Reviewer's report

Title: Rotational strength, range of motion, and function in people with unaffected shoulders from various stages of life

Version: 1 Date: 10 December 2008

Reviewer number: 2

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General Comments:

I think this is an excellent article that has important information for clinicians and should be published after appropriate edits in your journal if possible. One of the primarily limitations is identified by the authors and limitations are discussed near the conclusion of the paper which is appropriate. That limitation is the very small subject population that is included in the older sections of this paper. The authors have acknowledged this and I believe that they have done an adequate job of that.

The paper may need a statistical consult as I am not able to determine if there are any limitations to their methods based on the differing subject populations in the groups they are comparing.

The normative data listed is very important for clinicians who work with shoulder and patients and this paper can make a great contribution to the literature in this area.

Specific comments:

Page 2 Abstract, line 12 - add - "isometric" before rotational strength to be sure the reader knows that this is how the strength was measured.

Introduction is well written, I have no comments on this.

Page 7, methods. line 19 - why were the test session limited to only (at least 2 of the following variables) - why did the subjects not complete all of the test measures ? This should be explained in detail as if the researchers had gathered all the data sets from all the subjects this would obviously provided a larger population of responses.

Page 8, line 1 - strength was measured - add the d to the measure

Page 8, line 18 - with your supine ROM measures. Greater detail has to be given here in my opinion. Was the scapula stablized ? Was any overpressure used ? ie - passive implied you moved the arm, did you press into end rom - if you did how did you standardize the force you pushed with ? Was it measured in the coronal plane at 90 degreeses or did you put something under the elbow to put the shoulder in the scapular plane. How did you limit scapular motion ?
How did you standardize the identification of the substitute movement? I assume you are talking about the shoulder shrug type movement? Was this just with visual observation or was it filmed? Also, were the three tasks randomly ordered? If not - why?

Why did subjects only complete one of the three instruments and how did you select which one - random?

Level of interest: An exceptional article

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.