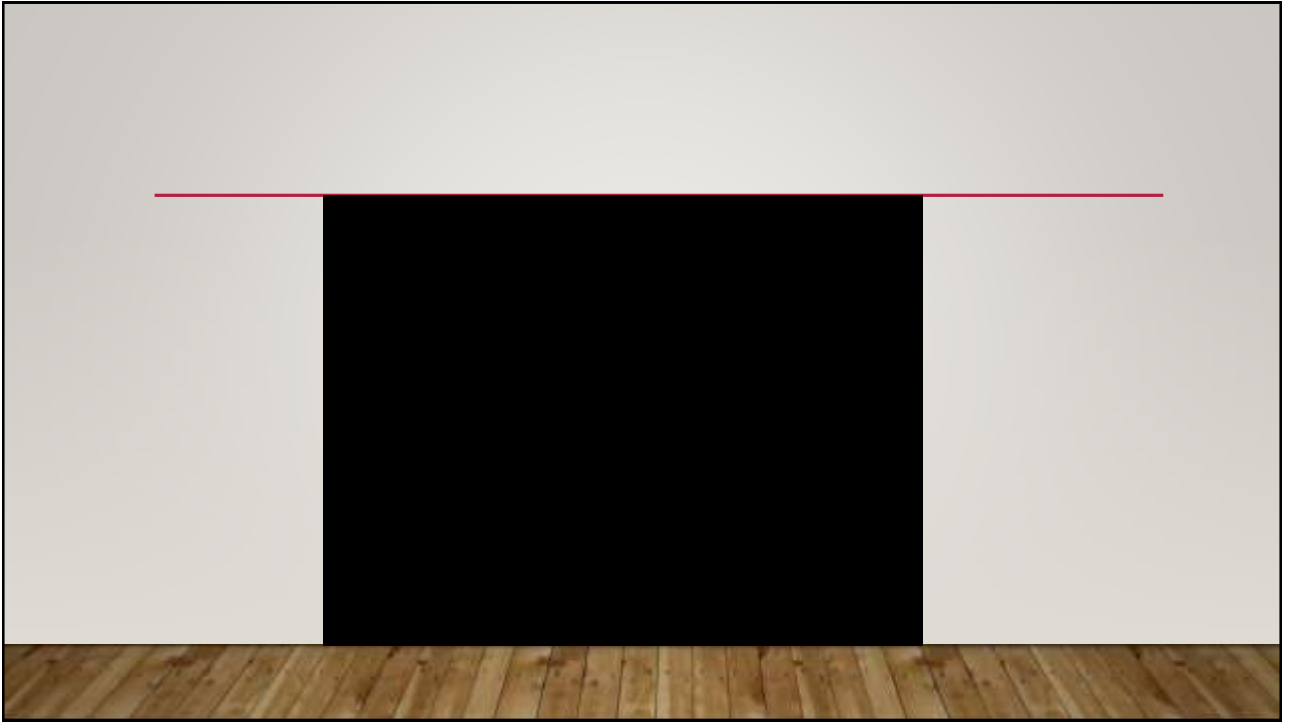
However the technique should be standardized and more training for the procedure need to be encountered.

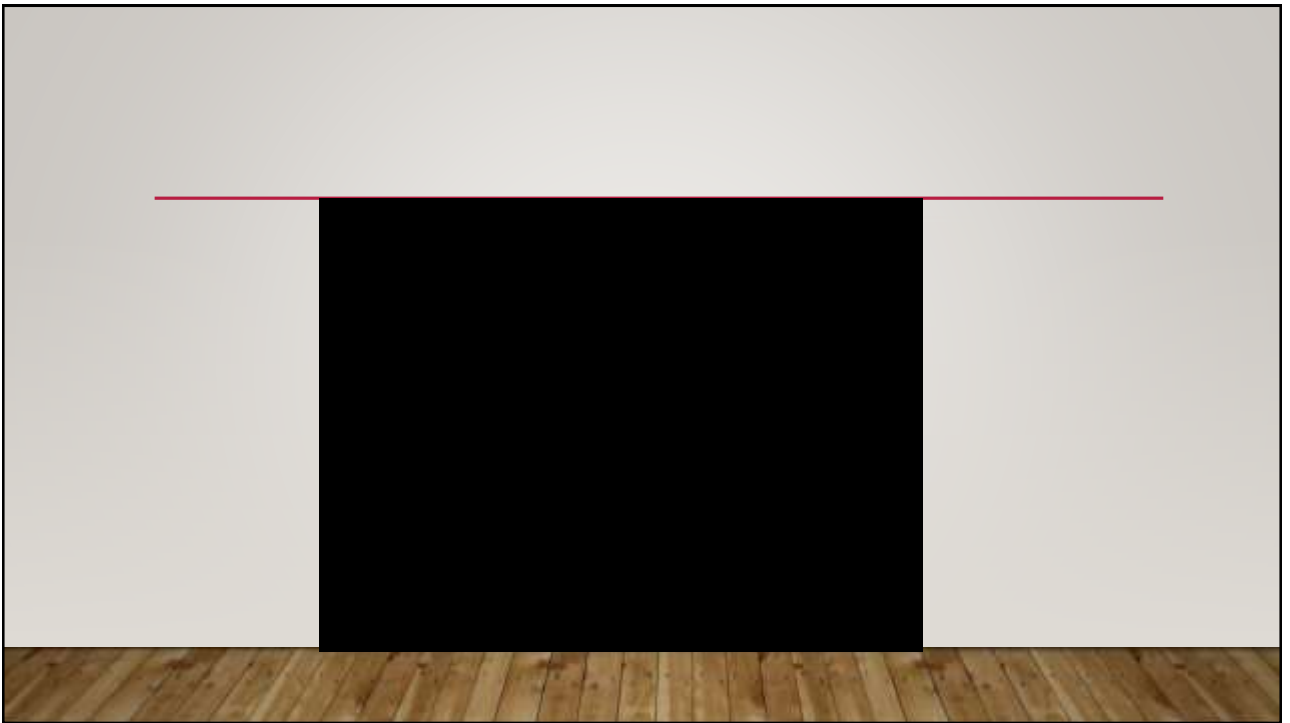
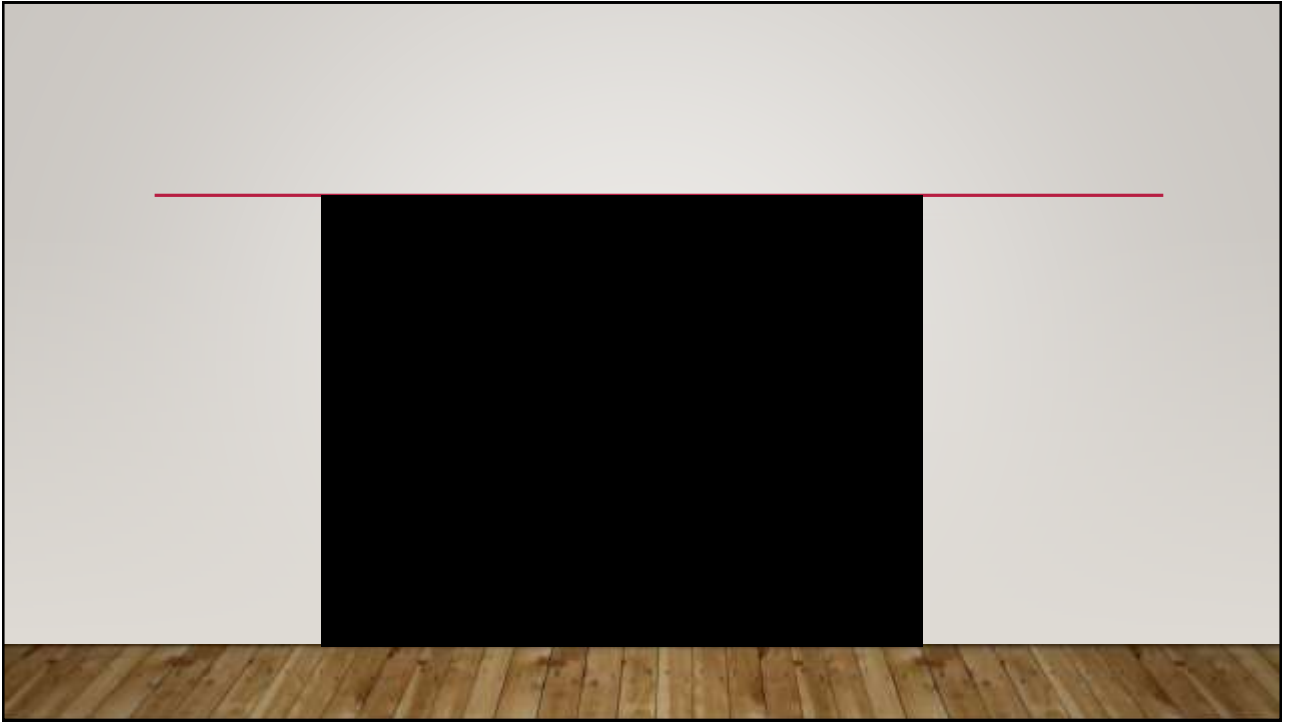
Finally, there is a need for large-scale trials focusing on long-term outcomes and oncological safety before widespread adoption can be recommended.

VIDEO











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**Thank you**  
**Questions??**