Reviewer’s report

Title: The effect of variation in interpretation of the La Trobe radiographic foot atlas on the prevalence of foot osteoarthritis in older women: the Chingford general population cohort

Version: 0 Date: 07 Sep 2017

Reviewer: Jill Halstead

Reviewer's report:

Dear Authors. This is an interesting article discussing the interpretive issues surrounding radiographic definitions of foot OA. I think the study would benefit from a greater detail in the discussion about the interpretation particularly the issues around certain anatomical sites and positional orientations that lead to the 3 techniques. I have specific comments and feedback, see below.

Introduction

Line 78 - no full stop.

Lines 76 to 79 - please consider revising/removing the paragraph. Starting the article by discussing the disparities between symptomatic and radiographic OA is leading and suggests that you are going to report PROMs in this article. It feels the article naturally starts at the next paragraph (Line 81).

Line 106 - Please reference the sentence.

There are a number of interventional studies that have used the LFA to define foot OA:


Methods and Results

Line 177 to 184 Please can you be specific about whether there was only 1 scorer and was this PMc?
I cannot see the added value of table 1, intra rater reliability, unless the XRs were scored on multiple occasions. I would expect given the start of the paragraph that inter-rater reliability between the experienced and learning researcher would be more informative.

If you would like to continue to include the intra-rater reliability, please can you add this to the discussion and compare the reliability LFA paper Menz et al. 2007:


Discussion

It would have been helpful to include more observations on morphological differences between the alignments in this cohort and the LFA. Perhaps discussing whether difficulties leading to different techniques of XR interpretation are dependent on specific anatomical locations.

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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