Reviewer’s report

Title: Effect of therapeutic plasma exchange on plasma levels and total removal of adipokines and inflammatory markers

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Reviewer: Tom Barber

Reviewer’s report:

This is an interesting original article on the effects of therapeutic plasma exchange (TPE) on plasma levels of adipokines and inflammatory markers. The data do have clinical relevance, and the paper is relevant to clinicians and researchers with an interest in this field. The conclusions, that TPE has a persistent effect on sICAM-1 levels and temporary effects on several other adipokines measured in the plasma, are well supported by the data. I agree with the authors that the data on sICAM-1 are relevant for interpretation of data post-TPE and also may have therapeutic implications. This reviewer just has a few comments that need to be addressed by the authors:

Major compulsory revisions:

1. As the authors acknowledge, this study only relates to those subjects who are undergoing TPE for clinical purposes due to some underlying condition that warrants this treatment. What about subjects with obesity and T2D? How does TPE affect sICAM-1 in these subjects? I think this important limitation needs to be made clear in the revised abstract, given that one cannot necessarily infer the same conclusions for an obese cohort based on the data on TPE being used for clinical purposes in patients with conditions such as MS for example.

2. There are grammatical errors throughout and some spelling errors which need to be corrected.

3. The number of subjects (n=21) is relatively low. Does this provide sufficient power? Were power calculations performed a priori?

Minor essential revisions:

1. The sexual dimorphism regarding resistin is interesting. Would the authors like to speculate on the possible reasons for this sex difference in the effects of TPE on resistin levels?

2. Plasma levels of many of the adipokines analysed pre- and post-TPE did not change much. What is the explanation for differences in effects of TPE on plasma levels of sICAM-1 versus the other non-changed adipokines assessed? Is it related to molecular size? Some discussion of possible explanations for this phenomenon would be desirable.
Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I declare that I have no competing interests.