Reviewer's report

Title: Minimally Invasive Scoliosis Surgery in Adolescent Idiopathic Scoliosis: Surgical Technique

Version: 2 Date: 29 March 2011

Reviewer: Jeffrey D. Coe

Reviewer's report:

Major Compulsory Revisions

This article is much closer to being suitable for publication. Most of my comments are regarding the figures and captions. First, though, I am confused somewhat by the "track changes" features in the copy of the manuscript for review. Some markings make no sense to me. For the next revision, I would like to see the "track changes" version and a version with the changes accepted into the final submitted form. One minor grammatical note, "difficult" on line 158 should be "difficulty". See below for my comment regarding "custom made".

With regards to the figures, overall they are improved. Nevertheless, a technique article should have unambiguous and clearly labeled and captions figures. In Figure 1, either the illustration should be labeled right or left with regards to the facet or the legend should specify the laterality and (ideally) the level. Figure 4 is totally confusing. Each screw and device in this illustration should be labeled and explained thoroughly in the caption. I am especially concerned about anything that is "custom made". If such an instrument is not made available in the standard MIS sets, then this requires major discussion in the text. I am unable to find any comment on this in lines 95-106 in the text or anywhere else for that matter.

Also, the figures of the postoperative radiographs should have Cobb measurements to compare with the pre-operative images and the interval since surgery for these radiographs should be specified. Lastly, Figure 16 is out of focus and confusing. There are three metallic instruments in this figure. The authors refer to the suction tip in the caption. I think I know which one it is, but this should be labeled. Also, the laterality should be labeled and anatomic features (for example, I think I see the spinous process) should be labeled as well (arrows for the latter).

Level of interest: An article of limited interest

Quality of written English: Acceptable

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

I may have a potential competing interest as I am on a design team for a MIS scoliosis system for a company other than DePuy spine. This competing interest was not apparent previously since the manufacturer was not disclosed on the initial draft.