Reviewer’s report

Title: Standardization of examination posture used for spinal curvature assessment by means of the DTP-3

Version: 1 Date: 15 December 2011

Reviewer: M S Wong

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# It is a good attempt to assess the spine curvature using non-invasive method.

Major Compulsory Revisions:
# The details (design, measurement procedure, operation time and system accuracy) of the DTP-3 diagnostic system should be provided in this manuscript.

# The accuracy of locating each spinal process for each trial with and without body sway in standing posture should be elaborated.

# How long it takes to do a scan for the captioned vertebrae? The measurements can be changed within a trial due to body sway or inconsistent manual location of spinal processes.

# It is supposed a light touch / small contact between the device and the subject. How to ensure no significant forces are acted onto the subjects that might affect the subject’s posture under assessment.

# “It can be interpreted as though in posture G the overall position of the spine (position of the trunk) changes significantly, the curvature of individual sectors of the spine do not significantly differ from posture A. Based on it, there is clear that posture G does not influence significantly on the curvature of the spine.” What is the point for designing a device for assessing the G posture but without significant difference as compared with the A posture?

# “The residual sway is so minor that a single examination is sufficient for the entire spinal shape examination, representing significant savings on time. In the free standing posture, it was necessary to apply an average of several (e.g. 5) repeated examinations in order to improve the reliability of the examination.” Could the presence of the device cause the subject’s posture change (Hawthorne effect) that may not fully reflect the actual posture sway / deviation in the actual assessment?

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.