Peer Review Report

Review Report on Comparison of uremic toxin removal between expanded hemodialysis and high volume online hemodiafiltrations in different modes

Original Research, Acta Biochim. Pol.

Reviewer: Menso Nube
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EVALUATION

Q 1 **Please summarize the main findings of the study.**

The main findings include the removal, as measured by RRs, of four uremic retention products (range from 500D–40kD) during four high-efficiency dialysis modalities.

From this study, it appeared that statistical significant differences could not be demonstrated during a single dialysis session.

Q 2 **Please highlight the limitations and strengths.**

The present study is well designed, executed and written. Important limitations are the lack of Ht-based hemoconcentration calculations and a control HF-HD arm.

Q 3 **Please comment on the methods, results and data interpretation. If there are any objective errors, or if the conclusions are not supported, you should detail your concerns.**

The authors should omit the term SIGNAL (page 7, 10) or 'best degree of clearance' (page 8), because there is no evidence at all –not even a trend–, that the removal of any uremic substance is superior in either modality

Check List

Q 4 **Please provide your detailed review report to the editor and authors (including any comments on the Q4 Check List)**

This study is important, because it may support the start of the missing link in this area, namely a RCT, comparing survival between HV-HDF and HDx. As HDx is as easy to perform as standard HD and, hence, available all over the world, comparable survival could benefit thousands of patients who are (either by location or by an inability to reach high convection volumes) restrained from HV-HDF.

Q 5 **Is the English language of sufficient quality?**

Yes.

Q 6 **Is the quality of the figures and tables satisfactory?**

Yes.

Q 7 Does the reference list cover the relevant literature adequately and in an unbiased manner?

No.

Q 8 Are the statistical methods valid and correctly applied? (e.g. sample size, choice of test)

Yes.

Q 9 Are the methods sufficiently documented to allow replication studies?

Yes.

Q 10 Are the data underlying the study available in either the article, supplement, or deposited in a repository? (Sequence/expression data, protein/molecule characterizations, annotations, and taxonomy data are required to be deposited in public repositories prior to publication)

No.

Q 11 Does the study adhere to ethical standards including ethics committee approval and consent procedure?

Yes.

Q 12 Have standard biosecurity and institutional safety procedures been adhered to?

Not Applicable.

QUALITY ASSESSMENT

Q 13 Originality

Q 14 Rigor

Q 15 Significance to the field

Q 16 Interest to general audience

Q 17 Quality of the writing

Q 18 Overall quality of the study