## LETTER TO THE EDITOR



## A New Anastomotic Technique for Prevention of Postoperative Recurrence in Crohn's Disease

Takayuki Yamamoto

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## To the Editor:

With great interest, I read the article by Fichera et al. on a new anastomotic technique for Crohn's disease (CD). The authors performed an antimesenteric functional end-to-end hand-sewn (Kono-S) anastomosis for 46 cases of CD. One patient developed an anastomotic leak, which was successfully treated conservatively. At a mean follow-up of 6.8 months, 18 patients (43 %) showed an average Rutgeert's score of 0.7 (range, 0–3) in endoscopic examination. They concluded that the Kono-S anastomosis is safe; however, long-term studies are necessary to confirm its efficacy in preventing postoperative recurrence.

About a decade ago, many authors (including me) reported that a stapled functional end-to-end anastomosis (SFEA) with a wider anastomotic lumen reduced a risk of recurrence after surgery for CD.<sup>2</sup> Fecal stasis and subsequent bacterial overgrowth are implicated in anastomotic recurrence in CD. A wider anastomosis is less likely to cause a functional obstruction and may be associated with a lower risk of recurrence. However, the favorable results after SFEA in the previous studies should be interpreted with caution. Most previous studies were retrospective. The follow-up duration was shorter in the SFEA group as compared with conventional anastomosis group. Recently, a large randomized controlled trial (RCT)<sup>3</sup> compared clinical and endoscopic recurrence rates between patients who had SFEA and conventional (handsewn end-to-end) anastomosis. The clinical and endoscopic recurrence rates were not significantly different between the two groups. Based on the results of this high-quality study, anastomotic technique following bowel resection does not seem to affect postoperative recurrence.

T. Yamamoto (🖂)

Inflammatory Bowel Disease Center, Yokkaichi Social Insurance Hospital, 10-8 Hazuyamacho, Yokkaichi, Mie 510-0016, Japan

e-mail: nao-taka@sannet.ne.jp

Previous surgical efforts for prevention of postoperative recurrence mainly focus on the size of the anastomotic lumen, not on the site of the recurrence. In CD, the mesenteric side of the intestine is the original site of anastomotic recurrence. In the Kono-S anastomosis, side-to-side anastomosis is created on the antimesenteric side. The Kono-S anastomosis is an attractive anastomotic technique in the surgical management of CD. The authors' short-term experience has confirmed the safety and efficacy of this new technique. In the era of biologics, the impact of infliximab on postoperative recurrence should be considered. A number of studies found that infliximab significantly reduced the risk of recurrence after resection for CD.<sup>4</sup> To evaluate the long-term efficacy of the Kono-S anastomosis, large RCTs assessing clinical and surgical recurrence rates as compared with conventional anastomosis are necessary.

Conflict of Interest None to declare.

## References

- Fichera A, Zoccali M, Kono T. Antimesenteric functional end-toend handsewn (Kono-S) anastomosis. J Gastrointest Surg 2012;16:1412–1416.
- Yamamoto T, Bain IM, Mylonakis E, Allan RN, Keighley MR. Stapled functional end-to-end anastomosis versus sutured end-toend anastomosis after ileocolonic resection in Crohn disease. Scand J Gastroenterol 1999:34:708–713.
- McLeod RS, Wolff BG, Ross S, Parkes R, McKenzie M; Investigators of the CAST Trial. Recurrence of Crohn's disease after ileocolic resection is not affected by anastomotic type: results of a multicenter, randomized, controlled trial. Dis Colon Rectum 2009;52:919–927.
- Regueiro M, Schraut W, Baidoo L, Kip KE, Sepulveda AR, Pesci M, Harrison J, Plevy SE. Infliximab prevents Crohn's disease recurrence after ileal resection. Gastroenterology 2009;136:441

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