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An Invited Commentary on “One-stitch versus Traditional Method of Protective Loop Ileostomy in Laparoscopic Low Anterior Rectal Resection: A Retrospective comparative Study” (International Journal of Surgery 2020; 80:117-123)

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**An Invited Commentary on “One-stitch versus Traditional Method of Protective Loop Ileostomy in Laparoscopic Low Anterior Rectal Resection: A Retrospective comparative Study” (International Journal of Surgery 2020; 80:117-123)**

Dear Editor,

Laparoscopic low anterior resection has become the most effective treatment for low rectal cancer. Postoperative anastomotic leakage has been shown in a major clinical trial to associate with unfavorable oncologic outcomes with decreased overall survival (1). The formation of a protective stoma for fecal diversion in the form of loop ileostomy has been reported to improve leak rate after low anterior resection. Ulrich et al. (2) showed that the leak rate after laparoscopic low anterior resection in the ileostomy group was nearly eight times lower compared to that of the no ileostomy group. Two methods of ileostomy fixation have been described: traditional method (TM) where the stoma is constructed by suturing the intestine's wall transcutaneously or intracutaneously; and the one-stitch method (OM) that is performed by closing the abdominal incision and by using 2/0 silk threads from one side through the mesentery opening to the other side. Despite loop ileostomy is not technically demanding, it is related to complications such as skin irritation, stoma stricture, parastomal hernia, stoma prolapse, stoma necrosis and electrolyte abnormalities.

Yuezhi et al.(3) presented a single center 2-year experience of 95 rectal adenocarcinoma patients who underwent laparoscopic low anterior resection with protective loop ileostomy and focuses on the method of ileostomy fixation using 54 and 41 patients operated according to the TM and OM, respectively. Interestingly the median operative time in the OM group was significantly shorter than in that the TM group (200.0min vs 227.5min,  $p=0.028$ ). This was attributed to the use of several stitches for stoma fixation in the TM group, while in the OM only one stitch was used. Moreover, OM reduced the total cost by the use of fewer stitching materials the shortening of operating time, thereby decreasing not only the socioeconomic burden, but the anastomotic leak rate. Also the duration of hospital stay was associated with this complication. Regarding the degrees of stoma adhesions, significant differences were shown between the two groups ( $p=0.007$ ). There were 32 patients (78%) who had a mild degree of peristomal adhesions, 6 (14,6%) a moderate degree and 3 (7,3%) a severe degree in the OM group, compared to 31 (57,4%), 13 (24,1%) and 10 patients (18,5%) who presented mild, moderate and severe adhesions, respectively in the TM group. No significant differences were formed between the two groups for early stoma-

related complications such as retraction, stricture and skin irritation, and for postoperative complications following stoma closure.

Overall, this is a well-conducted study on loop ileostomy fixation which provided adequate clinical and technical details of benefits of OM. The limitations of the present study are small number of patients the non-blinded selection of patients for the ileostomy methods and the subjective assessment of the degree of peristomal adhesions which may act as inherent biases. Although clinical practice cannot be driven by this study alone, however it provided adequate proof of concept, and the necessary information for calculation of sample size. Which are necessary for the design and conduct of randomized controlled trials.

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Invited Commentary, internally reviewed

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