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Press review

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- Deerenberg EB, Harlaar JJ, Steyerberg EW, et al. Small bites versus large bites for closure of abdominal midline incisions (STITCH): a double-blind, multicentre, randomised controlled trial. *Lancet* 2015;386:1254–60. doi:10.1016/S0140-6736(15)60459-7

Background

Incisional hernia is a frequent complication of midline laparotomy and is associated with high morbidity, decreased quality of life, and high costs. We aimed to compare the large bites suture technique with the small bites technique for fascial closure of midline laparotomy incisions.

Methods

We did this prospective, multicentre, double-blind, randomised controlled trial at surgical and gynaecological departments in ten hospitals in the Netherlands. Patients aged 18 years or older who were scheduled to undergo elective abdominal surgery with midline laparotomy were randomly assigned (1:1), via a computer-generated randomisation sequence, to receive small tissue bites of 5 mm every 5 mm or large bites of 1 cm every 1 cm. Randomisation was stratified by centre and between surgeons and residents with a minimisation procedure to ensure balanced allocation. Patients and study investigators were masked to group allocation. The primary outcome was the occurrence of incisional hernia; we postulated a reduced incidence in the small bites group. We analysed patients by intention to treat. This trial is registered at Clinicaltrials.gov, number

NCT01132209 and with the Netherlands' Trial Register, number NTR2052.

Findings

Between October 20, 2009, and March 12, 2012, we randomly assigned 560 patients to the large bites group ($n = 284$) or the small bites group ($n = 276$). Follow-up ended on August 30, 2013; 545 (97%) patients completed follow-up and were included in the primary outcome analysis. Patients in the small bites group had fascial closures sutured with more stitches than those in the large bites group (mean number of stitches 45 [SD: 12] vs. 25 [10]; $P < 0.0001$), a higher ratio of suture length to wound length (5.0 [1.5] vs. 4.3 [1.4]; $P < 0.0001$) and a longer closure time (14 [6] vs. 10 [4] min; $P < 0.0001$). At 1-year follow-up, 57 (21%) of 277 patients in the large bites group and 35 (13%) of 268 patients in the small bites group had incisional hernia ($P = 0.0220$, covariate adjusted odds ratio: 0.52, 95% CI: 0.31–0.87; $P = 0.0131$). Rates of adverse events did not differ significantly between groups.

Interpretation

Our findings show that the small bites suture technique is more effective than the traditional large bites technique for prevention of incisional hernia in midline incisions and is not associated with a higher rate of adverse events. The small bites technique should become the standard closure technique for midline incisions.

Comments

1. Incisional hernia is not uncommon after midline laparotomy as the incidence ranges between 10–23%, and can be as much as 38% in high-risk patients [1,2].
2. Several meta-analyses have shown that the fascial closure technique of reference is a running suture using slowly-absorbable monofilament sutures, which results in less incisional hernia than interrupted sutures [3,4].

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3. Some of the limits of this otherwise well-performed trial include: (i) both the technique and type of suture were different, meaning that it is difficult to know which of these variables might have influenced the outcome, (ii) the median follow-up was one year, whereas the incisional hernia rates were given for 36 months.
4. The incisional hernia rate in both arms seems to be high for only one-year follow-up. One possible explanation might be that clinical and radiologically detected incisional hernias were counted together; incisional hernias were detected radiologically in nearly 50% of patients.

References

- [1] Br J Surg 2010;97:1497–1502.
- [2] Br J Surg 2011;98:633–8.
- [3] Ann Surg 2010;251:843–56.
- [4] Br J Surg 2002;89:1350–6.

■ Messenger M, Pasquer A, Duhamel A, et al. Laparoscopic gastric mobilization reduces postoperative mortality after esophageal cancer surgery: a French nationwide study. *Ann Surg* 2015;262:817–23. doi:10.1097/SLA.0000000000001470

Objective

This study was designed to investigate the impact of laparoscopic gastric mobilization (LGM) on 30-day postoperative mortality (POM) after surgery for esophageal cancer (EC).

Background

Meta-analyses of nonrandomized studies have failed to demonstrate any significant benefit of hybrid minimally invasive esophagectomy on POM, potentially due to small population samples. Moreover, none of the published randomized trials have been designed to answer this question.

Methods

All consecutive patients who underwent EC resection between 2010 and 2012 in France were included in this nationwide study ($n=3009$). Data were extracted from the French National Health Service Database with internal and external quality controls. Patients treated with LGM (LGM group, $n=663$) were compared with those treated with open approach (open group, $n=2346$). Propensity score matching and multivariable analyses were used to compensate for the differences in baseline characteristics.

Results

The 30-day POM rate was 5.2%, significantly lower after LGM, compared with open surgery (3.3% vs. 5.7%, $P=0.005$), as well as in-hospital (5.6% vs. 8.1%, $P=0.028$), and 90-day POM (6.9% vs. 10.0%, $P=0.016$). After propensity score matching, 30-day POM rates were 3.3% versus 5.9%, respectively ($P=0.029$). By multivariable analysis, age ≥ 60 years, malnutrition and cardiovascular comorbidity were independently associated with higher POM, whereas LGM was associated with a decrease in POM (OR: 0.60, 95% CI: 0.37–0.98, $P=0.041$).

Conclusions

This all-inclusive nationwide study strongly suggests that POM is significantly reduced after LGM for EC. This is high valuable evidence that helps decision-making regarding the optimal approach for EC surgery.

Comments

1. The MIRO randomized trial [1] has shown that LGM was associated with a significant decrease in postoperative morbidity. However, no impact on mortality was observed

because of the small number of events. Similar results were obtained in another randomized trial looking at the advantages of mini-invasive surgery in esophageal cancer [2].

2. Because mortality is so rare, only large-scale studies, such as population studies with sizeable numbers of patients, can provide the answer to the question that was asked. Moreover, another advantage of population studies is to be able to appraise the reproducibility of the technique in several centers, not merely in expert centers.
3. While all patients underwent thoracotomy, LGM was associated with decreased morbidity and mortality, essentially related to pulmonary complications [1]. The authors hypothesized that incisions on both sides of the diaphragm are more detrimental than just opening the thorax, and this is the essential factor responsible for the advantage of LGM.
4. Missing, however, are the results of patients undergoing LGM and thoracoscopy, evaluating the potential additional advantage of mini-invasive thoracic surgery, but again the samples were too small. Moreover, it is important to underline that some important parameters, such as tumor characteristics, were not included in the propensity score because they were not recorded in the French National Health Service Database.

References

- [1] J Clin Oncol 2015;33(Suppl. 3;abstr 5).
- [2] Lancet 2012;379:1887–92.

■ Piessen G, Lefèvre JH, Cabau M, et al. Laparoscopic versus open surgery for gastric gastrointestinal stromal tumors: what is the impact on postoperative outcome and oncologic results? *Ann Surg* 2015;262:831–40. doi:10.1097/SLA.0000000000001488

Objectives

The aim of the study was to compare the postoperative and oncologic outcomes of laparoscopic versus open surgery for gastric gastrointestinal stromal tumors (gGISTs).

Background

The feasibility of the laparoscopic approach for gGIST resection has been demonstrated; however, its impact on outcomes, particularly its oncologic safety for tumors greater than 5cm, remains unknown.

Methods

Among 1413 patients treated for a GIST in 61 European centers between 2001 and 2013, patients who underwent primary resection for a gGIST smaller than 20 cm ($n=666$), by either laparoscopy (group L, $n=282$) or open surgery (group O, $n=384$), were compared. Multivariable analyses and propensity score matching were used to compensate for differences in baseline characteristics.

Results

In-hospital mortality and morbidity rates in groups L and O were 0.4% versus 2.1% ($P=0.086$) and 11.3% vs. 19.5% ($P=0.004$), respectively. Laparoscopic resection was independently protective against in-hospital morbidity (odds ratio 0.54, $P=0.014$). The rate of R0 resection was 95.7% in group L and 92.7% in group O ($P=0.103$). After 1:1 propensity score matching ($n=224$), the groups were comparable according to age, sex, tumor location and size, mitotic index, American Society of Anesthesiology score, and the extent of surgical resection. After adjustment for BMI,

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