Author's response to reviews

Title: Type 2 diabetes as a disease of ectopic fat?

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Author's response to reviews: see over
Monday, 30 June 2014

Dear Sabina

Re: MS: 1853021583131745 Type 2 diabetes as a disease of ectopic fat?
Naveed Sattar and Jason MR Gill

Thanks for comments and pleased to hear reviewers like the paper. Only reviewer 1 has some suggestions, all minor. Hereewith point by point response.

1. the authors might choose to mention about the rodent studies in which removing the sub cut fat had no metabolic impacts compared to removing visceral fat supporting the ectopic fat theory

Thank you. We have added relevant text to this point and relevant reference. Now new ref n=13

2. the authors might choose to discuss the role of ectopic fat in compartments other than liver and muscle, such as the heart and the pancreas. The authors briefly mentioned the issue of ectopic fat in the pancreas but they could briefly expand on how does fat in the pancreas cause a problem

We have highlighted the potential for pancreatic fat to influence beta cell function more prominently now in text, as well as in table and figure 2. How pancreatic fat causes beta cell function is currently not known and we have highlighted that more research is required to address this issue.

3. More discussion about the limited evidence available in which expanding sub cut fat compartment might be useful metabolically despite weight gain (similar to the glitazone story)

We are not sure what the reviewer means here and hence have not altered the text in this case.

Other changes:

- In addition, we have added key words, competing interest and authorship contribution statements.
- Figure 1 is in fact derived using data from ref 2 so does not need a copyright form. We have amended the relevant legend.
- Figure 2 is one my own but I have used something similar in a book chapter but it is now improved so have not referenced this book chapter given it is an original figure, significantly altered from a prior printed version.

I hope these changes are all satisfactory.

Sincerely,

Naveed