Author’s response to reviews

Title: Relationships between obesity, glycemic control, and cardiovascular risk factors: a pooled analysis of cross-sectional data from Spanish patients with type 2 diabetes in the preinsulin stage

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Author’s response to reviews: see over
Dear Dr Shipley,

We would like to submit the above titled manuscript for your review to be considered for publication in the journal *BMC Cardiovascular Disorders*.

Obesity is associated with the onset of type 2 diabetes mellitus, but reports conflict regarding the association between obesity and macrovascular complications. We therefore investigated associations between body mass index and cardiovascular risk factors in 6442 non–insulin-treated patients with type 2 diabetes mellitus. We obtained relevant cross-sectional data from five observational studies and limited our patient selection to patients enrolled in Spain.

We created generalized logit models to analyze the relationship between cardiovascular risk factors and both body mass index and HbA1c. Of concern, we found that younger patients had higher body mass index, HbA1c and triglyceride levels than their older counterparts. Diastolic and systolic blood pressure, and triglyceride levels were directly correlated with body mass index, whereas an inverse correlation was observed between body mass index and high-density lipoprotein cholesterol levels, patient age, and duration of diabetes. Increased total cholesterol levels and duration of diabetes, and decreased high-density lipoprotein cholesterol levels were associated with a higher HbA1c. Additionally, HbA1c levels were independent of body mass index.

We believe this study is important as it shows the importance of controlling obesity in patients with type 2 diabetes mellitus, and in particular, suggests that reducing obesity at an early age could have far-reaching benefits. Moreover, it also suggests that, once diabetes is diagnosed, we should not only focus on glycemic control, but also remember other cardiovascular risk factors that are not under control, especially in our young and more obese patients.

I confirm that the paper has not been published or submitted for publication previously, it is not under consideration for publication elsewhere, and its publication has been approved by all the authors. All the conditions as stated by the ICMJE have been met.

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Should you have any questions regarding this submission, please feel free to contact me. My details have been included below.

We hope you consider that this manuscript would be beneficial to your readers and look forward to hearing from you.
Thank you for your time.

Yours sincerely

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