Author's response to reviews

Title: Association between gross motor function and postural control in sitting in children with cerebral palsy: A study of 139 children

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Author's response to reviews: see over
Dear Editors,

Thanks for your first revision. We have emphasized the changes we made in the manuscript by using bold text.

We have added the answers to the different comments from reviewers in the next paragraphs.

We are looking forward to hearing from you soon.

Maria Dolores Hidalgo Montesinos, PhD
AUTHOR QUERIES

Reviewer 1: Regina Harbourne

Major compulsory revisions:

1. Because the GMFCS is a categorical scale, and the LSS is also a categorical scale, it is not clear how the LSS improves the care of children with CP, or why it helps in evaluation or classification, as you state in your introduction. And because the two scales have a high correlation, it appears that they may be measuring the same thing. Therefore, you need to state clearly the importance of the LSS, above and beyond the value of using the GMFCS. In other words, be explicit in why we need the LSS if it is giving us essentially the same information as the GMFCS; does it discriminate better? Is it more sensitive? Is it more useful in children with a greater severity of CP, and less useful in children with mild CP?

Response from authors:

In relation to this comment, we added the following justification in the introduction based on the design of the scale and scientific evidence published prior to this study:

“These two classification systems were based on the International Classification of Functioning, Disability and Health (ICF). Nevertheless, whereas the authors of the GMFCS were interested in the distinction between capability, performance and the perspective that environmental and personal factors influence in the performance of gross motor function, the LSS was associated with the component of activity of the ICF and the relationship between sitting ability and the amount of postural support adaptations needed for children with neuromotor disorders. The LSS has potential to
assist therapist in determining what level of external postural support is required to maintain a sitting position [8,9]. Chung et al. [3] support the use of the LSS and GMFCS in clinical research to enable comparisons across the studies in terms of motor severity.”

2. In the results, you start grouping according to age. This should be stated in the introduction, and mentioned in the methods. Please explain why you began grouping according to age, when age was not mentioned in your objectives for the study. Also, p. 8, line 21, you give a % of "children". This is not clear - what is your definition of "children"? I don't think this is needed if you already indicate the ages and groups.

3. Considering #2 above, you have results with percentages of "children" pp.8-9, which appear unnecessary.

Response from authors:

The age groups were eliminated from the study because, as the reviewer says, do not provide additional information. Mean age, standard deviation, minimum and maximum age are provided as descriptive information.

4. Although you clearly state that you are looking at the relationship of the SCPE to GMFCS and LSS, it is not clear why you feel this is important. The first time you mention it is on p. 6 in your aims; please clarify, in the introduction, why you want to examine this variable.
Response from authors:

In relation to this comment, we added the following justification in the introduction based in the scientific evidence published prior to this study:

“Besides, in recent years researchers have tried to develop a new terminology to classify the CP due to the clinical complexity that results from the topographic classification or motor impairment, as performed by the Surveillance of Cerebral Palsy in Europe (SCPE), in order to improve the monitoring of the frequency of the PC, providing a framework for research and service planning [13,14]. The classification of CP should be based on CP type and motor function. The sitting ability is an strong predictor for ambulation in children with CP at two years of age. Therefore, the knowledge of sitting ability is relevant to predict future ability in these children [14, 15].”

5. Your results appear to be just listed; this section should be organized according to your research objectives.

Response from authors:

We have organized the results according to our research objectives.

Minor revisions:

-Page 7, line 12 - what treatment was the therapist blinded to? There is no treatment in this study as far as I can tell.

Response from authors:

We have modified the sentence:
“The trunk control, sitting position, postural changes and mobility of the children were evaluated in the centres by an experienced physiotherapist blinded to the study objectives.”

Response from authors:

We have modified the sentence:

“The surface of therapeutic bench was not too soft to affect the results.”
Reviewer 2. : Mintaze Gunel

9. Do the title and abstract accurately convey what has been found?

I mean, last description is not requirement. “A STUDY OF 139 CHILDREN”. Sound is not good. “Association between gross motor function and postural control in sitting in children with cerebral palsy” is enough.

Response from authors:

We have modified the title: ASSOCIATION BETWEEN GROSS MOTOR FUNCTION AND POSTURAL CONTROL IN SITTING IN CHILDREN WITH CEREBRAL PALSY.

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

Response from authors:

We have reviewed the translation of the manuscript.