Reviewer's report

Title: Gait characteristics in hip osteoarthritis patients with mild to moderate symptoms compared to healthy controls

Version: 1 Date: 14 September 2012

Reviewer: Joaquin Barrios

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MAJOR Compulsory Revisions

There is no abstract in the materials given!

Background, P1: Provide citations when mentioning the studies evaluating early stage hip OA

It is questionable whether Background, P2, Sentences 4-6 are needed in your intro - these sentences seem to detract from the idea of using radiographically driven subgroups. It begs the question of why symptom-driven subgroups were not also explored.

M&M, P1, Sentence 1: Stay in past tense, please address throughout paper

M&M, P1: Please include the anchor scores for the HHS in your description

M&M, P1, Exclusion criteria: "resent" should be "recent"

M&M, Gait analysis: How was 50% of stance determined methodologically?

M&M, Radiography assessment: What software was used to view and make measures on the digital films?

M&M, Analysis: Replace "nonparametric" with "non-normally distributed"

M&M, Analysis: Please provide more detail for how the MLR was conducted. It doesn't appear from the reading that the MLR "controlled" for velocity. It sounds like it was conducted as a corollary analysis to observe the R-square value between walking velocity and the given key variables. Unclear from the reading.

Results: When describing group differences, rather than repeating what is in the table (means, SDs and p-values), please given the difference between groups in the appropriate units. Example: "Hip excursion was lesser in the patient group by 5 degrees on average." Same for joint space difference. Otherwise, it is redundant to the well-presented tables.

Results tables: Add walking velocity data

Discussion, P3: How do your findings compare to the Watelain study?
Discussion, P6: This paragraph is not well presented and very long. No actual topic sentence, and subject matter is all over. Starts out talking about loading, but finishes with passive energy storage. Break up and re-work.

Discussion, P8: This entire paragraph seems to come out of the blue. You present a concept that you neither fully describe nor actually did in the study. If incorporating this MD concept is important to the authors, that is fine, but it comes across as agenda-driven. Please reduce the emphasis on this if keeping is important - otherwise delete.

MINOR Essential Revisions

Background, P2, Sentence 3: Change ""between"" to ""within"
Background, P3, Sentence 1: Delete double word
Results: 2nd to last P: reword "significant reduced" and "deviations was observed"
Discussion, P1, S1: "manifest" should be past tense
Discussion, P4: Sentence 1 is a run-on sentence. Also fix the comma
Discussion, P4: Reword "inferior level of disease in our material"
Discussion, P4, last sentence: Reword "velocity do have"

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests