Reviewer’s report

Title: Identification of gait domains and key gait variables following hip fracture

Version: 0 Date: 15 Jul 2015

Reviewer: José C. Millán-Calenti

Reviewer’s report:

Interesting article in which the authors, using the possibilities of electronic walkways, aim to identify a set of variables to describe gait in hip fracture patients as well as to explore how known risk factors for poor outcome after hip fracture are associated with these gait variables.

249 participants aged ≥ 70 years were included in the study and gait assessment was carried out using a GAITRite®mat.

The methodology is clear and the sequence and the results are exposed correctly.

Table 1 shows the clinical characteristics of the participants with Barthel Index's and Nottinham E -ADL index results, but I have not found any reference to Barthel Index and Nottinham Index in the method section. I have not seen references to any of these two indexes.

In conclusion, the authors present results that may be of interest in the field of intervention of the gait as a measure to improve the quality of life in subjects after presenting a hip fracture, in this case, but which might be applicable to other diseases.

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.

No

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

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.
I am able to assess the statistics

**Quality of written English**
Please indicate the quality of language in the manuscript:

Acceptable

**Declaration of competing interests**
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

'I declare that I have no competing interests'

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal