Reviewer's report

Title: Safety of liver resection and effect on quality of life in patients with benign hepatic disease: Single center experience

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Reviewer: Hannes Neeff

Reviewer's report:

The authors of this manuscript conducted a retrospective analysis of the safety of liver resection and the effect of surgery on the quality of life in patients with benign hepatic disease.

The study population included 146 patients for the analysis of safety. Of those, 81 patients completed a questionnaire regarding quality of life after liver resection for benign disease.

The authors concluded that hepatic resection for benign disease is a safe procedure with low morbidity and no mortality in this series. Of note, more than 50% of all procedures were "major hepatectomies".

The demographic data as well as the indications for surgery in the sub-population, which completed the QOL questionnaire, is reported to be representative for the whole group. More than 50% were treated for severe symptoms and another 20% for the suspicion of malignancy.

This study is of high value in the context of the advances of liver surgery making more and more patients amenable to liver surgery for various indications. Therefore the question has to be raised if technical feasibility is the hallmark of surgery in benign disease or patient satisfaction.

Clearly, information on patient QOL after hepatic resection is underrepresented in current literature thus underlining the importance of this study.

Notably, more than 95% of the study population would again undergo liver resection.

- Minor Essential Revisions

1. As I understand, QOL questionnaires were sent out to patients after recovery from liver surgery. Please try to clarify this in the methods section.

For this reason there is an inherent bias in the "retrospective" QOL analysis. The other bias, which is always immanent in retrospective QOL studies, is the return rate of questionnaires. The return rate of 55% - which is quite good! - should therefore be put into context. As it was stated in the text the sample was representative for the complete group. This should therefore also be pointed out in Table 1 and Table 2.
2. QOL assessment: It would be of interest if the highly significant improvements in "emotional functioning" page 8 are related to the treatment of suspected malignant disease. If the authors can derive this information from their data, please comment, since to eliminate all doubt in suspicious liver lesions is a very important indication for liver surgery and of paramount importance to the "QOL" for the affected patients.

Albeit, the authors could nicely show a significant improvement in almost all symptom scales, it should also be commented on the fact that "physical well-being" was not significantly changed postoperatively, while more than 50% of patients were treated for "severe symptoms".

3. Table 2: Give detail for the asterisk (others*) in Table 2

4. Page 4: change: left/right hepatectomy to left/right hemihepatectomy (see page 6: operative procedures)

5. Page 7: Style: “This patient recovered well and was sent to a neurological "rehab...".”, abbreviation, please rephrase

6. Page 7: This section reports “recurrence”, please rephrase “…not "true" recurrences...” as it suggests that those lesions were deliberately left behind at the time of surgery.

7. Page 11: Conclusions: change ….might leads to an improvement… to ……might lead to ……

8. Title page: Please check if “PhD” is the correct term/abbreviation for "Professor" (Ordinarius) and "Privatdozent" (PD) in an international context. Otherwise, please change to e.g. MD.

Level of interest: An article of outstanding merit and interest in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests. H.N.