Reviewer’s report

Title: Is vertebral rotation correction maintained after thoracoscopic anterior scoliosis surgery? A low dose computed tomography study

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Reviewer: Jean Claude De Mauroy

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The techniques of rotational analysis are not in common use and require some supplements to make them accessible to the majority of the readers.

p3 l11 Can you better define rotatory distorsion (or torsion) and axial vertebral rotation? These two concepts are not always clear.

p3 l13 The asymmetry of the trunk at the Adams test is not only the result of spinal rotation. It also associates the deformation of the thoracic cage, and especially the paravertebral musculo-fascial asymmetry. You then confirm that there is no correlation.

p4 l9-p5 l1 Can you group the results by posterior surgery and those of the anterior approach surgery. (Hay at the end)

p8 l13-16 It's not very easy to understand. Can you add a figure of a "da Vinci view" to illustrate you convention?

p8 l20-21 The word "de-rotation" is not clear. Do you mean that between 6 and 24 months post-surgery there is a an improvement of rotational correction? I understood that the problem was a loss of rotational correction.

Discussion

In only two cases the significant change occurred: Case 15 at the level of a vertebra and case 21 at the level of the disc. What is the clinical significance of a change in the disc and a change in the vertebra?

In the other 9 cases, the significant change concerns both a disc and a vertebra with always alternating positive rotation and negative rotation. What is your interpretation of this alternation?

Does the concentration of rotations on one or two segments have any significance?

Case 28: Can we say that there is a T12-L1 bloc?

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