# Percutaneous Transhepatic Cholangiography versus Endoscopic Ultrasound-Guided Biliary Drainage: A Systematic Review

Answering reviewers, point by points.

Dear Editor,

I would like to take this opportunity to thank your team and your reviewers for spending some of their time in reviewing our new article. I must say the reviewers comments have been very helpful and after reviewing their comments and revising our article, we have learnt a lot as we had to read more and make some changes.

I have managed to get this article reviewed again and edited by one of the recommended English Language Editors provided on your website (certificate is uploaded as requested), their input had been very helpful.

I have addressed all the issues raised by the reviewers and made changes which I will try to highlight them point-by-point as requested.

Reviewer #1: Scientific Quality: Grade A (Excellent) Language Quality: Grade B (Minor language polishing) Conclusion: Accept (High priority) Specific Comments to Authors: Excellent summation of the various endoscopic techniques for biliary drainage, including comparative outcomes compared to percutaneous approaches.

## Author's Response:

As they have not been any point to address apart from the language, I would like to thank the reviewer for their support. (English editing certificate is attached).

Reviewer #2: Scientific Quality: Grade C (Good) Language Quality: Grade B (Minor language polishing) Conclusion: Minor revision

**Specific Comments to Authors:** The authors undertook a systematic review for the technical aspects and outcomes of different approaches to biliary drainage. The results indicated EUS-BD is linked with a higher rate of effective biliary drainage and manageable procedure-related adverse event profile compared with PTBD. The study was carried out precisely and correctly and the paper is well strucured. Tables are impressive and the previous relevant literature was taken into consideration. A few suggestions: 1. Figures should be added to make the results comprehensible. 2.Some spelling and grammar mistakes should be checked carefully. 3.The reference should be updated .

### Author's Response:

The reviewer has raised 3 points.

1-Figures should be added: As this is only a systematic review, no significant statistical procedures have been done, hence could not create figures. Initially we were going to conduct full Meta-analysis though we decided to only do a systematic review. So, only the PRISMA has been added as a figure for this article.

2-Some spelling and grammar mistakes: Again, English editing has been done for the revised manuscript and uploaded as requested.

3-References should be updated: All reference have now been reviewed and updated inline with the WJG guidelines.

## (1) Science editor:

It is a comprehensive review of percutaneous trans-hepatic cholangiography versus endoscopic ultrasound-guided biliary drainage. And the author found that EUS–BD is clinically useful as a biliary drainage option. EUS–BD could become a first-line biliary drainage treatment instead of ERCP if the outcomes of clinical studies are positive and technology is simplified. But some aspects need improvements. First, in the discussion section, the technical aspects of different biliary drainage methods should be summarized in depth, and the current shortcomings should be pointed out, as well as possible improvement measures in the future. Second, there are many mistakes in the tense and plural usage of the language in the manuscript, which need to be revised in detail. Language Quality: Grade B (Minor language polishing) Scientific Quality: Grade B (Very good)

### Author's Response:

The science editor has raised 2 points.

1-Expand the discussion to cover different technical aspects, current shortcomings, and possible improvement measure in the future.

I have added 3 paragraphs to the discussion in order to address the points mentioned above. My additional paragraphs are highlighted below:

The use of endoscopic ultrasound-guided biliary drainage (EUS–BD) was first reported by Giovannini et al. in 2001 [11]. Subsequently, several studies reported the efficacy of EUS–BD as an alternative biliary drainage method after a failed ERCP. The EUS–BD procedures are divided into three techniques—(1) EUS-rendezvous technique (EUS-RV), (2) EUS-ante grade approach (EUS-AG), and (3) EUS-guided transluminal biliary drainage, including choledocoduodenostomy (EUSCDS) and hepaticogastrostomy (EUS-HGS) [6]. In EUS-RV, the biliary duct is accessed using fluoroscopy and EUS with the formation of a temporary fistula, which is followed by guide wire placement via the biliary duct and ampulla into the duodenum. After the guidewire placement, ERCP is performed using the EUS-placed guidewire, which is removed once biliary cannulation is obtained. Thus, EUS-RV should be performed for the patients with an endoscopically accessible ampulla after unsuccessful biliary cannulation in conventional ERCP.

In EUS-AG, the intrahepatic biliary duct is accessed via the creation of a temporary fistula between the intestine and intrahepatic biliary duct from the upper intestine. To achieve biliary obstruction through the fistula without the endoscope reaching the ampulla, stent placement or balloon dilation is performed after dilation of the fistula. This technique is appropriate wherein reaching the biliary orifice using endoscopy is impossible or unmanageable, such as in cases of biliary obstruction in patients with surgically altered anatomy or upper intestinal obstruction.

Under the EUS guidance, the biliary duct is accessed followed by guide wire placement and fistula dilation in EUS-guided transluminal biliary drainage, including EUSCDS and EUS-HGS. A permanent fistula is created for biliary drainage by inserting the stent between the biliary duct and intestine. This procedure can be performed in cases wherein reaching the biliary orifice using endoscopy is possible or accessible; however, in cases of unresectable malignant biliary obstruction, given the features of permanent fistula creation, its indication should be limited.

2-The second point is again the language issues for which the revised manuscripts has had another professional English Language editing by one of your recommended providers.

## (2) Company editor-in-chief:

I have reviewed the Peer-Review Report, the full text of the manuscript, and the relevant ethics documents, all of which have met the basic publishing requirements of the World Journal of Gastroenterology, 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. Before final acceptance, uniform presentation should be used for figures showing the same or similar contents; for example, "Figure 1Pathological changes of atrophic gastritis after treatment. A: ...; B: ...; C: ...; D: ...; E: ...; G: ...". Please provide decomposable Figures (in which all components are movable and editable), organize them into a single PowerPoint file. Please authors are required to provide standard three-line tables, that is, only the top line, bottom line, and column line are displayed, while other table lines are hidden. The contents of each cell in the table should conform to the editing specifications, and the lines of each row or column of the table should be aligned. Do not use carriage returns or spaces to replace lines or vertical lines and do not segment cell content.

### Author's Response:

The Company editor-in-chief has raised 2 points.

1-Uniforming the presentation in alphabetical order: All tables have now been edited and corrected as per the editor-in-chief recommendations. Though I'm not excellent in computer, hence, might not be as expected 100% for which I do apologies.

2-Decomposable figures in PowerPoint file: All been done and uploaded to the system.

Thank you again for you time and effort and I hope you accept our article in your great journal.

#### Dr Eyad Gadour, MBBS, MRCP, CCST, FRCP