

Dear Editor,

Thank you for giving us the opportunity to submit a revised draft of our manuscript entitled “Use of Shear Wave Elastography for the Diagnosis and Follow-up of Biliary Atresia: A Meta-Analysis.” We appreciate the time and effort that you and the reviewers have dedicated to providing your valuable feedback on our work. We are grateful to the reviewers for their insightful comments on the paper. We have been able to incorporate changes to reflect most of the suggestions provided by the reviewers. We have highlighted the changes within the manuscript. Here is a point-by-point response to the reviewers’ comments and concerns.

Sincerely,

Ellen S. Wagner, MD

| Reviewers’ comments | |
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| Reviewer #1: | Author’s Reply |
| Scientific Quality: Grade A (Excellent) Language Quality: Grade A (Priority publishing) Conclusion: Accept (High priority) Specific Comments to Authors: I have reviewed the meta-analysis titled: "Use of Shear Wave Elastography for the Diagnosis and Follow-up of Biliary Atresia: A Meta-Analysis" with great interest. I think it is a very good work, analyzing various studies on a important subject, using a non-invasive technique to diagnose and follow up biliary atresia cases. These diagnostic modalities will in the future replace more invasive techniques. I admire the clarity of the limitations. | Thank you for your commentary and for taking the time to review our work. |
| Reviewer #2 | Author’s Reply |
| Scientific Quality: Grade A (Excellent) Language Quality: Grade B (Minor language polishing) Conclusion: Accept (General priority) Specific Comments to Authors: Good analysis. | Thank you for your commentary and for taking the time to review our work. Regarding language quality (Grade B), the authors have reviewed and revised the language utilized in the manuscript. |
| Reviewer #3 | Author’s Reply |
| Scientific Quality: Grade C (Good) Language Quality: Grade A (Priority publishing) Conclusion: Minor revision Specific Comments to Authors: The manuscript "Use of shear-wave elastography for the diagnosis and follow-up of biliary atresia: a meta-analysis" by Wagner et al. | Thank you for taking the time to review our work. We appreciate your feedback. Please see below for our point-by-point response to each concern raised. |

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| <p>presents the results of two meta-analyses of elastography in two serious situations during biliary atresia management. The paper is, in general, well written, but there are some issues regarding this study.</p> | |
| <p>The authors intended to analyze the SWE role in biliary atresia management, but the papers included in the analysis mentioned the use of different methods. In this way, the results are not fully comparable.</p> | <p>Thank you for bringing up this point. This is one of the limitations in our work and has been addressed more clearly in the discussion. However, due to the small numbers of the included studies, the subgroup analysis by stratifying the included studies based the used methods was not applicable.</p> |
| <p>Also, the age of the patients is very different, and the moment of the analysis may significantly influence the results as fibrosis has a quick evolution in biliary atresia.</p> | <p>This is now referenced in the limitations section with the sentence, “Furthermore, each study analyzed for BA diagnosis was performed on infants of different average age (with ranges from two to 140 days of life); given the rapid evolution of fibrosis in BA, the variety of ages analyzed may influence the results.”</p> |
| <p>The diagnosis reference is also different as some used the biopsy and others the surgical exploration and cholangiogram.</p> | <p>This is now stated more clearly in discussion with sentences, “Notably, several of the studies used different reference standards (five utilized liver biopsy, one utilized surgical exploration or cholangiography, and one did not specify its reference standard).” and “In addition to the use of different reference standards (liver biopsy vs. surgical exploration or cholangiogram)…”</p> |
| <p>Still, their conclusions may be necessary for future developments and research in this field. Some of these aspects may be explained more in detail in the Discussions. The limitations of the study may be explained more in-depth.</p> | <p>We have expanded the limitation section by adding more details as per your comments beginning with “Although the findings from this meta-analysis are compelling, there are notable limitations to the analysis...” in the discussion section</p> |
| <p>It will be essential to mention that the elastography may not reflect the fibrosis level correctly but the severity of cholestasis, as presented in many previous studies.</p> | <p>Thank you for this excellent point. We have addressed this with the following: “In a similar vein, a recent study by Darweesh et al found that cholestasis itself can increase liver stiffness measurements in adult patients, separate to histologic findings of fibrosis;</p> |

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| | future studies must take this potential confounder into account” |
| Also, I would include the ultrasound findings as an early step in diagnosing biliary atresia. | We appreciate this suggestion. This was addressed in the introduction section of the paper with “While ultrasound findings, such as absence of a contractile gall bladder after feeding or the presence of a triangular cord sign, can be suggestive of BA, ultrasound alone is not diagnostic[3].” |
| I consider that the Discussion section should include more discussions of the results. | Thank you for this feedback, the discussion of results was bolstered as suggested, including the following sentence, “When interpreted within the context of pathophysiology of BA, with fibrosis beginning at bile duct obliteration, in comparison to non-BA cholestasis which has variable degrees of fibrosis, these results reflect the potential for SWE to aid in the diagnostic process. “ |
| Editor’s comments | |
| The manuscript has been peer-reviewed, and it's ready for the first decision. Language Quality: Grade A (Priority publishing) Scientific Quality: Grade B (Very good) | Thank you for your commentary and for taking the time to review our work. |
| Before final acceptance, uniform presentation should be used for figures showing the same or similar contents; for example, “Figure 1 Pathological changes of atrophic gastritis after treatment. A: ...; B: ...; C: ...; D: ...; E: ...; F: ...; G: ...”. | This has been done and submitted as requested. |
| Please provide decomposable Figures (in which all components are movable and editable), organize them into a single PowerPoint file. | This has been done and submitted as requested. |
| 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. | This was done and is reflected in the table with additional lines added to help distinguish “diagnosis” and “follow-up” studies within the table categorization. There were no carriage returns nor segmented cells utilized. |
| Please check and confirm whether the figures | This has been added to the figures as |

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| <p>are original (i.e. generated de novo by the author(s) for this paper). If the picture is ‘original’, the author needs to add the following copyright information to the bottom right-hand side of the picture in PowerPoint (PPT): Copyright ©The Author(s) 2022.</p> | <p>instructed.</p> |
| <p>If an author of a submission is re-using a figure or figures published elsewhere, or that is copyrighted, the author must provide documentation that the previous publisher or copyright holder has given permission for the figure to be re-published; and correctly indicating the reference source and copyrights. For example, “Figure 1 Histopathological examination by hematoxylin-eosin staining (200 ×). A: Control group; B: Model group; C: Pioglitazone hydrochloride group; D: Chinese herbal medicine group. Citation: Yang JM, Sun Y, Wang M, Zhang XL, Zhang SJ, Gao YS, Chen L, Wu MY, Zhou L, Zhou YM, Wang Y, Zheng FJ, Li YH. Regulatory effect of a Chinese herbal medicine formula on non-alcoholic fatty liver disease. World J Gastroenterol 2019; 25(34): 5105-5119. Copyright ©The Author(s) 2019. Published by Baishideng Publishing Group Inc[6]”. And please cite the reference source in the references list. If the author fails to properly cite the published or copyrighted picture(s) or table(s) as described above, he/she will be subject to withdrawal of the article from BPG publications and may even be held liable.</p> | <p>None of the figures utilized in this manuscript have been previously published.</p> |
| <p>Before final acceptance, when revising the manuscript, the author must supplement and improve the highlights of the latest cutting-edge research results, thereby further improving the content of the manuscript. To this end, authors are advised to apply a new tool, the Reference Citation Analysis (RCA). RCA is an artificial intelligence technology-based open multidisciplinary citation analysis database. In it, upon obtaining search results from the keywords entered by the author, "Impact Index Per Article" under "Ranked by" should be selected to find the latest highlight</p> | <p>The authors applied to RCA utilizing keywords “biliary atresia” and “elastography” which yielded 43908 articles. When sorted by “impact index per article,” the search highlighted several articles which were already in use by the authors, including Sigrist et al. (rank #4), Friedrich-Rust et al. (rank #13), Bamber et al. (rank #16), Shiina et al. (rank #21), Dietrich et al. (rank #22), etc. There were no recently published articles highlighted by this search on the topic of elastography for biliary atresia that would further augment this meta-analysis.</p> |

articles, which can then be used to further improve an article under preparation/peer-review/revision. Please visit our RCA database for more information at: <https://www.referencecitationanalysis.com/>.