Reviewer's report

Title: Laparoscopic versus Open Left Lateral Segmentectomy

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Reviewer: Peter Schemmer

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Carswell et al. have compared in their manuscript “Laparoscopic versus Open Left Lateral Segmentectomy” the laparoscopic and open left lateral hepatic segmentectomies in a 4-year period performed at their center. They have concluded that laparoscopic left lateral segmentectomy is safe and feasible and results in less postoperative opiate analgesia and a shorter postoperative hospital stay.

Critic

1. The study of Carswell et al. is in accordance with the several lines of evidence demonstrating the benefits of the laparoscopic surgical methods. However, this work suffers the important limitation of a small sample size. Thus, although compatible with other studies, the authors may tone down their conclusions and generalizations. Furthermore, it’s not clear whether the study design was retrospective or prospective, and if prospective, was it designed as a randomized controlled trial (RCT)? If not, the authors have to declare how they managed to overcome selection-bias, especially in such a limited sample-size.

2. It’s not clearly stated what the reason of portal triad clamping in 50% of the cases in the open group was. In this regard, a comparison between postoperative transaminases would make sense.

3. Why was the skin closure in LG performed after the infiltration of Marcaine? Can it have any effect on the postoperative analgesic requirement? How frequent was shoulder pain in LG?

4. Claiming that a laparoscopic liver surgery provides tangible benefits to both patients and hospital, it would make sense to do a cost-benefit analysis for better comparison between the two methods.

5. It would be wise to state the median follow-up time in both groups and to compare the groups accordingly. This is especially important regarding the discussions about the risks of port site metastasis in laparoscopic oncologic surgery.

6. The last two paragraphs of the discussion are irrelevant to the findings of this study and may be omitted.