PEER-REVIEW REPORT

Name of journal: *World Journal of Hepatology*

Manuscript NO: 76510

Title: Effect of Thrombocytopenia and Platelet transfusion on Outcomes of Acute Variceal Bleeding in Patients with Chronic Liver Disease: A real-world experience

Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer’s code: 00921744

Position: Peer Reviewer

Academic degree: MD

Professional title: Doctor

Reviewer’s Country/Territory: Netherlands

Author’s Country/Territory: India

Manuscript submission date: 2022-03-23

Reviewer chosen by: AI Technique

Reviewer accepted review: 2022-03-23 13:22

Reviewer performed review: 2022-03-24 14:44

Review time: 1 Day and 1 Hour

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<th>[ ] Grade B: Very good</th>
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SPECIFIC COMMENTS TO AUTHORS
This is a very large retrospective study assessing the impact of platelet and FFP transfusion on the outcome of a variceal bleed. The study clearly demonstrates that platelet (and FFP) transfusion may do harm as they increase rebleeding and mortality. Importantly, the authors demonstrate that only transfusion, and not baseline platelet count is associated with poor outcome. I have a few suggestions to further improve the quality of this work. 1) In the introduction the authors state that TEG and ROTEM provide 'a global assessment of the coagulation system'. Whilst these tests are likely more accurately representing hemostatic status than PT and platelet count, also these tests are far from perfect, and I would like the authors to give this statement a little more nuance (J Clin Gastroenterol. 2020 Apr;54(4):389-391). 2) Also in the introduction it is stated that 'severe thrombocytopenia is believed to increase the risk of procedural bleeding in cirrhotics'. Also this statement needs to be toned down as there are also studies showing a lack of predictive value of platelet count for procedural bleeding (see statements on this in the recently published EASL guidance document: https://pubmed.ncbi.nlm.nih.gov/35300861/). 3) The statement in the beginning of the introduction on 'a procoagulant state in several cirrhotic patients' is vague. There is evidence for hypercoagulable features in all patients with cirrhosis, even those who are critically ill. 4) Pag 13, top - please also cite the 2022 EASL guideline. 5) page 13 middle - the discussion of the Mohanty and Blasi studies is vague - don't all 3 studies basically conclude the same (lab values do not predict outcome, transfusion is bad)? Also, the Blasi study doesn't deal with active bleeding, but with post-prophylactic band ligation, so the comparison is somewhat confusing. 6) The discussion can be considerably
shortened as it reiterates results. 7) Why aren't details on the multivariable analyses shown?
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Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer’s code: 05231286

Position: Editorial Board

Academic degree: MD, PhD

Professional title: Associate Chief Physician

Reviewer’s Country/Territory: China

Author’s Country/Territory: India

Manuscript submission date: 2022-03-23

Reviewer chosen by: AI Technique

Reviewer accepted review: 2022-03-24 06:14

Reviewer performed review: 2022-04-02 11:03

Review time: 9 Days and 4 Hours

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SPECIFIC COMMENTS TO AUTHORS

The efficacy of platelet transfusions on rebleeding in patients with cirrhosis is controversial. This study is a good complement to this clinical question. It is a great honor to review the authors’ research report. My main concerns are as follows. 1. In this report, the baseline characteristics of patients were collected. It is better if the authors can analyze the relationship between variables such as platelet count level and prothrombin time with rebleeding and mortality on days 5 and 42 in this population. 2. The variable expression should be determined by normality test. If the continuous data were normally distributed, a mean±SD should be considered. 3. Since the sample number between platelets transfusion group and the control group, a propensity score matching (PSM) model was suggested for balancing confounders between the two groups. 4. The authors used odds ratio (OR) in table 4 and table 5. While in this prospective study, including mortality data, risk ratio (RR) and/or hazard ratio (HR) might be more properly. 5. In table 4 and table 5, the author summarized the parameters associated with 42-day rebleeding and 42-day mortality, respectively. The details of multivariate analysis should be presented in these two parts.
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Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer’s code: 06255079

Position: Peer Reviewer

Academic degree: MSc

Professional title: Lecturer

Reviewer’s Country/Territory: Ethiopia

Author’s Country/Territory: India

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Reviewer chosen by: AI Technique

Reviewer accepted review: 2022-03-23 13:20

Reviewer performed review: 2022-04-05 14:26

Review time: 13 Days and 1 Hour

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SPECIFIC COMMENTS TO AUTHORS

1 Title. Does the title reflect the main subject/hypothesis of the manuscript?  
2. Abstract. Does the abstract summarize and reflect the work described in the manuscript?  
• Yes, the title and the abstract cover the main aspect of the work  
3 Key words. Do the key words reflect the focus of the manuscript? It is recommended to use MeSH headings as the keywords. Please correct, if possible.  
4. Background. Does the manuscript adequately describe the background, present status and significance of the study?  
• The background of the manuscript has tried to provide the background and information relevant to the study but it needs more clarification and rephrasing of the sentence.  
5 Methods. Does the manuscript describe methods (e.g., experiments, data analysis, surveys, and clinical trials, etc.) in adequate detail?  
• Methods section is well-written.  
6 Results. Are the research objectives achieved by the experiments used in this study? What are the contributions that the study has made for research progress in this field?  
• The results of the study shows some novel findings and is plausible.  
7 Discussion. Does the manuscript interpret the findings adequately and appropriately, highlighting the key points concisely, clearly and logically? Are the findings and their applicability/relevance to the literature stated in a clear and definite manner? Is the discussion accurate and does it discuss the paper’s scientific significance and/or relevance to clinical practice sufficiently?  
• The discussion part looks relevant but there are various spelling and grammatical errors.  
8 Illustrations and tables. Are the figures, diagrams and tables sufficient, good quality and appropriately illustrative of the paper contents? Do figures require labeling with arrows, asterisks etc., better legends?  
• The tables so far are clear but if possible the significance of the findings should be mentioned.
where necessary  9 Biostatistics. Does the manuscript meet the requirements of biostatistics? • The statistical analysis looks appropriate and relevant. 10 Units. Does the manuscript meet the requirements of use of SI units? • Yes. 11 References. Does the manuscript cite appropriately the latest, important and authoritative references in the introduction and discussion sections? Does the author self-cite, omit, incorrectly cite and/or over-cite references? • The references of the manuscript has to follow the referencing style guidelines of the journal. 12 Quality of manuscript organization and presentation. Is the manuscript well, concisely and coherently organized and presented? Is the style, language and grammar accurate and appropriate? • Some part of the discussion has grammatical errors and should be addressed. 13 Research methods and reporting. Authors should have prepared their manuscripts according to manuscript type and the appropriate categories, as follows: (1) CARE Checklist (2013) - Case report; (2) CONSORT 2010 Statement - Clinical Trials study, Prospective study, Randomized Controlled trial, Randomized Clinical trial; (3) PRISMA 2009 Checklist - Evidence-Based Medicine, Systematic review, Meta-Analysis; (4) STROBE Statement - Case Control study, Observational study, Retrospective Cohort study; and (5) The ARRIVE Guidelines - Basic study. Did the author prepare the manuscript according to the appropriate research methods and reporting? • The statistical analysis looks appropriate and relevant. 14 Ethics statements. For all manuscripts involving human studies and/or animal experiments, author(s) must submit the related formal ethics documents that were reviewed and approved by their local ethical review committee. Did the manuscript meet the requirements of ethics? • There is no any ethical or any other concern raised. The approval has been granted.