Dear Lian-Sheng Ma, Science Editor, Company Editor-in-Chief,

Thank you very much for your kind letter and for the opportunity to improve our paper. We appreciate the reviewers' input to our study. Their fresh look at our study prompted us to make changes in some aspects and to give some additional explanations in other aspects.

All changes in the manuscript were made using 'Track Changes'. We hope that this is acceptable. If additional highlighting is necessary, please let us know.

We present all reviewers' comments and the responses to them point by point at the end of this letter.

Best wishes,

Marko Murruste, MD Corresponding author

7 July 2021 Tartu University Hospital Estonia

Reviewers' comments:

The manuscript confirms that the clinical outcomes following 'short' pancreaticojejunostomy (S-PJ) are non-inferior to the 'long' pancreaticojejunostomy (L-PJ), and the authors found that there is no significant difference in pain relief, improvement in quality of life, body weight gain, patients' satisfaction with surgical treatment, and readmission rate due to CP, compared with L-PJ. Thus, the authors think the S-PJ should be preferred surgical option in uniformly dilated pancreatic duct. The findings do provide a more reasonable and reliable care standard for surgical treatment of chronic pancreatitis. However, there are several issues that need to be explained by the author.

1. All 91 patients undergoing side-to-side PJ was between 10/1997 and 12/2020. The time span is relatively long, so will such a long time span affect the conclusions of the study? After all, there were only 91 cases in that 23-year period.

Response to the comment:

The reviewer paid attention to an important factor of every study: is the effect of surgical treatment permanent or temporary?

A brief answer to this question is that when comparing long-term results (five- and ten-year follow-up) of S-PJ ad L-PJ we did not find any significant differences between the groups.

However, while this topic involves a large amount of data, we would like introduce them in our next paper dedicated to the long-term results of surgical treatment (data about: pain relief, pain medication, changes in quality of life, survival, employment status, pancreatic endo- and exocrine insufficiency).

Thus, if this is acceptable, we would provide the above-mentioned data in a separate article.

2. The author should give a figure of the "long" catheter tomy in Figure 1, comparing with "short" catheter tomy.

Response to the comment:

We are very grateful to the reviewer for noticing a weakness in illustrating our paper. We added now to the figure of S-PJ a figure of L-PJ for comparison.

The figures are included as follows:

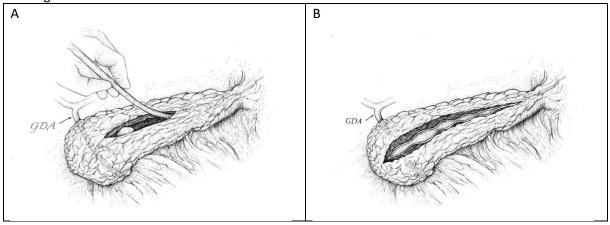


Figure 1. A) 'Short' ductotomy (median length 40 mm), probing of the pancreatic duct. B) 'Long' ductotomy (length up to 100 mm).

3. Limitations of the study are noted in the manuscript. Surgeons dedicated to pancreatic surgery operated all patients enrolled, and consequently, obtained results (zero mortality and relatively low

morbidity) may not generalize to outcomes at hospitals that have less expertise. Thus, the authors should specify the hospital level or range of practical procedures to ensure that the procedure is widely or better used for the surgical treatment of chronic pancreatitis. Overall, this study has important clinical implications for the surgical management of chronic pancreatitis.

Response to the comment:

The reviewer paid attention to an important aspect of surgery: surgical treatment should be as safe as possible. An important message of our manuscript is that S-PJ is safer than L-PJ, leading to lower morbidity, lower need for blood transfusions and zero mortality. However, we are convinced that such risky procedure as pancreatic surgery should be centralized, and these patients should be treated at university hospitals with readiness for multidisciplinary treatment.

We added a comment to the discussion part:

'It has been shown that centralization of pancreatic surgery is important and its beneficial effect is associated in particular with better short-term results after surgery (38).'

4. Chronic pancreatitis is usually treated by non-surgical treatment, so the authors should provide the necessary criteria for surgical treatment of chronic pancreatitis. Nonoperative treatment is the main treatment for chronic pancreatitis.

Response to the comment:

The reviewer emphasized another important aspect of the treatment of patients with CP: the main treatment of chronic pancreatitis is non-operative. However, surgical treatment is in many cases indicated, mostly because of intractable pain syndrome or complications of chronic pancreatitis.

We added information about indications for surgical treatment to 'Results':

'Indications for surgical treatment were chronic intractable pain in 79 cases (86.8%) and complications of CP associated with intraductal hypertension in 12 cases (13.2%). There were no differences in the indications between the groups.'

(1) Science editor: The reviewer recommends publication of the study, after redressing some flaws. However, in my opinion there are several shortcomings that difficult the publication of the manuscript. First, the authors compare two groups not suitable to comparison, the S-PJ group and the L-PJ group, because the surgical technique proposed is performed when some characteristics are present in the patient, making the patient disease different due to those characteristics. It is not clear and not studied how those different pathologic factors (strictures and calcifications in the main pancreatic duct) influence in the outcome of the patients. Furthermore, the authors did not employ standards in the definition of exocrine insufficiency, neither they included any objective accepted tools like fecal elastase. And finally, the proposed surgical drainage technique for chronic pancreatitis pain management (i.e., the Partington-Rochelle modification of pancreaticojejunostomy) is not the most widely used technique, as far as in specialized pancreatic surgeons: there are hybrid techniques such as Frey procedure, Beger technique, or its Berne modification technique, with advantages in terms of efficacy.

Responses to the comments:

We are grateful for these important comments.

We do agree with the reviewer that uniformly dilated PD and PD with multiple strictures or
calcifications have some anatomical differences. However, in our study there were no
differences between the groups regarding patients' gender, time from onset of chronic pain,
endocrine insufficiency, BMI, loss of body weight or proportion of patients with pancreatic
pseudocysts. Nor were there any differences between the groups concerning the indications
for surgical treatment.

The main message of our manuscript is that 'Based on our data, S-PJ provides adequate decompression in the setting of a uniformly dilated PD. As the clinical outcomes following S-PJ are not inferior to those of L-PJ, S-PJ should be preferred surgical option in uniformly dilated PD.'

Thus, in the treatment of patients with a uniformly dilated PD, use of S-PJ is beneficial to patients because of shorter operating time, lower need for blood transfusion and lower rate of surgical complications.

- All patients treated via pancreatic resections and hybrid operations were excluded from the study, as our study was only focused to the subgroup of patients treated via pancreaticojejunostomy.
- (2) Company editor-in-chief: I have reviewed the Peer-Review Report, full text of the manuscript, and the relevant ethics documents, all of which have met the basic publishing requirements of the World Journal of Gastrointestinal Surgery, and the manuscript is conditionally accepted. I have sent the manuscript to the author(s) for its revision according to the Peer-Review Report, Editorial Office's comments and the Criteria for Manuscript Revision by Authors.