



Predictive factors for endoscopic recurrence after ileocolic resection for Crohn's disease

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These days, despite the increased use of immunomodulators and biologic agents, approximately 70%-80% of patients with Crohn's disease (CD) undergo surgical resection and up to 70% of these require a second operation due to continuing inflammation (1). Therefore, postoperative recurrence (POR) still remains a crucial issue. The mechanism of POR is not exactly known, but it may be mediated by luminal contents. POR can be determined and measured clinically and endoscopically (2).

Clinical POR can be defined as the recurrence of symptoms leading to treatment changes or hospitalization after the exclusion of other causes such as bile salt diarrhea, bacterial overgrowth, and obstruction due to adhesions (3). Clinical POR rates are lower than endoscopic recurrence rates. Clinical POR develops within 1 year after surgery in approximately 25% of patients (4).

Endoscopic POR is generally considered to precede clinical recurrence and has been reported to occur in 58%-72% of patients within 1 year postoperatively (4). The mucosa proximal to the intestinal anastomosis (neoterminal ileum) is at a particularly high risk of recurrence. Endoscopic POR can be quantified using Rutgeerts endoscopic score, and endoscopy-based management can be applied (5). Based on this score, five recurrence risk groups have been defined (Table 1). Endoscopic recurrence is generally defined as Rutgeerts score of ≥ 2 (5).

In the present article, a retrospective single-center study was conducted; it included 42 patients with CD who had undergone ileocolic resection between 2003 and 2014 (6). The endoscopic POR rate within 6-12 months after ileocolic resection was 59.5% (25 of 42 patients). This recur-

rence rate was comparable with that in other studies that have reported endoscopic recurrence rates in 54%-75% of patients within 1 year after surgical resection (6). Currently, there is no agreement on the optimal approach to reduce POR in patients with CD. Patient stratification according to Rutgeerts scoring system is still the cornerstone in patients with CD within the first year after surgical resection (5). As the result of endoscopy is obtained within 6-12 months after surgery, it does not help physicians determine the best therapeutic approach during the early postoperative period. During this period, some predictive factors can be used to discriminate high-risk patients (7). Smoking, prior intestinal resection, penetrating disease behavior, perianal disease, extensive bowel disease (>50 cm), preoperative corticosteroid use, postoperative immunomodulatory or biologic medical treatment, the presence of granulomas, myenteric plexitis, and fecal calprotectin have been found to be risk factors for POR (1,2,4,7-9). However, the POCER trial, in which smoking, penetrating disease behavior, and prior intestinal resection were accepted as high

Table 1. Definition of Rutgeerts postoperative endoscopic ileal score (4)

Score	Definition
i0	No lesions
i1	≤ 5 aphthous lesions
i2	> 5 aphthous lesions with normal mucosa between the lesions or skip areas of larger lesions or lesions confined to the ileocolonic anastomosis
i3	Diffuse aphthous ileitis with diffusely inflamed mucosa
i4	Diffuse inflammation with already larger ulcers, nodules, and/or narrowing

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risks for endoscopic recurrence, reported that almost half of the low-risk patients experienced endoscopic POR 18 months after surgery (9). Therefore, the impact of predictive factors still remains limited (7). In the present article, most of these factors previously cited were not significant in increasing endoscopic POR. Perianal disease and the shorter duration of CD have been found to be the only predictive factors for endoscopic POR (6).

Our efforts should continue to identify high-risk patients for endoscopic POR with the hope of a better prognosis that can allow a targeted approach and beneficial therapeutic prophylaxis.

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