



# Prevention of postoperative recurrence in Crohn's disease: the never-ending story

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**Article:** Factors associated with anti-tumor necrosis factor effectiveness to prevent postoperative recurrence in Crohn's disease (**Intest Res 2022;20:303-312**)

Crohn's disease (CD) is a chronic, relapsing inflammatory disorder of intestinal tract without cure.<sup>1</sup> Approximately 20% of patients with CD show complicating behavior such as stricturing or penetrating complications at the time of diagnosis of CD, which usually require intestinal resection.<sup>1</sup> Despite the development of therapeutic armamentarium including immunosuppressive and biologic agents,<sup>2-4</sup> the proportion of patients with complicating behavior of CD continuously increases throughout the disease course after diagnosis of CD, reaching above 80%.<sup>5</sup> The cumulative rate of intestinal resection reached 44% at 10 years and 70% at 20 years after CD diagnosis.<sup>6</sup> However, the first operation does not mean the end of the disease course of CD. Many patients with CD experienced postoperative recurrence after first surgery and 25% of them usually undergo second intestinal resection during the follow-up.<sup>7</sup> Repeated surgeries for CD can have a negative impact on patients' quality of life, mainly due to the bowel habit change and short-bowel syndrome, etc. Therefore, it is currently recommended to perform an ileocolonoscopy at 6 months after surgery to evaluate the severity of the endoscopic findings based on the Rutgeerts score and to consider therapeutic escalation such as immunosuppressants or anti-tumor necrosis factor

(anti-TNF) therapy in case of postoperative endoscopic recurrence.<sup>8</sup>

Buisson et al.<sup>9</sup> in this issue of *Intestinal Research* investigated the efficacy of anti-TNF agents and associated factors in preventing postoperative recurrence of CD. They reviewed medical records of 316 CD patients who underwent intestinal resection from 2011 to 2017 using a prospectively-maintained database of the University of Chicago Medicine Inflammatory Bowel Disease Center. In 117 anti-TNF-naïve patients, anti-TNF therapy was more effective than immunosuppressive agents and no medication/5-aminosalicylates to prevent endoscopic postoperative recurrence, defined by Rutgeerts index  $\geq 2$  at 6 months. In 199 patients exposed to anti-TNF agents prior to surgery, combination with anti-TNF and immunosuppressive agents was more effective than anti-TNF monotherapy to prevent endoscopic postoperative recurrence. They concluded that anti-TNF agents were the most effective medication to prevent postoperative recurrence and combination with anti-TNF and immunosuppressive agents should be considered in anti-TNF exposed patients. In addition, primary non-response to anti-TNF before surgery and prophylactic monotherapy were identified as factors associated with anti-TNF failure to prevent endoscopic postoperative recurrence in CD patients. The strength of this study was that it was one of the real-world evidence that confirmed the importance of an active strategy of using anti-TNF agents alone or in combination with immunosuppressive agents to prevent postoperative re-

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currence in CD. However, the weak point of this study was a referral center-based, retrospective study, which can cause referral bias. Also, they did not present data on therapeutic drug monitoring, such as trough levels of anti-TNF agents and anti-drug antibodies to anti-TNF agents.

The unmet needs for the optimal management of postoperative recurrence of CD are the validation of modified scoring systems to stratify patients at high risk of postoperative recurrence, the development of noninvasive monitoring tools such as bowel ultrasound, and new surgical modalities to reduce postoperative recurrence using diverse methods of anastomosis such as antimesenteric functional end-to-end anastomosis.<sup>10</sup> Additionally, the role of newer biologics and small molecules in the prevention of postoperative recurrence of CD should be investigated. The importance of navigating optimal strategy for preventing recurrence of CD after surgery cannot be overemphasized for all CD patients to “live happily ever after.”

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### Conflict of Interest

No potential conflict of interest relevant to this article was reported.

### Data Availability Statement

Not applicable.

### Author Contribution

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