Reviewer's report

Title: Evaluation of Implant Loosening Following Segmental Pedicle Screw Fixation in Adolescent Idiopathic Scoliosis: A 2 Year Follow-up with Low-Dose CT

Version: 6 Date: 5 August 2014

Reviewer: Ian Stokes

Reviewer's report:

This revised manuscript includes corrections and recommended changes as in the previous reviews, though the issue of sensitivity and false positives still receives little attention. This is unfortunate, given the stated objective "to compare the rate of screw loosening detected by CT with that using plain radiography."

Major Compulsory Revisions:
In the cover letter, the authors state: "It is very well known that CT is more sensitive than plain radiography with regard to screw loosening... CT is almost a gold standard in this respect." They then focus on the lower x-ray dose aspect as the rationale for their recommendation to use CT. It would be helpful to incorporate the above statement into the body of the manuscript, with appropriate references to supporting literature. However, they should also note that ideally a 'gold standard' would be the most accurate, not necessarily the most sensitive method.

Minor Compulsory Revisions
I checked, and Scoliosis (the journal) regularly employs the abbreviation 'et al.' with the period (full stop). So the present manuscript should do likewise.

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.