

Point-by-point responses to the reviewers' comments

Thank you for your interesting in our manuscript submitted in the *World Journal of Gastroenterology*. We carefully read your kind peer-review reports. According to the reviewers' dedicated recommendations and the editor's suggestions, we have made several revisions in the manuscript. All of the revisions were highlighted in the revised version of the manuscript. We would be glad if you are good enough to find satisfaction in our address to the reviewers' comments.

1. The editor's suggestions in the edited manuscript file

1) Please provide language certificate by professional English language editing companies.

→ We uploaded the completed language certificate as an attached document in addition to the revised manuscript. (document name: 26079-Language certificate)

2) A copy of signed conflict-of-interest statement should be provided to the BPG in PDF format, which are necessary for final acceptance.

→ We uploaded the completed two conflict-of-interest statements as attached documents in addition to the revised manuscript. (document name: 26079-Conflict-of-interest statement Jae-Won Joh, 26079-Conflict-of-interest statement Milljae Shin)

3) In order to attract readers to read your full-text article, we request that the author make an audio file describing your final core tip, it is necessary for final acceptance.

→ We uploaded the recorded audio file as an attachment in addition to the revised manuscript. (file name: 26079-Audio core tip)

4) Don't need blank space between reference number and the before words.

→ We checked and corrected the word spacing error throughout the manuscript (including the main text and Table 1). These corrections were highlighted in the revised manuscript.

5) Please add PubMed citation numbers and DOI citation to the reference list and list all authors.

→ We provided the PMID numbers and the CrossRef DOI names throughout the reference list. All the references had the PMID numbers, but the following three references did not have the DOI names. We added these information in the “References” section of the revised manuscript. And we checked and listed the names of all authors in each reference. These revisions and corrections were highlighted in the revised manuscript.

86 Dowsett JF, Vaira D, Hatfield AR, Cairns SR, Polydorou A, Frost R, Croker J, Cotton PB, Russell RC, Mason RR. Endoscopic biliary therapy using the combined percutaneous and endoscopic technique. *Gastroenterology* 1989; **96**(4): 1180-1186 [PMID: 2925062]

97 Matsuno N, Uchiyama M, Nakamura Y, Iwamoto H, Hama K, Ashizawa T, Nagao T, Yamanouchi E. A nonsuture anastomosis using magnetic compression for biliary stricture after living donor liver transplantation. *Hepatogastroenterology* 2009; **56**(89): 47-49 [PMID: 19453026]

108 Atar E, Bachar GN, Eitan M, Graif F, Neyman H, Belenky A. Peripheral cutting balloon in the management of resistant benign ureteral and biliary strictures: long-term results. *Diagnostic and interventional radiology (Ankara, Turkey)* 2007; **13**(1): 39-41 [PMID: 17354194]

2. This article is a comprehensive review regarding recent advances in endoscopic management of biliary complications after living donor liver transplantation. This review article is well-written and refers to many recent manuscripts. Therefore, this article is very informative for readers of this journal. (reviewer’s code: 03474917)

→ We really appreciate your review and positive comments. We would like to offer you our heartfelt thanks for this.

3. In this article the author covered endoscopic management for different kinds of biliary complications. It is detailed and comprehensive. It could be made more focused if the author concentrates on biliary anastomotic stricture. Overall its well

written, and I only have a few minor comments and questions. The author mentioned several risk factors for biliary complications. It is worthwhile to mention about prolonged cold ischemic time and acute cellular rejections as important risk factors for biliary anastomotic stricture. Supplement with graphical illustration would be great for description of the magnet compression technique. Are there any long term results in the literature for using magnet compression to treat duct-to-duct or HJ strictures? (reviewer's code: 03474905)

→ Thank you for your review and comments. We agreed to a reviewer's proposal. We added the detailed information about risk factors for biliary complication in the "INTRODUCTION" section of the revised manuscript. Also, we inserted the graphic illustration describing the process of magnetic compression anastomosis technique as supplementary material (supplementary figure 1 and its detailed supplementary figure legend). These revisions were highlighted in the revised manuscript. We uploaded the supplement material as an attached document in addition to the revised manuscript. (document name: 26079-Supplementary material)

→ Magnetic compression anastomosis (MCA), first developed by Yamanouchi et al. in 1998, is an innovative technique for alimentary tract anastomosis without performing surgery. After confirming the safety of MCA technique in animal experiments, various types of alimentary tract anastomoses has been performed in numerous clinical patients. An anastomosis becomes possible wherever magnets can be inserted. More recently, MCA is beginning to be used to create biliary anastomosis in patients with benign or malignant strictures, particularly postoperative stricture. It hasn't been long since MCA technique took root in patients underwent living donor liver transplantation (LDLT).

As you noted, the literature-based long term results for using MCA to treat posttransplant biliary structure is very important because it validates the ultimate value or usefulness of MCA in the field of LDLT. Unfortunately, maybe due to introduction of MCA in a short period of time, almost every published experience with MCA consists of case series, with a small number of patients. Most reports focus on the technical success including magnet approximation and recanalization,

and support the safety and feasibility of MCA in patient with biliary stricture after LDLT. They lack long-term data after removing the biliary stent, such as stricture resolution, stent-free follow-up duration, and stricture recurrence after initial success. Even if the data are shown, these data may be inadequate for evaluating the long term results because the study concluded too early to evaluate. Furthermore, there are no randomized, controlled trials or nonrandomized studies to compare MCA and surgical treatment on a severe biliary stricture that cannot be canalized using conventional non-surgical methods. Nevertheless, we believe that large studies with long-term outcomes will be reported in the near future.

4. I appreciate of your huge work on this manuscript and comprehensive consideration of every aspect of LDLT, especially for your consideration of pediatric liver translation and complications for liver donor. Adjusting the site of types of biliary anastomotic strictures might be better. (reviewer' code: 00183194)

→ We really appreciate your review and positive comments. If you mean we have to change the order of subsection "types of biliary anastomotic strictures", we rearranged and included the paragraph in the "INTRODUCTION" section of the revised manuscript. This revision was also highlighted.

5. This review article provides a wide scope of knowledge on endoscopic managements of biliary complications following liver transplantation. It is highly applaudable for the authors to make this manuscript for international readers who are involved in liver transplantation. However, some minor revisions are needed to improve the quality of the manuscript. The subsection "Types of biliary anastomotic strictures" is recommended to be included in the introduction of several complications at the very beginning of this manuscript. In addition, incidentally, I could find the improper use of indefinite article in the sentence "In these, if anastomotic stricture recurred, enteroscopic intervention was repeated and an biliary stent was placed in all of these patients" The indefinite article, "an", placed before "biliary" is inappropriate, because the letter "b" is not a vowel. (reviewer's code: 03479176)

→ Thank you for your review and positive comments. We agreed to a reviewer's proposal. We changed the order of subsection "types of biliary anastomotic strictures" and included the paragraph in the "INTRODUCTION" section of the revised manuscript. Also, we spelled correctly according to the rules of orthography. These revisions were highlighted in the revised manuscript.

Everything you have pointed out has been corrected exactly. Once again, thank you for interesting our manuscript titled "Advances in Endoscopic Management of Biliary Complications after Living Donor Liver Transplantation: Comprehensive Review of the Literature". We look forward to receiving your favorable responses in the near future.

Sincerely yours,

Milljae Shin, MD (First author)

Jae-Won Joh, MD, PhD (Corresponding author)