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ERAS compliance outweighs patient risk in high-risk colon cancer surgery

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Enhanced Recovery After Surgery (ERAS) protocols have substantially improved perioperative care in colorectal surgery, leading to reduced hospital stay and lower complication rates [1-3]. However, persistent concerns regarding tolerability often limit the application of ERAS protocols in older or frail high-risk patients. A recent study by Alshiakh et al. [4] challenged this paradigm, indicating that surgical success is driven more by optimized perioperative care than by baseline patient comorbidities.

The most transformative finding of this study was that ERAS compliance was a more powerful predictor of outcomes than medical history. In a large cohort of 1,035 patients, the researchers demonstrated that achieving a compliance rate of 70% or more reduced the risk of prolonged hospital stay by 86% and the risk of complications by 70%. Crucially, while univariate analysis initially flagged advanced age and comorbidities as risk factors for poor outcomes, these factors lost their independent statistical significance in multivariate models when ERAS compliance was considered. This suggests a "mediation model": patients with high risk often have poorer outcomes not because of their physiology alone, but because their conditions make it harder for clinical teams to adhere to the full ERAS protocol.

The need for tailoring ERAS

This study provides a detailed assessment of vulnerable populations where ERAS may fail. For instance, patients with renal disease showed the lowest compliance (69.69%) and the highest complication rate (45.8%). This is largely driven by challenges in standard ERAS elements such as fluid restriction and pharmacological pain management, which are often contraindicated or more complex in the setting of chronic kidney disease.

Similarly, older patients face specific hurdles during early mobilization. These insights shift the clinical question from "Is this patient too risky for ERAS?" to "How can we adapt the ERAS protocol to ensure this specific patient reaches an adequate compliance threshold?" The authors rightly advocate for a tailored ERAS approach that optimizes modifiable treatment factors rather than relying on traditional risk-based patient selection.

A call for inclusive optimization

This study marks a substantial step toward patient-centered perioperative care. It proves that the benefits of ERAS are not a luxury for the healthy and young but a necessity for the patient with high-risk factors who has the most to gain from optimized recovery. By demonstrating that high compliance can effectively offset the physiological disadvantages of age and comorbidities, this study empowers surgical teams to move away from exclusionary practices.

Conclusion

The application of ERAS protocols to improve the outcomes of patients with colorectal cancer is increasingly recognized as essential. However, in clinical practice, a certain degree of hesitation exists when applying these protocols to older patients or those with significant comorbidities. In this context, robust evidence is particularly important for guiding clinicians

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regarding when and how ERAS can be safely implemented. This study provides valuable data that may help address these clinical concerns. However, obtaining sufficiently diverse patient data remains challenging. To overcome this limitation and establish clearer evidence, multicenter or multinational collaborative studies should be considered.

The future of colon cancer surgery lies in the ability to bridge the compliance gap through multidisciplinary support, ensuring that every patient receives the full protective benefits of evidence-based perioperative care.

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All work was done by JK.

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