

## Peer Review File

Article Information: <http://dx.doi.org/10.21037/jss-20-598>.

### **Reviewer A**

Thank you for your comments on our manuscript. The authors feel the manuscript is stronger after incorporating your suggestions.

### **Comment #1**

How were the surgeons chosen for the evaluation group? What experience or training criteria was utilized?

Reply #1:

Thank you for this comment. We have included a description of the surgical experience required to be included within our study.

Changes in text #1

“Every surgeon that was asked to participate in this study had at least 5 years of experience performing spinal deformity surgery. Each was fellowship trained in spine surgery. Furthermore, all surgeons included in this study are members of an international society of specialists devoting time to the advancement/study of principles for treating patients with spinal deformity.”

### **Comment #2**

How do the authors propose that the opinions of this cohort of surgeons is reflective of the community of spine surgeons as a whole?

Reply #2:

Thank you for this comment. The authors completely agree with the point of this comment. As a result we have added this as a limitation to our study.

Changes in text #2:

Our analysis was based on responses from a small group of surgeons. We cannot state that these opinions reflect the larger community of spine surgeons as a whole. Our panel, however, does constitute a group of surgeons from around the world with a broad range of surgical experiences.

### **Comment #3**

The authors discuss better outcomes when the UIV selection matched the algorithm proposed in the manuscript, however the sole outcome measure utilized in the study was the development of PJK which may often times be clinically inconsequential to the patient. Were other outcomes measured assessed and compared?

Reply #3:

The authors thank the reviewer for bringing up this point regarding PJK. We have added it as a limitation within our manuscript.

Changes in text #3

The authors also acknowledge the limitation of using PJK as a measure of possible poor selection of UIV. PJK may not be symptomatic and therefore our results may not accurately reflect clinical failure of a UIV level selected but rather only a radiographic finding for a patient<sup>4</sup>. Still, PJK is associated with proximal junctional failure and this is why it was selected for analysis.

**Comment #4:**

The authors rely heavily of the qualitative assessment of the panel of surgeons queried for the study but provide little quantitative support for these opinions which are subject to bias.

Reply #4:

Thank you for this comment. The authors agree with this comment and have added it as a limitation within our “Discussion” section.

Changes in text #4

There may be inherent biases within our group of deformity surgeons which we cannot control for within our study design.

**Reviewer B**

**Comment #1:**

It is better to present a summary of the questionnaire results answered by 14 surgeons.

Reply #1

Thank you for this comment and your kind words in regards to our manuscript. We have added the lines below to further emphasize the summary of results from our questionnaire. If further summary lines/tables are needed please let us know.

Changes in text #1

All 14 surgeons responded to all 11 cases and indicated their desired UIV (Figure 2). The UIV selected at each individual level is shown in Figure 2. Figure 2 reflects the number of surgeons that selected each UIV level. The top three UIV selected were T10, T11 and T3. The UT, LT, lumbar and cervical regions were selected in 36.2%, 55.9%, 5.9% and 2.0% of cases respectively for these 11 cases. In 8/11 cases (73%) there was agreement amongst the spine surgeons regarding the region of the UIV.

**Comment #2:**

How many of the 14 surgeons who participated in the questionnaire agreed with the algorithm developed in this study?

Reply #2:

Thank you for this comment. All the surgeons agreed with our algorithm and this fact has been added to our manuscript.

Changes in text #2

All surgeons included in this study agreed with our algorithm.