Reviewer’s report

Title: A specific scoliosis classification correlating with brace treatment: description and reliability

Version: 1 Date: 14 September 2009

Reviewer: Toru Maruyama

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This classification is essential to manufacture Rigo-Cheneau brace. However, this classification seems to have some drawbacks.

Major Compulsory Revisions

1. First, those who do not know the historical background feel it strange that the single thoracic curve can be classified as three curves pattern. What are the three curves?

2. Second, the most important point, is the lack of the definition, as the authors themselves pointed out on the page 11.

Single thoracic curve can be classified as A1 or C1. If T1 and TP are balanced, it is classified as C1. If T1 and TP are imbalanced, it is classified as A1. Without clear definition of “balanced” or “imbalanced”, it is difficult to reproduce this classification, especially for the readers who are unfamiliar with this classification system.

Similarly, thoracic/lumbar or thoracolumbar double curve can be classified as A3, B1 or C2, according to the direction of the imbalance. If T1 and TP are balanced, it is classified as C2. If T1 and TP are imbalanced to the thoracic convex side, it is classified as A3. If T1 and TP are imbalanced to the thoracic concave side, it is classified as B1.

Therefore, clarification of the definition of “balanced” or “imbalanced” is necessary.

3. fractioned curve – compensatory curve?
   functional curve – non-structural curve?

4. Please describe each brace design in text. It is difficult to comprehend differences of the brace design only by these figures.

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

Quality of written English: Needs some language corrections before being published
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.

Toru Maruyama