

Dear Dr Jin-Lei Wang
Director, Editorial Office
Baishideng Publishing Group Co, Limited

Thank you for giving us another opportunity to submit a revised draft of the manuscript titled "Anticoagulation in simultaneous pancreas kidney transplantation-On what basis?" to the *World Journal of Transplantation*. We appreciate your efforts and are grateful to your team. We have incorporated changes to reflect the comments provided by the reviewers and editor and the changes have been highlighted within the manuscript.

Comments from reviewer

"Please discuss in more detail the reproducibility between different labs of TEG compared to conventional coagulation tests"

Response: Thank you for pointing this out. We have discussed the following in the materials and methods section under the heading 2.3 Thromboelastogram in the last 3 lines. "The R time indicates the concentration of soluble clotting factors in plasma and correlates with PT results. The K correlates positively with PT/APTT results and inversely with fibrinogen levels. The angle (α) indicates the rapidity of fibrin build up and cross-linking, and is a dynamic measure that is unique to thromboelastography. The α and MA correlates positively with fibrinogen and platelet levels in circulation; high fibrinogen levels or thrombocytosis results in increased α and MA"

Comments from the Editor

1. "Please re-provide the figure documents. All submitted figures, including the text contained within the figures, must be editable. Please provide the text in your figure(s) in text boxes; For line drawings that were automatically generated with software, please provide the labels/values of the ordinate and abscissa in text boxes; Please prepare and arrange the figures using PowerPoint to ensure that all graphs or text portions can be reprocessed by the editor"

Response: We have re-attached the figure documents. All the text and the labels are inserted into text boxes.

2. Please write the "article highlights" section at the end of the main text. Detailed writing requirements for "article highlights" can be found in the Guidelines and Requirements for Manuscript Revision which can be downloaded at <https://www.wjgnet.com/bpg/GerInfo/291>.

Response: Many thanks for pointing this out. We have written the article highlights as per the guidelines provided before the acknowledgements section.

Article highlights:

Research background:

Pancreas allograft thrombosis is the most common non-immunological cause for early graft loss. Hence, prophylactic anticoagulation has become the routine practice. CCT are slow in titrating anticoagulation especially in the early post-operative period and also don't detect hypercoagulable state that is inherent to diabetes and is left unaddressed. TEG is a dynamic, rapid and reliable tool that provides a complete picture of coagulation. TEG based anticoagulation in pancreas transplantation has been proven to identify patients at risk of thrombotic graft loss thereby enabling safe anticoagulation with least morbidity and mortality.

Research objective:

Despite these studies, there is no clear consensus for the basis of anticoagulation. Therefore, we aimed to compare the outcomes between TEG and CCT based anticoagulation in SPK transplantation.

Research methods:

A single center retrospective analysis comparing the outcomes between TEG and CCT-directed anticoagulation in SPK recipients, who were matched for donor age and graft type {Donors after brainstem death (DBD) and donors after circulatory death (DCD)}.

Anticoagulation consisted of intravenous (IV) heparin titrated up to a maximum of 500 IU/hour based on CCT in conjunction with various clinical parameters or directed by TEG results. Graft loss due to thrombosis, anticoagulation related bleeding, radiological incidence of partial thrombi in the pancreas graft, thrombus resolution rate after anticoagulation dose escalation, length of the hospital stays and, 1-year pancreas and kidney graft survival between the two groups were compared.

Research results:

For the first time we have compared TEG and CCT directed anticoagulation in pancreas transplantation. There were no thrombotic graft losses in the TEG group whereas 7 pancreases and 4 kidneys were lost in the CCT group. The incidence of anticoagulation related bleeding was less (17.65% TEG vs. 45.10% CCT, $p=0.05$) and also the median length of hospital stay was reduced (18 days TEG vs. 31 days CCT, $p=0.03$) in TEG group compared to the CCT group.

Research conclusions:

TEG based anticoagulation prevents thrombotic graft loss without concomitant increase in the incidence of anticoagulation related bleeding and also reduces the length of hospital stay. Hereby our findings re-confirm the published literature.

Research perspectives:

Future prospective studies with more patient numbers will be more beneficial for generating a robust evidence base.

3. “Please provide the PubMed numbers and DOI citation numbers to the reference list and list all authors of the references. Please revise throughout. The author should provide the first page of the paper without PMID and DOI numbers. NOTE: The PMID is required, and NOT the PMCID; the PMID number can be found at <https://pubmed.ncbi.nlm.nih.gov>. (Please begin with PMID:) The DOI number can be found at <http://www.crossref.org/SimpleTextQuery/>. (Please begin with DOI: 10.). Please verify that the references are cited by Roman numerals in square brackets and superscripted in the text, and that the numbering order is correct. There should be no space between the bracket and the preceding word or the following punctuation. When references in the text and tables are cited with author name(s), it is necessary to manually verify that the name(s) is consistent with the first author's surname in the corresponding reference list”**

Response: Thanks you for the comment. The references has been edited according to the guidelines for manuscript revision for retrospective studies and the changes has been highlighted appropriately.

We look forward to hearing from you regarding the revision and are keen to get it published soon.

Thanks, and Regards
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