

Reviewer's report

Title:Differences in muscle activity during hand dexterity tasks between women with arthritis and a healthy reference group

Version:2Date:4 November 2013

Reviewer:Cheryl Metcalf

Reviewer's report:

inor essential reviews

Figures - 1 – these figures are quite difficult to ascertain the grip given the extent of background objects in the scene. Please simplify them and concentrate only on the grip postures you are trying to illustrate as described in the section on 'Hand Exercises and Daily Tasks'.

2 – this is extremely small and it's difficult to view anything with certainty. Please provide a larger version for inclusion in the paper.

Background

Page 3, 3rd paragraph – 'strength measures will quantify...'

Methods

Page 4, 3rd paragraph – If your intention was to include the friends of the RA/HOA patients, then this should be clarified. At the moment, the structure of this sentence remains unclear. Were these healthy people informed that by accompanying their RA/HOA friends, they would be asked to be included in the study? Please clarify.

Muscle Activation

Page 5, 1st paragraph – please clarify what the 'standardised procedure' was?

Results

Page 7, Paragraph 1 – 'it was possible' is too informal. Simply state that 'Data was analysed from 20 RA subjects...'

Page 8, paragraph 1 – there is no purpose to presenting the statistical difference between ages. Simple descriptive statistics would suffice.

Discussion

General point – there is little critical appraisal in the discussion and this could be improved.

Page 9, Paragraph 3 – please define what you mean by muscle balance? Do you mean the relationship between agonist/antagonist, or something different?

Page 10, Paragraph 1 – 'use another word than 'degree of muscle activity' that is more accurate than descriptive.

Page 11, paragraph 3 – I don't think it can be argued that you did not include

impaired hand function. You should revise or clarify this statement.

Conclusion

The Authors have made a generalisation in the recommendations for treatment that do not take into account the joint mobility issues and other symptoms of these pathologies. While this is a useful recommendation, it should be treated with caution and the present study cannot claim to recommend treatment plans on its findings. Perhaps a more tempered statement would be better that suggests it may be beneficial if possible given other aspects of the pathology.

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 have no competing interests.