



Contents lists available at ScienceDirect

Asian Journal of Surgery

journal homepage: www.e-asianjournalsurgery.com

Letter to the Editor

Surgical strategies and clinical outcomes in Crohn's disease: Rethinking indications and postoperative management

Keywords:

Crohn's disease
Intestinal surgery
Laparoscopic resection
Postoperative recurrence
Strictureplasty
Biologic therapy
Perioperative management

Dear Editor,

Crohn's disease (CD) remained one of the most challenging inflammatory bowel disorders for both physicians and surgeons. Although advances in biological and small-molecule therapies had greatly improved disease control, surgery continued to play an essential role in managing complications such as strictures, fistulas, perforations, and abscesses. In recent years, an increasing number of studies had re-evaluated the timing, surgical techniques, and postoperative care strategies for CD, which might profoundly influence long-term outcomes and patient quality of life.¹

Historically, surgery for CD was viewed as a "last-resort" option, often performed only after prolonged medical therapy failure. However, delayed surgical intervention frequently resulted in irreversible intestinal damage, malnutrition, and psychosocial burden. Recent evidence suggested that early, well-planned surgery—particularly minimally invasive approaches such as laparoscopic or robotic ileocolic resection—was associated with lower morbidity, faster recovery, and reduced postoperative pain. These findings challenged the traditional "step-up" approach and emphasized the value of a "top-down" strategy that incorporated early multidisciplinary evaluation among gastroenterologists, surgeons, radiologists, and nutritionists to achieve optimal timing and technique selection.²

The extent of resection also remained a critical topic. While aggressive resection might reduce short-term recurrence, it inevitably increased the risk of short bowel syndrome and nutritional deficiencies. Limited resection preserving bowel length had been shown to lower long-term complications without compromising disease control. Similarly, strictureplasty was a valuable bowel-conserving technique for multiple fibrostenotic lesions, especially in young patients requiring repeated interventions. These approaches represented a paradigm shift toward functional preservation rather than anatomical radicality.³

Postoperative recurrence continued to be a major concern in

clinical practice. Studies from Asian centers revealed recurrence rates and patterns similar to those observed in Western populations, suggesting that genetic susceptibility, gut microbiota imbalance, and dietary habits might contribute collectively to disease heterogeneity. Routine endoscopic surveillance within 6–12 months after resection enabled early detection of subclinical recurrence, allowing timely escalation of therapy. Moreover, early postoperative administration of biologics, particularly anti-TNF or anti-integrin agents, had markedly reduced endoscopic recurrence and delayed clinical relapse in high-risk patients.⁴

Perioperative optimization also played a pivotal role in improving outcomes. Patients with active inflammation often experienced hypoalbuminemia, anemia, and immunosuppression, which increased postoperative risk. Nutritional support through preoperative enteral feeding, especially exclusive enteral nutrition, had been demonstrated to decrease inflammation, correct metabolic deficits, and enhance anastomotic healing. Likewise, stringent infection control, smoking cessation, and psychological counseling formed indispensable components of holistic perioperative care.⁵

In conclusion, surgery in Crohn's disease should no longer be considered a treatment failure but an integral element of a comprehensive, multidisciplinary management plan. Early surgical intervention, minimally invasive and bowel-sparing techniques, optimized nutrition, and proactive postoperative surveillance together contributed to improved long-term prognosis. Further multicenter, prospective studies are warranted to refine individualized surgical indications and integrate biologic therapy into perioperative strategies, ultimately advancing precision surgery for Crohn's disease.

Funding

This work was supported by the Shandong University of TCM Doctoral Quality & Innovation Grant [grant number YJSTZCX2025023]; Construction of an Automated Detection Platform for Stool-Based SDC2 and TFPI2 Gene Methylation in the Auxiliary Diagnosis of Colorectal Cancer [320.6750.2024-25-3]; and Shandong Provincial Key Disciplines Center [YYP2025-XK13].

Conflict of interests

The authors declared no conflict of interest.

<https://doi.org/10.1016/j.asjsur.2025.12.082>

1015-9584/© 2025 Asian Surgical Association and Taiwan Society of Coloproctology. Publishing services by Elsevier B.V. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Please cite this article as: D. Li, C. Jiang and Z.-A. Guan, Surgical strategies and clinical outcomes in Crohn's disease: Rethinking indications and postoperative management, *Asian Journal of Surgery*, <https://doi.org/10.1016/j.asjsur.2025.12.082>.

Downloaded for Anonymous User (n/a) at Columbia University from ClinicalKey.com by Elsevier on March 07, 2026.
For personal use only. No other uses without permission. Copyright ©2026. Elsevier Inc. All rights reserved.

References

1. Hashash JG, Yu Ci Ng F, Farraye FA, et al. Inter- and intraobserver variability on endoscopic scoring systems in Crohn's disease and ulcerative colitis: a systematic review and meta-analysis. *Inflamm Bowel Dis.* 2024;30(11):2217–2226.
2. Ahmed Ali U, Kiran RP. Surgery for Crohn's disease: upfront or last resort? *Gastroenterol Rep.* 2022;10. goac63.
3. Michelassi F. Expert commentary on bowel-preserving surgery for diffuse stricturing Crohn's jejunoileitis. *Dis Colon Rectum.* 2022;65(10):1171–1172.
4. Olteanu AO, Klimko A, Tieranu EN, et al. Managing Crohn's disease postoperative recurrence beyond prophylaxis: a comprehensive review with meta-analysis. *Biomedicine.* 2024;12(11).
5. Bak MTJ, van Ruler O, Stassen L, et al. Preoperative screening and prehabilitation strategies prior to ileocolic resection in patients with Crohn's disease are not incorporated in routine care. *Int J Colorectal Dis.* 2023;38(1):254.

Donglin Li^{a,c}, Chuan Jiang^{a,b,c}, Zhong-An Guan^{b,*}^a The First College of Clinical Medicine, Shandong Traditional Chinese Medicine University, Jinan, China^b Department of Proctology, Affiliated Hospital of Shandong University of Traditional Chinese Medicine, Jinan, China^{*} Corresponding author. Department of Proctology, Affiliated Hospital of Shandong University of Traditional Chinese Medicine, No. 16369, Jingshi Road, Lixia District, Jinan, Shandong, 250000, China.E-mail address: guanlaoshiyouxiang@163.com (Z.-A. Guan).11 November 2025
Available online xxx^c Donglin Li and Chuan Jiang contributed equally to this work.