Author’s response to reviews

Title: Aqua walking as an alternative exercise modality during cardiac rehabilitation for coronary artery disease in older patients with lower extremity osteoarthritis

Authors:

Jong-Young Lee (jyleeheart@naver.com)

Kee-Chan Joo (kcjoogregory@gmail.com)

Peter H Brubaker (brubaker@wfu.edu)

Version: 2 Date: 18 Aug 2017

Author’s response to reviews:

Editor Comments:

It is an interesting and topical study but it needs some changes.

1) In the “background” paragraph you say that “the overall decrease in physical activity from OA is likely to result in deteriorating cardiovascular health over time” referring to a paper focusing on rehabilitation after brain injury which does not consider OA at all. Please clarify.

Response to the reviewer’s comment

Thank you for your valuable comment. We agree with your opinion. Thus, we have omitted the sentence and clarified our point by adding other sentences.

Patients with OA and walking disability are at increased risk of death from cardiovascular causes [9]. Thus, management of OA in patients with CAD should focus on approaches that will improve disability. Cardiovascular rehabilitation programs that increase physical activity have a positive impact on both CAD and OA.

2) In the “methods” paragraph you said that patient enrolled in the study suffered from coronary artery disease, it would be better If you specify the clinical presentation of the CAD (stable angina, unstable angina, Nstemi or Stemi).

Response to the reviewer’s comment

Thank you for your valuable comment. We agree with your opinion; accordingly, we have inserted the detailed clinical presentation of CAD in the Table 1.
3) In the “Population characteristics” paragraph you said that there is a male dominancy (76.6%) but then at page ten you said that “participants in the present study were older females with lower…”. Please correct or clarify this point.

Response to the reviewer’s comment

Thank you for your valuable comment. We agree with your opinion. We have corrected the sentence in accordance with your recommendation.

Furthermore, the participants in the present study were older patients (aged >65 years) with lower extremity arthritis and thus are likely to generate smaller improvements in CRF than younger, healthier subjects.

4) In the paragraph “Psychosocial factors” you reported that QOL scores increased in every group. It would be interesting to know if patients suffered from STEMI, NSTEMI, Unstable angina or Stable angina, due to the fact that these diseases may impact in different way on the QOL.

Response to the reviewer’s comment

Thank you for your valuable comment. We agree with your opinion. However, there might not be any substantial differences in the current clinical situation because the sample size was too small to discriminate. If the sample size will be increased in our upcoming trial, we will see the effect of the clinical setting on psychosocial factors.

5) In the “methods” paragraph you said that you randomized patients in three group but then in the “limitation” paragraph you said that you did not randomize patient into the AW group. Please change or clarify this point.

Response to the reviewer’s comment

Thank you for your valuable comment. We agree with your opinion. We have corrected that sentence in the Limitations paragraph.

6) I think that a limitation of the study is that you did not evaluate in any way the level of physical activity at home. Can you report some data about this?

Response to the reviewer’s comment
Thank you for your valuable comment. We agree with your opinion. We have inserted the content in the Limitations paragraph. Unfortunately, we provided education on home-based physical activity and exercise counseling, but could not evaluate the level accurately.

Limitations

Our study did not accurately evaluate the level of physical activity out of the hospital, which might have influenced the outcomes of this study.

7) There are several typing errors to correct.

Reviewer’s response

Thank you for your valuable comment. We agree with your opinion. Even before submission, we checked for typing errors by using a special consultation company. We have rechecked the same in the revised version of our manuscript.