

055. The Comparative Efficacy Surgical Techniques of Transanal Endoscopic Microsurgery Versus Radical Resection for Early-Stage Rectal Cancer: A Systematic Review And Meta-Analysis

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ABSTRACT

Background: Colorectal cancer ranks third in incidence and second in mortality among all tumours. Radical surgery has been the conventional treatment for early-stage rectal cancer. Advancements in medical technology have established Transanal Endoscopic Microsurgery (TEM.) as a viable minimally invasive surgical treatment for early-stage cancer. Nonetheless, there is still ambiguity regarding the selection of surgical methods for individuals with early-stage rectal carcinoma. This meta-analysis aims to compare the outcomes of two surgical techniques. **Methods:** We searched PubMed, Web of Science, and the Cochrane Library to discover research and trials published from 2010 up to 2023. We utilised Revman 5.4.2 to do the meta-analysis. **Results:** Five studies were considered, comprising 358 patients, including transanal endoscopic microsurgery and radical resection for early-stage rectal cancer. Our findings indicate that TEM surgical approach was significant in reducing intraoperative bleeding MD -131.18 95% CI [-205.79;-56.56] p=0.0006, operative time MD -82.37 95% CI [-97.59;-67,16] p< 0.00001. However, our result shows that TEM surgical increased hospital stay MD -2.50 95% CI [-10.94;-5.95] p< 0.56. We also found TEM surgery was associated with lowering the incidence of post-operative bleeding RR 0.32 95% CI [0.11,0.97] p =0.04 and permanent stoma RR 0.25 95% CI [0.07,0.83] p =0.02. **Conclusion:** This study demonstrated that TEM surgery was associated with reducing the incidence of intra-operative bleeding, operative time, post-operative bleeding and permanent stoma. Additional investigations are required to validate these findings.

Keywords: Early-Stage Rectal Cancer, Transanal Endoscopic Microsurgery, Radical Surgery, Complication, Long-Term Outcomes

DOI: <https://doi.org/10.24843/JBN.2024.v08.is02.p055>