Reviewer's report

Title: Coagulation activation, platelet depletion and endothelial integrity in case of uraemia and haemodialysis treatment.

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Reviewer: Theodoros Eleftheriadis

Reviewer's report:

Although it is already known that ESRD and CKD patients are characterized by endothelial and platelet dysfunction, the article remains interesting for two reasons. First, it deals with both aspects concurrently and the statistical relation between ET-1 levels and PLT granules depletion is an important finding. Second, the method used for the detection of PLT activation is also interesting, albeit not widely available.

Thus in my opinion the article is suitable for publication providing that the authors correct and/or clarify some points.

1. The article has to be re-read carefully for correcting some type and linguistic errors.
2. In the title it should be clarified that the term platelet depletion is referred to PLT granules.
3. It would be better if the analysis among the 3 groups (ESRD, CKD and healthy subjects) was performed by means of ANOVA.
4. The conclusions subsection should be smaller, one or two sentences. The other interesting things of this subsection should be transferred to the discussion subsection.
5. In the discussion section the authors noted the significance of LMWH as anticoagulant in the HD procedure. However, PLT aggregation is known to be influenced (increased) by heparin (the white clot syndrome is at the extreme of such an action). A study in HD patients showed that PLT aggregation is positively related to LMWH dose, although to a lesser extent before the HD session than immediately after the HD session (Eleftheriadis et al, Nephrology, 11:3-8, 2006). A comment is needed about this, and if possible the authors could evaluate the relation between PLT granule depletion and LMWH dose.

Level of interest: An article of importance in its field

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

Statistical review: Yes, and I have assessed the statistics in my report.

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