

PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	Changes in arterial stiffness indices during a single hemodialysis session in end-stage renal disease population -- A systematic review and meta-analysis protocol
AUTHORS	Fortier, Catherine; Obeid, Hasan; Paré, Mathilde; Garneau, Charles-Antoine; Sidibé, Aboubacar; Boutouyrie, Pierre; Agharazii, Mohsen

VERSION 1 – REVIEW

REVIEWER	Iwashima, Yoshi Dokkyo Medical University
REVIEW RETURNED	15-Dec-2020

GENERAL COMMENTS	The study protocols are scientifically credible and are presented in an appropriate context. This reviewer has no further comment.
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REVIEWER	Zuo, Junli Ruijin Hospital North Of Shanghai Jiao Tong University Medicine School
REVIEW RETURNED	23-Dec-2020

GENERAL COMMENTS	<p>The authors promoted an interesting scientific assumption: how kind of the acute effect a single hemodialysis session have on mechanical biomarkers of arterial stiffness.</p> <ol style="list-style-type: none">1. How to avoid the potential confounding effect of vasoactive agents which is generally used in the ESRD patients?2. The studies that were able to include in the present study is limited, the feasibility of the study should be mentioned.
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VERSION 1 – AUTHOR RESPONSE

Reviewer: 1

Dr. Yoshi Iwashima, Dokkyo Medical University

Reply: There was no comment to address.

Reviewer: 2

Miss Junli Zuo, Ruijin Hospital North Of Shanghai Jiao Tong University Medicine School

1. How to avoid the potential confounding effect of vasoactive agents which is generally used in ESRD patients?

Reply: The reviewer raises an interesting point. Indeed, these subjects are in general treated by multiples and heterogeneous classes of antihypertensive drugs with various pharmacokinetics characteristics during dialysis. Besides the potential chronic effects of these drugs on arterial stiffness metrics, there may also be potential confounding effects related to the timing of medication taken with respect to dialysis schedule and the extent to which the medication is removed by dialysis. Unfortunately, the original studies are unlikely to be very informative on this issue. As such, we concur with the reviewer that there may be some confounding effect, but it is our impression that we cannot quantify this confounding effect because subjects are taking various classes of drugs and at this point, we are not performing a meta-analysis based on individual data. As such, this systematic review and meta-analysis cannot properly address the point raised by the reviewer.

2. The studies that we're able to include in the present study are limited, the feasibility of the study should be mentioned.

Reply: We agree with the reviewer's comment. Indeed, we were initially concerned about the potentially limited number of eligible studies. However, we conducted a rough Pubmed Search that resulted in more than 15 articles exploring different targeted stiffness metrics around a hemodialysis session. This number of potentially eligible studies is reassuring about the feasibility of this systematic review and encourages us to start the whole process in a proper form.