Reviewer’s report

Title: Transient elastography for predicting esophageal/gastric varices in children with biliary atresia

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Reviewer: giada Sebastiani

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MAJOR COMPULSORY REVISIONS

The study by Chongsrisawat et al deals with non-invasive detection of oesophageal varices in children by transient elastography and simple serum biomarkers. This is an interesting topic and there is not a lot of literature about it. However, I have some major concerns that the authors should address.

- splenomegaly was detected with physical examination. Was this then confirmed with abdominal ultrasound? If so, also ultrasound results should be included in the results and in the methods.

- RESULTS: this section is very limited and it should be expanded. For example, more data about the performance of the methods (transient elastography and serum markers) must be included. Predictive values, accuracy, likelihood ratios must be included. The authors should also comment on the predictive values since the area under the ROC curve has not much value in clinical practice. A very high negative predictive value could be very useful to exclude children who need an endoscopy. Also refer to a recent study (Sebastiani et al, J Hepatol 2010), that is one of the largest about chronic liver diseases, that has developed an algorithm based on simple non-invasive test. Maybe the authors could apply some of these simple and cheap tests. Moreover, they should propose an algorithm based on their results to be used in clinical practice. Also a cost-benefit analysis should be included accordingly. Finally, the area under the ROC curve should be used especially to define cut-off of the markers that could have high predictive values to rule-out or rule-in oesophageal varices. Unfortunately, all this analysis is lacking and the present data are insufficient. The above mentioned results should also be carefully commented in the discussion.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests.