



## Transanal Endoscopic Microsurgery vs. Endoscopic Mucosal Resection for Large Rectal Adenomas

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### Letter to Editor

The centralization of complex surgical procedures has improved the results for the benefit of patients [1]. The randomized and multicenter controlled prospective studies are the ones with the greatest scientific evidence. Its implementation and development are not simple. However, the inclusion of centers with a high variability in the experience in the treatments under study may lead to biases in the results.

The study “Randomised controlled trial of Transanal Endoscopic Microsurgery (TEM) versus Endoscopic Mucosal Resection (EMR) for large rectal adenomas (TREND Study)” by Barendse RM et al. [2], conclude in their paper that “EMR may have potential as the primary method of choice due to a tendency of lower complication rates and a better cost-effectiveness ratio”.

I read the study by Barendse et al. [2] with great interest, especially some of the results and conclusions. For example, although their primary outcome was recurrence at 24 months, their conclusions range over several different aspects.

The recurrence rates in this study were 15% for EMR and 11% for TEM, and 66% of resections were R0. In a recent study of 372 rectal adenomas published by our group [3], we reported an overall recurrence rate of 4%, and a rate of R0 resections of 87.1%.

Barendse et al. [2] selected rectal adenomas with benign features. Thirteen per cent presented a definitive pathology of infiltrating adenocarcinoma. Our group reported a rate of 18.8% [4], more than half of which were pT1. In these tumors, local resection with margins greater than 1 mm achieves curative oncological results, associated with good prognostic factors [5]. For this reason, these lesions should be treated with full thickness resection: EMR does not meet these resectability conditions.

In Barendse et al. [2] study, overall morbidity with TEM was 26%, slightly higher than in another recent publication by our group (23%) [6]. Like Clavien’s group, Barendse et al. [2] define major morbidity as higher than IIIa, but recent publications define it as III or higher [6,7]. Applying this modification, the final results change significantly: the mortality rates rise from 1/87 (1.1%) to 15/87 (17.2%) in EMR and from 7/89 (7.9%) to 14/89 (15.7%) in TEM.

Barendse RM et al. [2] report a major difference in costs between EMR and TEM. Our group found that with the use of TEM/TEO in centers with high volume (>50 cases/year) the price is lower [8], especially in outpatient and same day surgery programs.

These results for TEM, which diverge from ours, are probably due to the inclusion of centers without a great deal of experience with the technique, which may well have increased the variability in the results and may have introduced a bias. Some of the centers included in Barendse et al. [2] study had only treated 10 cases with TEM, even though in another study the author recommends a minimum of 35 procedures [9].

Although Barendse et al. [2] study is based on a multicenter clinical trial, the TEM branch does not achieve the results expected at a center with high experience with the technique; therefore, the comparison with EMR will be biased.

### References

1. Archampong D, Borowski D, Wille-Jørgensen P, Iversen LH. Workload and surgeon's specialty for outcome after colorectal cancer surgery. *Cochrane Database Syst Rev.* 2012;3.
2. Barendse RM, Musters GD, de Graaf EJR, van den Broek FJC, Consten ECJ, Doornebosch PG, et al. TREND Study group. Randomised controlled trial of transanal endoscopic microsurgery versus endoscopic mucosal

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- resection for large rectal adenomas (TREND Study). *Gut*. 2018;67(5):837-46.
3. Serra-Aracil X, Ruiz-Edo N, Casalots-Casado A, Mora-López L, Pallisera-Lloveras A, Serra-Pla S, et al. Importance of resection margins in the treatment of rectal adenomas by transanal endoscopic surgery. *J Gastrointest Surg*. 2018.
  4. Serra-Aracil X, Caro-Tarrago A, Mora-López L, Casalots A, Rebasa P, Navarro-Soto S. Transanal endoscopic surgery with total wall excision is required with rectal adenomas due to the high frequency of adenocarcinoma. *Dis Colon Rectum*. 2014;57(7):823-9.
  5. Borschitz T, Gockel I, Kiesslich R, Junginger T. Oncological outcome after local excision of rectal carcinomas. *Ann Surg Oncol*. 2008;15(11):3101-8.
  6. Serra-Aracil X, Labró-Ciurans M, Rebasa P, Mora-López L, Pallisera-Lloveras A, Serra-Pla S. Morbidity after transanal endoscopic microsurgery. Risk factors for postoperative complications and the design of a one-day surgery program. *Surg Endosc*. 2018;1-10.
  7. Koedam TWA, Velcamp Helbach M, Penna M, Wijsmuller A, Doornebosch P, van Westreenen HL, et al. Short-term outcomes of transanal completion total mesorectal excision (cTaTME) for rectal cancer: a case-matched analysis. *Surg Endosc*. 2018.
  8. Serra-Aracil X, Mora-Lopez L, Alcantara-Moral M, Caro-Tarrago A, Gomez-Diaz CJ, Navarro-Soto S. Transanal endoscopic surgery in rectal cancer. *World J Gastroenterol*. 2014;20(33):11538-45.
  9. Barendse RM, Dijkgraaf MG, Rolf UR, Bijnen AB, Consten EC, Hoff C, et al. Colorectal surgeons' learning curve of transanal endoscopic microsurgery. *Surg Endosc*. 2013;27(10):3591-602.