



Comment on: “Internal hernia after gastrectomy for gastric cancer in minimally invasive surgery era,” Gastric Cancer, 2019 Feb 13, by Kang et al

Xinxin Shao¹ · Yantao Tian¹

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Dear Editor,

We have read with great interest the article entitled “Internal hernia after gastrectomy for gastric cancer in minimally invasive surgery era” [1]. Internal hernia (IH) is a well-known postoperative complication after Roux-en-Y gastric bypass. However, it has not been a recognized complication of gastric cancer after gastrectomy, which generates the same defects during the surgical procedure. In this study, the closure of the jejunojejunostomy mesenteric, Petersen’s, and transverse colon mesenteric defects using a nonabsorbable continuous suture is recommended for patients undergoing gastrectomy for gastric cancer to reduce the incidence of IH. Although closure of defects is laborious and challenging, we agree with the authors’ view that IH might cause life-threatening conditions, such as bowel strangulation or perforation [2, 3]

Factors associated with IH after gastrectomy might include the reconstruction method (Billroth I, Billroth II or Roux-en-Y), the route of Roux limb (retrocolic route or antecolic route), closure of mesenteric defects, and a laparoscopic approach. The number of potential defects is a factor influencing the incidence of IH. In this study, Roux-en-Y and uncut Roux-en-Y reconstructions showed a significantly higher incidence of IH than Billroth II reconstruction ($P < 0.01$ and $P < 0.01$). One possible reason explained by the authors is that the Roux-en-Y and uncut Roux-en-Y

reconstruction types have two defects (jejunojejunostomy mesenteric defect and Petersen’s defect), whereas Billroth II reconstruction has only a Petersen’s defect. However, the mesentery of the jejunum in the uncut Roux-en-Y reconstruction type is intact, so it does not have jejunojejunostomy mesenteric defects. Of the surgically treated patients with IH in this study, 54.2% of IHs were located at the jejunojejunostomy mesenteric defect. Therefore, theoretically, without jejunojejunostomy mesenteric defects, the incidence of IH might be reduced. Table 2 also shows that the incidences of IH after distal gastrectomy in open and multiport uncut Roux-en-Y are lower than those in Roux-en-Y (2.0% versus 7.1 and 2.9% versus 5.6%). Based on this, the authors might further compare the incidence of IH between Roux-en-Y and uncut Roux-en-Y (multiport) for significant differences.

In conclusion, Roux-en-Y reconstruction is a classic anastomosis for gastrectomy, but the risk of IH is high. The fewer the potential defects, the lower the incidence of IH. Compared with Roux-en-Y, the risk of IH with uncut Roux-en-Y reconstruction might be lower because of its fewer potential defects. We recommend further study to compare the incidence of IH between Roux-en-Y reconstruction and uncut Roux-en-Y reconstruction after gastrectomy.

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Declarations

Conflict of interest The authors declare that they have no competing interests.

Ethical approval This article does not contain any studies with human participants or animals performed by any of the authors.

Informed consent Not applicable.

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✉ Yantao Tian
tianyantao@cicams.ac.cn

¹ Department of Pancreatic and Gastric Surgery, National Cancer Center/National Clinical Research Center for Cancer/Cancer Hospital, Chinese Academy of Medical Sciences and Peking Union Medical College, No. 17 Panjiayuan Nanli, Beijing 100021, China

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