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Invited Commentary

Commentary on: "Closure of mesenteric defects is associated with a higher incidence of small bowel obstruction due to adhesions after laparoscopic ante colic Roux-en-Y gastric bypass: A retrospective cohort study"

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First of all, I would like to thank Dr. Nuytens and colleagues at AZ Groeninge for adding a heavy effort of evidence to the literature. Their work of questioning the effectiveness of closing the mesenteric defects during ante-colic RYGB in a well-constructed retrospective cohort showed a statistical superiority of the non-closure technique, although the difference was not significance, the old theory was challenged. Furthermore, accusing the procedure of increasing the risk of small bowel obstruction (SBO) due to adhesions believing that closure of the mesenteric defects could result in a biased evaluation of an SBO event which leads to a higher threshold to proceed with an exploration knowing the mesenteric defects were closed.

This study has also identified smoking as an independent risk factor for SBO post RYGB which distinguishes their work among others [1].

Aghajani et al. in a comparable effort reported a significant lower incidence of internal hernias (IH) after closing the defect in their simple and fabulous technique compared to the non-closure technique of 2.5% and 11.7% respectively at 60-month follow-up time with an emphasis on the most frequent site of IH [2].

Kristensen et al. in their original review asking the same question: "Does the closure of mesenteric defects during laparoscopic gastric bypass surgery cause complications?" The results showed a significant decrease in incidence of IH after closing the mesenteric defects. The risk for IH is reduced from 1.6–9% before closure to 1.2% after closure using the ante colic approach and from 0.5–11% before closure to 1.9% after closure using the retro colic approach. What drives attention further was that the ante colic approach probably reduces the incidence of internal hernias because it ends with a lower defect [3].

Most of the studies or reviews comparing closure with non-closure techniques usually end up either favoring closure or showing equality in a statistical point of view, revealed by the authors' conclusion [1]. The wide variation of incidence could be related to general factors related to patients' condition and external factors like; surgical technique, lack of clear definition of IH, limitations of follow-up time and high early excess weight loss percentage.

In our practice, we would always close any mesenteric defect during Roux-en-Y procedures to minimize the risk of internal herniation.

The increased incidence of adhesive SBO in the non-closure group in this study could be attributed to the technique used rather than the closure itself. The importance of using an appropriate technique in closing the mesenteric defect cannot be overemphasized and it would prevent catastrophic complications. The subject need to be investigated thoroughly via a long term multicentric clinical trials with a delicate choice of patients, standardized technique and a strong hold follow up.

Provenance and peer review

Invited Commentary, internally reviewed.

Declaration of competing interest

None.

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