Author's response to reviews

Title: Lipoprotein lipase responds similarly to tinzaparin as to conventional heparin during haemodialysis

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Author's response to reviews: see over
Comments to Reviewer's report
Title: Lipoprotein lipase responds similarly to tinzaparin as to conventional heparin during haemodialysis

- Minor Essential Revisions
Suggested revisions:
1 - The authors state that some patients refused to fast prior to having samples taken during the study. The comparison with historical lipid profiles leaves open the possibility that some of the patients might have been fasting when the previous samples were analysed, but not during the study period. If this is the case, it should also be mentioned as a limitation to interpretation of some of the findings in the study.

Authors comments:
Those who refused to fast (i.e. diabetic patients) were told to keep a low fat diet with a cup of tea and only carbohydrates for breakfast and to keep the same regime of diet for all dialyses included in the study. This was accepted by them.

This text has been added into the manuscript.

We have used paired statistics which means that we have compared the values of the same subject.

Reviewer comment 2 - The authors’ data show that Tinzaparin leads to higher LPL activity at 40 minutes than UFH. It would therefore be expected that this would lead to lower Triglyceride levels at this time point than is seen with UFH. The data however, suggests the opposite – the authors say in their discussion “we found that this early fall of plasma TG was less marked with the LMW-heparin than with the UF-heparin.” If the authors have an explanation for this, it would be worth adding it to the discussion section.

Authors comments:
In response to this question we have added the following comments at the end of the second paragraph on page 9 in the manuscript:

The mechanism behind this is not immediately apparent. The higher levels of LPL activity in blood at 40 min likely results in more rapid lipolysis of lipoprotein triglycerides in the circulating blood. However, heparin also accelerates removal of partially lipolyzed lipoprotein particles [3, 22] and the heparin preparations may differ in this regard, with UFH being more efficient than LMW-heparin.

Reviewer comment 3 - The authors should be choose which they want and be consistent in the use of either “Haemodialysis” or “Hemodialysis”. (Minor issue, not for publication).

Authors comments:
This has been corrected into American spelling in the manuscript.
Reviewer Comment 4 - Also, Kt/V should be used instead of KT/V. (Minor issue, not for publication).

Authors comments:
This has been corrected in the manuscript.

Reviewer comment:
On the page 6th You did not put the minute after 180…
“Lipoprotein lipase activity
LPL activity in plasma was high at 40 min after injection of UF-heparin or tinzaparin and then decreased to much lower values at 180…”

Authors comments:
This has been corrected in the manuscript.

Reviewer comment:
Transonic methods need to be more explained.

Authors comments: we added the text below to clarify the method further-
*In addition, the Transonic Flow-QC Hemodialysis Monitor (HD01 Plus, Transonic systems inc., NY, USA) was used to measure the blood volume of the dialyzer before and after dialysis, to estimate the extent of clotting that could appear during hemodialysis. A specific software for such calculations was provided by the manufacturer.*

Reviewer comment:
Units for CRP did not present “The ratio for CRP was 1.45 ±0.26 (p=0.43),” on the 7th page.

Authors comments:
Units for CRP is mg/L, but in this case we have ratio without units.

Reviewer comment:
The list of abbreviation also is not present!

Authors comments:
We have separated a list of abbreviation (previously in the front page, now as page 2)