

World Journal of Gastroenterology

Re: No.: 44517

December 24, 2018

Dear Editor,

I am pleased to enclose the revision of retrospective study titled **"Comparison of Outcomes of Endoscopic Sphincterotomy versus Open Choledochotomy for Common Bile Duct Stones"**. The reviewer's comments are very helpful in improving our paper, and we have already revised our paper according to the peer-review report and point-by-point responses to reviewers' comments are attached. Thank you very much for your carefully evaluation and re-consideration in *World Journal of Gastroenterology*.

Yours sincerely,

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Responses to Comments (44517)

Reviewer #1

Comment 1

In page 5, line 13, patients with gallbladder stones who did not undergo a cholecystectomy were excluded from this study?

Reply: Thank you for your careful review. The reason why we excluded these patients with gallbladder stones who did not undergo a cholecystectomy was that gallbladder stones may increase the risk of CBDS recurrence and affect the reliability and accuracy of the results.

Comment 2

The method to measure distal CBD angulation should be shown by figure to recognize easily.

Reply: Thank you for this helpful comment. We have added some figures to show the method in the measurement of distal CBD angulation (Figure 2).

Comment 3

The description about Fig1 should be inserted in MATERIALS AND METHODS.

Reply: Thank you for your valuable suggestion. We agree with your suggestion, and we have inserted the Fig. 1 description in the MATERIALS AND METHODS section.

Comment 4

Many baselines of patient characteristics were statistically different between EST group and OCT group. Propensity score analysis should be used if you can. Patients are enough to perform propensity score analysis.

Reply: Thank you for your valuable and thoughtful comments. We agree with your suggestion and have performed the propensity matching score analysis to adjust for the influences of confounding factors.

Comment 5

n (%) and median (IQR) were equivocal in Tables.

Reply: We appreciate your this helpful comment. We have corrected this confusing description in the tables of the revised manuscript as suggested. Thank you very much.

Comment 6

In table 4, CBDS recurrence patient number was 61 patients. Therefore, it is difficult to perform a logistic regression test for 14 items.

Reply: Thank you for your constructive advice about this problem. Therefore, we solved it as follows: variables with a $P < 0.20$ in the univariate analysis were introduced into a logistic regression model to analyze the findings of a multivariate analysis of CBDS recurrence (Table 4).

Reviewer #2

Comment 1

You note a higher rate of repeat endoscopic as opposed to open procedures. How many of those procedures were to remove a CBD stent if the patient had an intact GB with stones? Please add these numbers to the results and define whether additional cost or hospitalization time included stent retrieval.

Reply: Thank you for your careful reading of our manuscript. As you mentioned, a higher rate of repeat endoscopic was noted in our study, as opposed to open procedures. We have carefully rechecked patient's medical records in the case system and now ensure that all of these patients with gallbladder stones were placed a temporary nasobiliary catheter but not a plastic stent at the duct before subsequent laparoscopic cholecystectomy during the initial hospitalization. We corrected the error in the Materials and Methods section of the revised manuscript. Thank you very much.

Comment 2

Although the median length of hospital stay was lower for EST-treated patients, a 6-day hospital stay and a 3-day hospitalization prior to ERCP seem relatively long. Please comment.

Reply: Thank you for your valuable comment about this confusing description. In our study, hospital stay for the EST group was defined as the duration of post-EST stay plus postcholecystectomy stay. We have noted this information in Table 2 of the revised manuscript.

Comment 3

I presume that all patients having OCT had open cholecystectomies. What percentage of patients undergoing EST had open as compared to laparoscopic gallbladder removal? Did this affect the cost equation?

Reply: We appreciate your helpful questions. After carefully rechecking patient's medical records, we ensured that all patients having OCT had open cholecystectomies. Additionally, we have calculated the percentage of patients undergoing EST had open cholecystectomy compared to laparoscopic cholecystectomy (added to Table 2 in the revised manuscript), and this would not affect the cost equation because it was exclusively for the cost of EST.

Comment 4

Were all ERCPs successful other than the 6 patients in Figure 1 who did not

achieve complete stone clearance? In other words, were the 168 patients in the EST group as well as the 134 patients in the OCT group actually subgroups in your institution? If so, this raises the question of selection bias that deserves comment.

Reply: Thank you for your valuable and thoughtful comments. In our study, the 168 patients in the EST group and the 134 patients in the OCT group were considered subgroups in our institution. We agree that this raises the question of selection bias. Due to the study's retrospective nature and we can not select patients, it may unavoidably result in a selection bias, and this is a limitation of our study. Accordingly, we performed the propensity matching score analysis to adjust for differences in baseline clinical characteristics to minimize selection bias, the results of which are included in the revised manuscript.

Comment 5

The major issue from the reviewer's perspective is the comparison of patients treated with EST to those treated with OCT, a procedure that has given way to laparoscopic CBDE in most institutions. In fact, in the reviewer's institution we have not done OCT in a decade. This needs comment in the Discussion section.

Reply: We appreciate your helpful comment. In recent years, laparoscopic CBDE has also become an attractive, single-stage option and carried out more and more widely in our institution. However, in our current study, we only selected patients who underwent OCT or EST, and patients underwent LCBDE were not enrolled. We plan to compare the differences between EST and LCBDE in a future study.

Reviewer #3

Comment 1

This is a retrospective study. It is not considered which procedure to choose according to age or general condition. Please describe the incidence and severity of cholangitis before each treatment.

Reply: Thank you for your beneficial comment. We agree with your suggestion and have described the incidence and severity of cholangitis before each treatment and added them to Table 1 in the revised manuscript.