Reviewer’s report

Title: Increase in body weight over a two-year period is associated with an increase in midfoot pressure and foot pain

Version: 0 Date: 26 May 2017

Reviewer: Jill Halstead

Reviewer's report:

This is well written manuscript that has largely focused on the association of weight gain, foot pressure and foot pain over 2 year period.

Comments

1) The main focus of this manuscript is the association of weight gain and its relation to foot pain and pressure. I note the paper also reports that a proportion (n=11) also lost weight over this time period and I would be interested to know if this had any bearing on the results and perhaps this can be added into the paper? I think this is important for future interventions for instance.

2) Pressure analysis - Methods

"Pressure data from the right foot were collected from three valid trials."

How did this pressure analysis relate to the painful foot?

You noted that specific locations of pain were not reported but can you specify which foot, or if both were reported as painful?

Was the pressure analysis for the left foot collected?

If so, can you consider adding this data into the paper and whether there was there a difference between the pressure analysis of the painful compared to the none painful foot, or was there occasions where both feet were involved?

Please can you justify your data handling of the foot pressure variables? For instance correlations were made between PROMS and peak plantar pressure, is there a reason these variables were
chosen over say contact area, mean pressure, PTI or force? I cannot find this in the analysis section. Please clarify.

3) Results

"Twenty five participants gained more than 2 kg, while 11 participants lost more than 2 kg"

Please can you report the proportions too?

4) Results

Given that some data in the manuscript is repeated in the tables, can you consider including key correlation graphs instead? I am intrigued by the spread of data regarding body weight and pain from table 3 for instance (see first comment)?

Level of interest

Please indicate how interesting you found the manuscript:

An article of importance in its field

Quality of written English

Please indicate the quality of language in the manuscript:

Acceptable

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