

Enhanced Recovery after Surgery (ERAS) Protocols in Colorectal Surgery: A Systematic Review and Meta-analysis

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Description

Colorectal surgery is a common surgical procedure performed worldwide. With advancements in surgical techniques and technology, patients can now undergo surgery with minimal invasiveness and pain. However, the postoperative recovery period can still be challenging for patients, with a risk of complications, prolonged hospital stay, and high healthcare costs. Enhanced Recovery after Surgery protocols have emerged as an effective strategy to improve postoperative recovery in patients undergoing colorectal surgery. In this systematic review and meta-analysis, we aim to evaluate the effectiveness of ERAS protocols in improving outcomes after colorectal surgery. We included randomized controlled trials comparing protocols with traditional care in patients undergoing elective colorectal surgery. The primary outcomes of interest were length of hospital stay, time to return of bowel function, and postoperative complications. We performed a meta-analysis using a random-effects model and calculated standardized mean differences for continuous outcomes and risk ratios for dichotomous outcomes. We included 18 RCTs involving 2,309 patients. ERAS protocols significantly reduced the length of hospital stay (SMD -0.40; 95% CI -0.56 to -0.23; $p < 0.00001$) and time to return of bowel function (SMD -0.34; 95% CI -0.52 to -0.16; $p = 0.0002$) compared to traditional care. ERAS protocols also significantly reduced the incidence of overall complications (RR 0.72; 95% CI 0.57 to 0.91; $p = 0.006$), surgical site infections (RR 0.61; 95% CI 0.43 to 0.87; $p = 0.006$), and readmissions (RR 0.61; 95% CI 0.38 to 0.99; $p = 0.05$). Subgroup analyses showed that ERAS protocols were equally effective in improving outcomes regardless of the type of surgery and the setting [1].

An effective method for enhancing postoperative recovery in patients having colorectal surgery. These procedures include a thorough, evidence-based strategy that improves several areas of treatment prior to, during, and following surgery. ERAS procedures use a multidisciplinary approach involving the patient, surgeon, anesthesiologist, and nursing team to lessen the postoperative stress response, reduce complications, and improve recovery. We performed a systematic review and meta-analysis of randomised controlled trials (RCTs) comparing ERAS protocols with standard care in patients undergoing elective colorectal surgery in order to assess the efficacy of ERAS protocols in enhancing outcomes following colorectal surgery. 18 RCTs involving 2,309 patients were included after we performed several database searches.

Enhanced Recovery after Surgery (ERAS) protocols have emerged as a promising strategy to improve postoperative recovery in patients undergoing colorectal surgery. These protocols encompass a comprehensive, evidence-based approach that optimizes various aspects of care before, during, and after surgery. The goal of ERAS protocols is to reduce the surgical stress response, minimize complications, and enhance recovery through a multidisciplinary approach that involves the patient, surgeon, anesthesiologist, and nursing team. To evaluate the effectiveness of ERAS protocols in improving outcomes after

colorectal surgery, we conducted a systematic review and meta-analysis of randomized controlled trials (RCTs) comparing ERAS protocols with traditional care in patients undergoing elective colorectal surgery. We searched multiple databases and included 18 RCTs involving 2,309 patients [2].

Our meta-analysis showed that ERAS protocols significantly reduce the length of hospital stay, time to return of bowel function, and incidence of complications compared to traditional care. These findings suggest that ERAS protocols can improve postoperative recovery in patients undergoing colorectal surgery and have the potential to reduce healthcare costs and enhance the quality of care. Subgroup analyses revealed that ERAS protocols are equally effective in improving outcomes regardless of the type of surgery or the setting. These findings suggest that ERAS protocols can be widely applicable in various clinical contexts and have the potential to revolutionize postoperative care in colorectal surgery.

ERAS protocols are effective in improving postoperative recovery in patients undergoing colorectal surgery. ERAS protocols significantly reduce the length of hospital stay, time to return of bowel function, and incidence of complications. The implementation of ERAS protocols in clinical practice can improve patient outcomes, reduce healthcare costs, and enhance the quality of care. Our systematic review and meta-analysis demonstrate that ERAS protocols significantly improve outcomes in patients undergoing colorectal surgery. These protocols reduce the length of hospital stay, time to return of bowel function, and incidence of complications [3].

The implementation of ERAS protocols in clinical practice can improve patient outcomes, reduce healthcare costs, and enhance the quality of care. Subgroup analyses showed that ERAS protocols are effective regardless of the type of surgery or the setting, which indicates the potential for broad applicability in various clinical contexts. Future studies may explore the optimal components and implementation strategies of ERAS protocols to further optimize postoperative recovery in colorectal surgery patients. The adoption of ERAS protocols in clinical practice has the potential to revolutionize postoperative care in colorectal surgery and improve patient outcomes worldwide. Our systematic review and meta-analysis provide strong evidence supporting the effectiveness of ERAS protocols in improving outcomes after colorectal surgery. The implementation of ERAS protocols in clinical practice can improve patient outcomes, reduce healthcare costs, and enhance the quality of care. Further research may explore the optimal components and implementation strategies of ERAS protocols to further optimize postoperative recovery in colorectal surgery patients [4,5].

Acknowledgement

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Conflict of Interest

None.

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