

PEER-REVIEW REPORT

Name of journal: World Journal of Radiology

Manuscript NO: 64477

Title: Comparison of point and two-dimensional shear wave elastography of the spleen in healthy subjects

Reviewer's code: 03664977

Position: Editorial Board

Academic degree: FAASLD, MD, PhD

Professional title: Professor

Reviewer's Country/Territory: Thailand

Author's Country/Territory: Germany

Manuscript submission date: 2021-02-19

Reviewer chosen by: AI Technique

Reviewer accepted review: 2021-02-21 23:49

Reviewer performed review: 2021-03-01 03:02

Review time: 7 Days and 3 Hours

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|---------------------------------|---|
| Scientific quality | <input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input checked="" type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish |
| Language quality | <input type="checkbox"/> Grade A: Priority publishing <input checked="" type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection |
| Conclusion | <input type="checkbox"/> Accept (High priority) <input type="checkbox"/> Accept (General priority) <input checked="" type="checkbox"/> Minor revision <input type="checkbox"/> Major revision <input type="checkbox"/> Rejection |
| Re-review | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| Peer-reviewer statements | Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous Conflicts-of-Interest: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |

SPECIFIC COMMENTS TO AUTHORS

Dear Authors submitting to WJG Manuscript ID – WJG64477 Manuscript Title Comparison of point and two-dimensional shear wave elastography of the spleen in healthy subjects All Author List: Friederike Nowotny, et al. Manuscript Type: prospective study Spleen stiffness as a tool predicting portal hypertension has been recently studied (1). There was attempt to evaluate reference range of splenic stiffness in healthy subjects (2, 3). However; none of the studies compared splenic stiffness using different methods. The current article shows non-significant correlation between the point and two-dimensional shear wave elastography (p-SWE and 2D-SWE) of spleen using different devices in normal healthy volunteers. Moreover, the splenic stiffness from different splenic poles were compared in this study. Reviewer's comment My comments 1. The major limitation of this study was the reliability of SWE value due to low number of measurement. Moreover, the inter-investigator agreement should be demonstrated. Previous studies showed that the interobserver agreement was excellent: 0.847-0.87 (4, 5) 2. Underlying liver disease, skin thickness and splenic size may effect splenic stiffness (2). Please clarify the definition of hepatopathies in your study and present the data of spleen size in baseline characteristics. 3. The limitation of tests such as the number of unsuccessful measurements should be clarified. In general, it was reported in about 2.8%.(6) 4. Previous studies showed reliable performance of both p-SWE and 2D-SWE in assessment of liver fibrosis (7). The explanation of unrelated splenic stiffness between two methods should be explained in discussion. FEB28, 2021

References 1. Song J, Huang J, Huang H, Liu S, Luo Y. Performance of spleen stiffness measurement in prediction of clinical significant portal hypertension: a meta-analysis. Clinics and research in hepatology and gastroenterology. 2018;42(3):216-26. 2. Cho YS, Lim S, Kim Y, Sohn JH, Jeong JY. Spleen Stiffness

Measurement Using 2 - Dimensional Shear Wave Elastography: The Predictors of Measurability and the Normal Spleen Stiffness Value. *Journal of Ultrasound in Medicine*. 2019;38(2):423-31. 3. Giuffrè M, Macor D, Masutti F, Abazia C, Tinè F, Patti R, et al. Evaluation of spleen stiffness in healthy volunteers using point shear wave elastography. *Annals of hepatology*. 2019;18(5):736-41. 4. Serra C, Grasso V, Conti F, Felicani C, Mazzotta E, Lenzi M, et al. A New Two-Dimensional Shear Wave Elastography for Noninvasive Assessment of Liver Fibrosis in Healthy Subjects and in Patients with Chronic Liver Disease. *Ultraschall in der Medizin (Stuttgart, Germany : 1980)*. 2018;39(4):432-9. 5. Fang C, Konstantatou E, Romanos O, Yusuf GT, Quinlan DJ, Sidhu PS. Reproducibility of 2-Dimensional Shear Wave Elastography Assessment of the Liver: A Direct Comparison With Point Shear Wave Elastography in Healthy Volunteers. *Journal of ultrasound in medicine : official journal of the American Institute of Ultrasound in Medicine*. 2017;36(8):1563-9. 6. Petzold G, Hofer J, Ellenrieder V, Neesse A, Kunsch S. Liver Stiffness Measured by 2-Dimensional Shear Wave Elastography: Prospective Evaluation of Healthy Volunteers and Patients With Liver Cirrhosis. *Journal of ultrasound in medicine : official journal of the American Institute of Ultrasound in Medicine*. 2019;38(7):1769-77. 7. Bâldea V, Lupușoru R, Dănilă M, Șirli R, Popescu A, Sporea I. Comparison between the performance of Two-Dimensional and Point Shear Wave elastography for the noninvasive assessment of liver cirrhosis. *Ultrasound in Medicine and Biology*. 2019;45:S119.

RE-REVIEW REPORT OF REVISED MANUSCRIPT

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Professional title: Professor

Reviewer's Country/Territory: Thailand

Author's Country/Territory: Germany

Manuscript submission date: 2021-02-19

Reviewer chosen by: Man Liu

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Reviewer performed review: 2021-04-08 03:42

Review time: 1 Hour

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|---------------------------------|---|
| Scientific quality | <input type="checkbox"/> Grade A: Excellent <input checked="" type="checkbox"/> Grade B: Very good <input type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish |
| Language quality | <input type="checkbox"/> Grade A: Priority publishing <input checked="" type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection |
| Conclusion | <input type="checkbox"/> Accept (High priority) <input checked="" type="checkbox"/> Accept (General priority) <input type="checkbox"/> Minor revision <input type="checkbox"/> Major revision <input type="checkbox"/> Rejection |
| Peer-reviewer statements | Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous Conflicts-of-Interest: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |

SPECIFIC COMMENTS TO AUTHORS

The authors clearly provide point by point explanation and make article more concise.