Reviewer’s report

Title: Radiographic characteristics in congenital scoliosis associated with split cord malformation: a retrospective study of 266 surgical cases

Version: 0 Date: 26 Feb 2017

Reviewer: Ron El-Hawary

Reviewer's report:

This manuscript describes a single center's experience with congenital scoliosis and split cord malformation. The group retrospectively identified 266 patients and compared those with Type I SCM with those with Type II SCM. This is the largest cohort in the literature and conclusions drawn include that Type I SCM had shorter septum length, higher proportion of kyphosis, higher prevalence of multiple and more extensive congenital spine malformations. This is an important contribution and should be accepted once English grammatical and stylistic editing is completed. In addition, please see comments below:

Materials and Methods Line 9 - How many patients were excluded?

Results Line 25-26 - Please include p values for female to male comparison and age comparison between type I and type II groups

Results Line 40 - ".. the main curve was higher" is misleading as line 44 indicates p=0.434

Results Line 17 (on the following page) - Please reference "volcano-shape deformity".

Conclusions - Please list all of the significant differences between type I and type II SCM that your study documented.

Figure Legends Line 44 - Fig 3 - Please provide further description of the anatomy in the legend or on the figure itself. The image is confusing and it is difficult to appreciate the anatomy.

Maybe descriptors with arrows in the figure?
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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