

Obese elderly with diabetes experience more pain and reduced quality of life compared to obese elderly with hypertension

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Handeling editor: Michal Heger Department of Pharmaceutics, Utrecht University, the Netherlands Department of Pharmaceutics, Jiaxing University Medical College, Zhejiang, China

Review timeline:

Received: April 14, 2019 Editorial decision: June 4, 2019 Revision received: June 30, 2019 Editorial decision: April 27, 2020 Published online: May 12, 2020

1st editorial decision

04-Jun-2020

Ref.: Ms. No. JCTRes-D-19-00004 Obese elderly with diabetes experience more pain and reduced quality of life compared to obese elderly with hypertension Journal of Clinical and Translational Research

Dear Dr. Rosa,

Reviewers have now commented on your paper. Both reviewers have recommended a reject. However, in light of their concerns, particularly with respect to the rationale of the study, we would like to offer you the opportunity to thoroughly revise your manuscript by addressing all the reviewers' comments below and resubmitting the paper. If you are prepared to undertake the work required, I would be pleased to reconsider my decision.

For your guidance, reviewers' comments are appended.

If you decide to revise the work, please submit a list of changes or a rebuttal against each point which is being raised when you submit the revised manuscript. Also, please ensure that



the track changes function is switched on when implementing the revisions. This enables the reviewers to rapidly verify all changes made.

Your revision is due by Jul 04, 2019.

To submit a revision, go to https://www.editorialmanager.com/jctres/ and log in as an Author. You will see a menu item call Submission Needing Revision. You will find your submission record there.

Yours sincerely

Michal Heger Editor-in-Chief Journal of Clinical and Translational Research

Reviewers' comments:

Reviewer #1: This manuscript describes a study in which older obese participant which either diabetes or hypertension were compared for pain, muscle strength and quality of life. This reviewer appreciated that recruiting these participants may be have been challenging. However, I have concerns about the rationale for a comparison between diabetic and hypertensive obese participants. The authors have not justified their rationale for doing the study sufficiently. It is not surprising that diabetic participants report more pain than hypertensive participants considering the pathophysiology of the two diseases. Moreover, it is not clear why the authors isolated pain and muscle strength, which are both factors in quality of life and only include pain and quality of life in the manuscript title. The authors need to make their study rationale much clearer.

Use of the 'elderly' in this manuscript represents poor grammar in most cases. Is an average age of 68 years really considered 'elderly'?

Reviewer #2: Introduction: This topic has not embased the hypothesis. It is important to demonstrate the relation between the variables of this study, as well as, the possible differences between hypertensive and diabetics about the variables included in this study to embased the hypothesis. Why people with diabetes can present more pain, per example? It is important that the hypothesis be properly embased. Material and Methods: How long time these people received the diagnostic of the disease. Are there differences between the time since diagnostic? Medications used should be described to each group. The medications used should be described in each group. This information is relevant because the results can be associated with the use of medications. Blood pressure measurement: The auscultatory method needs to be used by a trained person. Because of this, is important to insert data about the reproducibility of the measures of the evaluators. If there is more than one, it is important to test the reproducibility intra- and inter-evaluators. Please, see the article: https://www.researchgate.net/publication/273718141_Reprodutibilidade_da_medida_da_pres sao arterial auscultatoria durante o exercicio de Forca. Blood glucose: Was obtained the blood glucose in a fed or fasted state? Please, clarify. Statistical Analyses: Why the power sample size was analyzed based on the level of pain? It is important to clarify. Results: A table with the correlations can be shown. Discussion: It is important to show that the muscle



strength of this sample is different from young, middle-aged people, and/or elderly people without these diseases. References: Needed to be improved. More than 50% of the references are old (before 2015), and references of articles published just in Portuguese, being journals with regional circulation. Some references can be replaced by other references published in English.

Author's rebuttal

Dear Editor Michal Heger

I would like to thank you and the reviewers for the time and effort spent on our manuscript "Old-aged obese with diabetes experience more pain and reduced quality of life compared to old-aged obese with hypertension". As you will see below, we have taken into careful consideration all the advisors' remarks and we have modified our manuscript according their recommendations. All the suggestions made by the referees were accepted and are highlighted in the main text (outlined in the red marked version). In this sense, we hope our work is suitable for publication in Journal of Clinical and Translational Research. Thank you for the opportunity to resubmit our manuscript. A point-by-point response and a new version are attached.

Reviewer #1:

This manuscript describes a study in which older obese participant which either diabetes or hypertension were compared for pain, muscle strength and quality of life. This reviewer appreciated that recruiting these participants may be have been challenging. However, I have concerns about the rationale for a comparison between diabetic and hypertensive obese participants. The authors have not justified their rationale for doing the study sufficiently. It is not surprising that diabetic participants report more pain than hypertensive participants considering the pathophysiology of the two diseases. Moreover, it is not clear why the authors isolated pain and muscle strength, which are both factors in quality of life and only include pain and quality of life in the manuscript title. The authors need to make their study rationale much clearer.

Response: Thanks for the comment. We agree with the reviewer, and we reorganized the entire Introduction section. Please, see the new Introduction section.



Use of the 'elderly' in this manuscript represents poor grammar in most cases. Is an average age of 68 years really considered 'elderly'?

Response: We changed the word "elderly" to other correct expressions for older people.

Reviewer #2:

Introduction: This topic has not embased the hypothesis. It is important to demonstrate the relation between the variables of this study, as well as, the possible differences between hypertensive and diabetics about the variables included in this study to embased the hypothesis. Why people with diabetes can present more pain, per example? It is important that the hypothesis be properly embased.

Response: Thanks for the comment. We agree with the review and we reorganized the entire Introduction section. Please, see the new Introduction section.

Material and Methods: How long time these people received the diagnostic of the disease. Are there differences between the time since diagnostic?

Response: Thanks for the comment. The data were added in the first paragraph of the results section.

Medications used should be described to each group. The medications used should be described in each group. This information is relevant because the results can be associated with the use of medications.

Response: Apart of the registration of the use of analgesics or anti-inflammatory medications as excluded criteria, unfortunately, no other medications were registered. We added the topic as a limitation in the discussion section.



Blood pressure measurement: The auscultatory method needs to be used by a trained person. Because of this, is important to insert data about the reproducibility of the measures of the evaluators. If there is more than one, it is important to test the reproducibility intra- and inter-evaluators. Please, see the article: <u>https://www.researchgate.net/publication/273718141_Reprodutibilidade_da_medida_da_pressao_arterial_auscultatoria_durante_o_exercicio_de_Forca.</u>

Response: Thanks for the comment. The blood pressure was taken by trained nurses. Unfortunately, we did not have which measurements were taken by each trained nurse. Thus, we can provide the reproducibility inter-evaluators, unfortunately. We added "trained nurses" in the methods section, the intraclass correlation coefficient, and also added a limitation of the measurement reproducibility in the discussion section.

Blood glucose: Was obtained the blood glucose in a fed or fasted state? Please, clarify.

Response: Thanks for the comment. The blood glucose was obtained in the fasted state. We added this information to the paper.

Statistical Analyses: Why the power sample size was analyzed based on the level of pain? It is important to clarify.

Response: We added the power of sample size for general quality of life and handgrip strength

Results: A table with the correlations can be shown.

Response: Thanks for the comment. As no correlations were observed, we preferred to not to present a table with the correlations. We think that the table with no correlations could lead to sub-interpretations of the other results.

Discussion: It is important to show that the muscle strength of this sample is different from young, middle-aged people, and/or elderly people without these diseases.



Response: Thanks for the comment. We added more information about muscle strength of this sample.

References: Needed to be improved. More than 50% of the references are old (before 2015), and references of articles published just in Portuguese, being journals with regional circulation. Some references can be replaced by other references published in English.

Response: Thanks for the comment. We reorganized the entire references section.

2nd editorial response

27-Apr-2020

Ref.: Ms. No. JCTRes-D-19-00004R1 Old-aged obese with diabetes experience more pain and reduced quality of life compared to old-aged obese with hypertension Journal of Clinical and Translational Research

Dear authors,

I am pleased to inform you that your manuscript has been accepted for publication in the Journal of Clinical and Translational Research.

You will receive the proofs of your article shortly, which we kindly ask you to thoroughly review for any errors.

Thank you for submitting your work to JCTR.

Kindest regards,

Michal Heger Editor-in-Chief Journal of Clinical and Translational Research

Comments from the editors and reviewers: