

Dear Editor,

Please find enclosed the edited manuscript in Word format (file name: 6019-review.doc).

Title: Non-surgical treatment of post-surgical bile duct injury: Clinical implications and outcomes

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The manuscript has been improved according to the suggestions of reviewers:

1 Format has been updated

2 Revision has been made according to the suggestions of the reviewer

There were 3 reviewers in total and the followings are the reviewer's comments and corresponding responses.

(1) Comments from Reviewer 02521482

Since bile duct injuries represent a life threatening complication after surgery, the investigation over this issue is a very interesting aim. The authors report a large series of hepatobiliary procedures of which 77 had HBI. **Concerning the manuscript I have not major but only some minor suggestions as follows:**

1) in the material and methods I would encourage to include a picture with Strasberg classification. This could be more interesting for surgeons and from this classification the authors can explain they consider three type as in their paper (BDI 1;2;3)

Answer: Yes, we included a picture and description of Strasberg classification of biliary injury in material section; page 7 with highlighted in yellow, figure 1 and table 1 as well. In addition, it has been documented in "terms and definitions" of materials and methods section highlighted in yellow.

Here is the newly inserted phrase; We also used Strasberg classification which is based on stricture location, size and bile leakage to determine the type of bile duct injury as well (Figure 1, Table 1).

2) In the protocol of endoscopic intervention at the end of page...all patients were treated with intravenous. Please explain for how many time and which class of antibiotics.

Answer: As you mentioned above, we newly described the detail of protocol regarding which type and how many times of antibiotics had been delivered in "protocol of endoscopic intervention" of materials and methods section highlighted in yellow.

"Each patient received prophylactic antibiotics; either cefotaxime or ciprofloxacin right before endoscopic intervention. However, antibiotics treatment was continued if they showed any signs or symptoms of systemic infection after the procedure."

3) Results: study population. Line 2: Instead of seventy seven patients.....These patients were enrolled in this study. Line 4, please explain the acronym IHD

Answer: We explained "IHD" as intrahepatic duct and the corresponding phrase was revised as "Among them, 55 patients (71%) underwent cholecystectomy and 22 patients underwent partial hepatectomy with bile duct exploration due to intrahepatic duct (IHD) stones."

4) Clinical outcomes of non surgical... one patient had bowel perforation during ERCP. I suppose duodenum, but it is better to clearly report which part of bowel and why managed surgically

Answer: Yes, we absolutely agree with you and we revised the manuscript as follows.

One patient had duodenal perforation related to EST (endoscopic sphincterotomy) procedure and intervention for biliary stricture could not be done due to the incident. The patient was managed with non-surgical treatment, however, his clinical signs and symptoms were getting deteriorated and hepaticojejunostomy was done to resolve perforation and biliary stricture.

5) Discussion. Line 4. Therefore the aims of this....I think the aim is only one. So the aim of this study. We also analyzed the success.....was no significant differences in....please spacing differences in subgroup analysis of 55 patients with cholecystectomy revealed that patients who underwent bile duct exploration.....have you information about this exploration? If transcystic or by choledochotomy? ...and previous as well. In conclusion the most important prognostic parameter determining.....seems less redundant. ...surgical treatment could be considered, instead of should.

Answer: We read carefully and there were 4 different comments: (1) number of aim (2) typographical error (3) bile duct exploration (4) redundancy (5) grammatical error.

We revised the manuscript and added more investigation according to the above comments and they are the followings highlighted in yellow.

- (1) Therefore, the aim of this study was to report our experiences with a series of 77 patients with post-surgical BDIs and especially including the homogenous group of 55 patients who developed BDI after cholecystectomy.
- (2) We also analyzed the success rate according to the different initial non-surgical treatments (endoscopic vs. percutaneous) and there were no significant differences in success rate between the two groups.
- (3) As we mentioned in table 2, 43 out of 77 patients (56%) underwent bile duct exploration and transcystic technique was used in 33 patients (77%). Subgroup analysis of 55 patients with cholecystectomies revealed that patients who underwent bile duct exploration during cholecystectomy had tendency to develop BDI type 2 more often than patients without bile duct exploration
- (4) Here, we report that the most important prognostic parameter determining the success rate in treatment of post-surgical bile duct injury was the type of bile duct injury regardless of other clinical factors.
- (5) Surgical treatment could be considered as a first treatment of choice in bile duct injury type 3 (bile leak and biliary stricture) considering low success rate of non-surgical treatment.

(2) Comments from Reviewer 00054174

This paper was to investigate the effect of non-surgical treatment for bile duct injury. The author indicated that type of BDI was a significant prognostic factor in determining success rate of non-surgical treatment. Endoscopic or percutaneous hepatic approaches can be an initial treatment for bile leak and biliary stricture only. However, surgical intervention is suitable for the patients who had both bile leak and biliary stricture.

The paper was well written. It is meaning for the treatment of BDI.

(3) Comments from Reviewer 02553311

Manuscript is clear and innovative even if its nature of retrospective study from a single center. Some minor language revision is required.

3 References and typesetting were corrected

Thank you again for publishing our manuscript in the *World Journal of Gastroenterology*.

Sincerely yours,

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