Reviewer’s report

Title: Real Time Noninvasive Assessment of External Trunk Geometry during Surgical Correction of Adolescent Idiopathic Scoliosis.

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Reviewer: Jack Cheng

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This is an innovative study using a non-invasive intraoperative optical tracking system to help in tracking the position of the trunk extending from the neck region down to the pelvic region. Validation of this pilot study has been done in 5 scoliosis patients undergoing posterior spinal corrective instrumentation.

One main question is that the 3D trunk positioning after anesthesia and placement on the surgical frame could be quite different from the standing position pre-operatively. The tracking can only help in monitoring changes in the intraoperative position. Have the authors thought of doing the same tracking measurement pre-operatively and then compare with the changes made intraoperatively?

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

Quality of written English: Acceptable

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'