Reviewer’s report

Title: Effect of duration of diabetes on bone mineral density: A population study on East Asian males

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Reviewer: Jennie Walsh

Reviewer's report:
This is a topical and interesting area. There isn't so much published on the effect of diabetes on bone in South Asian populations so this is a useful addition to the literature.
The study has good numbers of subjects, the data analysis is appropriate and thoughtful, and the paper is reasonably well-written.
The association of type 2 diabetes with higher BMD, but increased fracture risk is well-recognised so the description of higher BMD in T2DM is not novel. However it does need to be presented to put the data on duration of diabetes into context.
The observation of lower femoral neck BMD with greater duration of diabetes is interesting. There have been similar findings in another study, but not in men and women or all ethnicities, so again this study adds useful information.
I'm surprised that BMI is not more different between the groups. If I understand the methods correctly, all KHANES participants with complete measurements were included, and participants for this analysis were not selected or matched by BMI. The similar BMI across groups is good for isolating the effect of DM from the effects of obesity, and reduces DXA artefact. But is this typical of the Korean T2DM population? If so, it would be good to explain this for readers in the USA and Europe.
It is difficult to justify pursuing the thread about insulin deficiency in longstanding T2DM as the cause of lower BMD when insulin was not different between the diabetes duration groups. Other possible mechanisms should be considered: What about the effect of glucose which was higher in the longer duration group? The existing literature on mechanisms of diabetes action on bone suggests that AGEs and low turnover are important - with a long time of high glucose, could the low turnover result in unfavourable bone balance?
Why femoral neck only significantly affected site? Degenerative change at the LS obscuring bone loss? Current evidence suggests cortical porosity is an important factor in T2DM bone fragility and might be picked up better at the hip than the spine? The lipid profile results probably aren't relevant to this story and could be removed.

Table 1 needs a font/text formatting tidy.
Ref 24 is duplicated as 25

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.
Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.
Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.
Yes

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