Reviewer's report

Title: A cross sectional study of upper extremity strength ten days after a stroke; relationship between patient’s perception and capacity measure

Version: 2 Date: 28 April 2015

Reviewer: urska puh

Reviewer's report:

Dear authors,

many thanks for your manuscript. I believe that a combination of objective measures and patient reported function may enhance the setting of realistic goals in patients after stroke. Investigation of this relationship for upper limb strength ten day after stroke is the most important contribution by your study. The manuscript is written well, however I have some suggestions for clarification.

Minor essential revisions:

1. Abstract (last sentence of conclusions): you suggested a combination of self-reported and strength capacity assessment (replace with objective strength capacity measures) is needed to increase knowledge of impairment early after stroke (replace with to enhance the setting of realistic goals with patients).
2. I suggest similar correction in the Conclusion (last sentence): In addition to your sentence “… to increase focus on the patient’s perspective…” add the following: ….and to ensure that a treatment goals are set on the basis of the objective outcome measures.
3. Methods (design and participants): Please clarify the third exclusion criteria: short life expectancy. It is not clear part of which exclusion criteria are severe communication disorders, cognitive deficits and fatigue, on the basis of which you excluded 18 patients.
4. Table 1. is not totally clear, especially where multiple parameters are quoted in one line.
5. Figure 1: you should increase the size of letters and numbers.

Major compulsory revisions:

1. Methods (measurements and procedures): Please describe the position of the patients (sitting position, position of the arm) during measurement with a dynamometer. “Patients rested their arm and hand on a table during the measurement” does not describe the measurement position in the repeatable way, and the elbow could also be extended; which is not in accordance to the position described in the studies by Mathiowetz et al. (1984, 1985).
2. Further, you set a cut off 80 % normative strength values to delineate normal strength versus reduced strength, which you mentioned in the manuscript several times. However, you did not quote which normative values you used.
3. Also in the discussion section (limitations) you indicate that “using percentage of normative values of JAMAR is constrained by the size and background of the reference group.” It is necessarily, that you clarify which normative values you used.

Discretionary revisions:

1. Results and discussion: You performed a screening of cognitive function (COG4, BNIS), FMA of the upper extremity motor and sensory function, and ARAT (as an inclusion criteria), but in the discussion (second paragraph) you are explaining the differences in the present study only with the fact that “the patients were still in hospital, resulting in reduced need or cause to use the upper extremity in the activities of daily life.” Why didn’t you perform some multifactorial analysis with your data to see if there is any pattern? Difference in hand awareness might be also a problem of hemi neglect and/or sensory problems. You should consider this in the discussion section and you may perform some additional calculation with your data.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests.