

Dear Editor,

Herein, we submit a revised version of our manuscript according to the suggestions of the reviewers entitled **“A Bedside Score Predicting Retained Common Bile Duct Stone in Patients with Acute biliary Pancreatitis”**

Name of Journal: World journal of Clinical Cases

We thank the reviewers for their valuable comments that aid to significantly improve our manuscript.

Dear editor, we hope that you will find our manuscript finally suitable for publication your Prestigious journal

Reviewer 1

The authors described a diagnostic equation with multiple parameters in order to predict the presence of CBD stones in patients with biliary pancreatitis. I think the possibility that the present manuscript will raise a meaningful problem in the field of endoscopic retrograde cholangiopancreatography (ERCP) in patients with acute pancreatitis. While I have read the current manuscript with interest, there are several points raised to improve the quality of the draft. The authors need to address the below points.

Comment 1: The portion in which CBD width had been measured and the timing in which GGT had been examined were not mentioned in the present draft. To accurately evaluate the possibility of the presence of CBD stones, the authors should take note of the above items.

Answer 1: the authors accept the comment. Data was added.

Comment 2: While I read the draft, I am a little worried about grammar and spellings.

For example, the notation method of the numbers of the patients with and without CBD stones is not unified in “Baseline demographics and laboratory characteristics”..

Answer 2: the authors accept the comment. Data was added.

With addressing the above comments, the manuscript will be a more interesting article, and then it will be worth being published in the World Journal of Gastroenterology.

Reviewer 2

Comments 3: Please elaborate your diagnostic criteria for acute pancreatitis.

Answer 3: the authors accept the comment. The data was added.

Comment 4: How many patients fulfilled your diagnostic criteria for acute pancreatitis?

How many of them were excluded for EUS and therefore not selected in this study?

Answer 4: the authors accept the comment. Data was added.

Comment 5: Because EUS seems to be your reference standard for the presence or absence of CBD stones, why was this important procedure performed only by one

endoscopist? This study will be more reliable if there were more than one reader to read the procedure images.

Answer 5: the authors accept the comment. However, we have only one skilled very competent endoscopist with over than 15 years' experience in the field of EUS, therefore he performed all the EUS examinations.

Comment 6: I presume there is a typo error in result section regarding “the third group, with a score of 41.12-51....”. Please check.

Answer 6: the authors accept the comment. The data was corrected.

Comment 7: The authors may have to mention another limitation. That is their model is not validated in another cohort of patients. How do the authors deal with selection bias when doing internal validation using the same patient cohort?

Answer 7: the authors accept the comment. This was added.

Reviewer 3

COMMENTS The authors have done a retrospective study on biochemical values of patients with acute pancreatitis and identified that there is significant difference between those patients with CBD stones and those without. They have formulated a score to recognize beforehand whether the patient is having CBD obstruction, so that treatment schedule can be made more rigorous. However,

Comment 8: it is not clear how it makes a difference. Authors have reported that they have done US and EUS in all patients. If US will identify CBD stones, what is the advantage of EUS?

Answer 8: Dear reviewer, we accept the comment. However, in our study we included all patients with suspected biliary pancreatitis and who the transabdominal US didn't reveal any CBD stone. In cases where there was a CBD stone by trans-abdominal US, those patients were immediately excluded as they didn't undergo EUS examination.

Comment 9: The scoring details should be given.

Answer 9: Thank you. The parameters that were included into the score are present in table 2, the details of the score are present at table 3. Data were highlighted.

Comment 10: The scientific explanation for the score for individual parameters needs to be given. The grammatical corrections noted may be incorporated.

Answer 10: the authors accept the comment. Actually, the parameters that were incorporated into the score are reasonable as predictors of CBD stone, as it was shown before that those parameters were significantly associated with CBD stone. The data are shown and discussed in the discussion section. Thank you.

Reviewer 4

Tawfik Khoury and colleagues aimed to generate a simple non-invasive score to predict the presence of CBD stone in patients with biliary pancreatitis. They developed and recommend a diagnostic score that included three significant parameters on multivariate analysis to predict retained common bile duct stone. The study is of interest to address a clinical issue and the recommended diagnostic scoring system might be used as an important aid for practitioners to guide them towards a more prudent decision regarding therapeutic plans for their patients if this system is accurate. There are still major concerns regarding the methods used and interpretation of the data. Major

Comment 11: In multivariate analysis, three parameters were identified to predict CBD stone; age, GGT level and dilated CBD, with a very high area under the curve. How about the area under the curve for every one of these three parameter? If the area under the curve of one of three parameters is higher than 0.8433, it is unnecessary to combine all three parameters to predict the presence of CBD stone in patients with biliary pancreatitis.

Answer 11: The authors accept the comment. However, we aimed to generate a score including several parameters for predicting CBD stone and that due to several studies have noted that the probability of CBD stone is higher in the presence of multiple predictors and that no single parameter consistently predicts CBD stone strongly.

Comment 12: Since OR '1' actually implies a lack of statistical significance, why did age (OR 1.062) and GGT level (OR 1.003) whose OR so close to '1' contribute greatly to the diagnostic scoring model?

Answer 12: the authors accept the comment. Those parameters showed the most statistical significance on univariate and multivariate analysis, therefore were incorporated into the score which have a very good ROC curve suggesting that those parameters are indeed statistically powered. Again, it might be that the not high OR related to the sample size, therefore we recommend further independent validation of our results.

Comment 13: Specific Language editing is required throughout the manuscript.

Answer 13: The authors accept the comment. The manuscript underwent an English editing by native English speaker

Comment 14: The following is a short list of typo but is not limited by the list: 1. In the sentence ' In these guidelines, clinical gallstone pancreatitis by itself received moderate strength in predicting common bile duct [14]', ' common bile duct ' is better to be changed into ' CBD '.

Answer 14: the authors accept the comment. Corrected.

Comment 15: (Page 5) 2. The sentence ' Univariate and multivariate logistic regression was used to estimate odds ratios (OR) of baseline factors, backward selection was used to select the final model.' is better to be changed into ' Univariate and multivariate logistic

regression was used to estimate odds ratios (OR) of baseline factors, and backward selection was used to select the final model.'

Answer 15: the authors accept the comment. Corrected.

Comment 16: (Page 7) 3. The sentence ' Finally, we determined the diagnostic accuracy of the cut-off points generated using this formula by calculating sensitivity, specificity, positive predictive value and negative predictive value.' should be ' Finally, we determined the diagnostic accuracy of the cut-off points generated using this formula by calculating sensitivity, specificity, PPV and negative predictive value (NPV). '.

Answer 16: the authors accept the comment. Data was corrected.

Comment 17: (Page 7) 4. The sentence ' The mean age in groups A and B were 54.8 ± 18.8 and 68.9 ± 14.3 , respectively. 'should be ' The mean age in groups A and B were 54.8 ± 18.8 and 68.9 ± 14.3 years, respectively. '

Answer 17: the authors accept the comment. Corrected.

Comment 18: (Page 7) 5. The sentence ' In multivariate regression analysis, three parameters were identified to significantly predict CBD stones: age (OR 1.062, 95% CI 1.026-1.097, $P=0.0005$), GGT level (OR 1.003, 95%CI 1.001-1.004, $P=0.0003$) and dilated CBD (OR 3.685, 95% CI 1.160-11.711, $P=0.027$), with receiver operator characteristics (ROC) of 0.8433 (figure 1).'should be ' In multivariate regression analysis, three parameters were identified to significantly predict CBD stones: age (OR 1.062, 95% CI 1.026-1.097, $P=0.0005$), GGT level (OR 1.003, 95%CI 1.001-1.004, $P=0.0003$) and

dilated CBD (OR 3.685, 95% CI 1.160-11.711, P=0.027), with area under the curve of 0.8433 determined by a ROC curve (figure 1). '?

Answer 18: the authors accept the comment. Data was corrected.

Comment 19: (Page 8) 6. The sentence ' Also, in three different studies evaluating the performance of different noninvasive tests in the prediction of CBD stones, GGT was the most powerful predictor [31] [32]. 'should be ' Also, in two different studies evaluating the performance of different noninvasive tests in the prediction of CBD stones, GGT was the most powerful predictor [31] [32]. '.

Answer 19: the authors accept the comment. Data was corrected.

Comment 20: (Page 11) 7. ' Total bilirubin mg%' should be ' Total bilirubin mg/dL '. (Table 1) 8. ' Dilated CBD per US ' should be ' Dilated CBD by US '; ' GGT (U\L) ' should be ' GGT (U/L) '. (Table 3) 9. ' (Age (years) x 0.5 + GGT (U\L) x 0.02 x CBD width by US (mm) x 10) ' should be ' (Age (years) x 0.5 + GGT (U\L) x 0.02 + CBD width by US (mm) x 10) (Table 4)

Answer 20: the authors accept the comment. Data was corrected.