Reviewer's report

Title: Validation of a new test that assesses functional performance of the upper quarter (FIT-HaNSA) in patients with shoulder pathology

Version: 1 Date: 20 October 2006
Reviewer: Jolanda Luime

Reviewer's report:

General
Very interesting and valuable paper, but need some consideration in introduction, methods and discussion.

Introduction
First paragraph
It is unclear from the introduction what the optimal use of the new tests will be. In the introduction a statement is made about the lack of functional performance tests in shoulder research. It is well known that there is a lack of valid tests for evaluating shoulder problems, in both diagnostic and evaluation research (and practice).
Would people use the test as diagnostic evaluation, like the methods are suggesting? Or would the test be more appropriately fitted in the evaluation of a new therapy, or should it be used to evaluate whether a patients is able to fulfil his/her duties at work? Or could it serve more than one purpose?

Second paragraph
I would suggest to use upper extremity rather than upper quarter, as the latter also includes the upper trunk region.

Third paragraph
Is it necessary to explain the other study in such detail?

Fifth paragraph
The objectives of the study do not logically follow from the first four paragraphs. As the use of the test will be come more clear in the introduction it probably helps to understand the rationale of these objectives. Again it will depend on the use of the test. If it is likely that the test will be used to evaluate shoulder problems over time, why should one evaluate the test among healthy controls? Although evaluation of extreme groups (discriminant validity) could be a first step in the evaluation of test performance, it will not be sufficient. Probably all thought over by the authors, but not clearly explained.

Methods
2d, 3rd, 4th paragraph
Several steps were taken to come to the three tasks. For readability it would help to start off with saying that Followed by the explanation of what the steps included.

5th paragraph
For readability it would help to start with the heading ‘description of the test’, followed by paragraph 6, 7 anc 8 and finally describing the stopping rules (paragraph 5)

Participants
This heading leads to confusion.
There is a general problem with the case definition of impingement and moreover the validity of the Hawkins test. This is difficult to solve, but may need some reflection in the discussion. The same applies for the diagnosis mentioned in part 2 – validation.
How many controls were included, and what tests were used to exclude any shoulder pathology?

Analyses
Pearsson was used, which assumes normal distribution. It would be more appropriate to use non-parametric tests regarding the small numbers of subjects included. The same applies for anova.
Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Discretionary Revisions (which the author can choose to ignore)

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions