Reviewer's report

Title: Study of trunk asymmetry in normal children and adolescents

Version: 5 Date: 25 November 2006

Reviewer: Tomasz Kotwicki

Reviewer's report:

General

The study presented by the authors may be considered important because it concerns a great number of healthy children and adolescents. This type of analysis is usually very interesting for professionals and often enables defining the normal limits of various parameters.

The authors respected the Bunnell's indication of 7 degrees of the angle of trunk rotation as a critical value in scoliosis screening. Their own research is coherent and gives interesting values of physiological trunk asymmetry. The results argue for the use of the sitting position in scoliosis screening. This all seems to be a valuable contribution of the paper.

The findings are presented clearly, especially in Tables.

I recommend publication in “Scoliosis”

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

none

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

In “Background” the sentence “Its evolution by age was determined using a scoliometer” is not clear to the reviewer. In a cross-sectional study no follow-up exists.

In the Methods section “seven degrees or more” should be used instead of “more than 7 degrees”. Otherwise the 7 degrees ATR children are not included in any group. Also the suitable algebraic symbols should be used in the legends for Tables 3 and 4.

In “Methods” – it is not clear how the intra- and interobserver error was calculated. Did one of observers repeat his measurement twice or more? Were all patients examined by all observers?

In “Results” the last sentence is too general (“In the majority of children .. the vertebral column was almost within normal limits”) and should be revised.

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Discretionary Revisions (which the author can choose to ignore)

none

What next?: Accept after minor essential revisions

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

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