Reviewer's report

Title: "Principal Component Analysis of the Relationship Between Pelvic Inclination and Lumbar Lordosis"

Version: 0 Date: 26 Jul 2018

Reviewer: James Ogilvie

Reviewer's report:

Line Comment

17 Explain how scoliosis enters this discussion.

47 This is why the label of idiopathic was applied. The category of idiopathic has decreased with genetic analysis and identification of syndrome associated scoliosis.

59 Is ST a validated surrogate for pelvic inclination? State that pelvic inclination is different from pelvic incidence, which is fixed.

63 Was this a consecutive series?

64 What was the diagnosis for which patients were being treated?

68 Define "malalignment" and correlate that with symptoms requiring treatment.

89 In view of no identifiers, can the authors exclude age as a significant variable in lumbar lordosis?

92 Were the authors able to ascertain compliance with the daily exercise routine?

102 Does the body mass index affect the appearance of dimples of Venus?

104 What is the abbreviation DL?

190 Neurological elements of the spine that innervate paraspinous muscles and provide positional information are important.

191 Can this "poor alignment" be parametrically defined?

225 Include the Bettany-Saltikov J et al., 201 paper in the bibliography.

228 The conflation of sagittal deformity (scoliosis) with other diagnoses is confusing. Are the authors stating that the study validates their treatment when applied to AIS, especially without identifying age or skeletal maturity?
248 Cite reference.

250 Is the relationship between LL and PIA fixed or subject to dynamic changes? Is the lack of relationship between lumbar lordosis and pelvic inclination unimportant in all age groups and diagnoses?

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