Reviewer’s report

Title: Orthotic treatment of adult scoliosis patients with chronic back pain

Version: 1 Date: 17 June 2014

Reviewer: Fabio Zaina

Reviewer’s report:

There is a lack of evidence about bracing effects in adult spinal deformities, so this paper provides some new input on this topic. Nevertheless, there are many points that must be addressed to improve the quality of the paper.

Major Compulsory Revisions:

The introduction should be improved reporting for example the SOSORT guidelines that give indication to the conservative treatment for adult scoliosis. In this field, some very low degree evidence exists from a case report about exercise (Negrini A, Parzini S, Negrini MG, Romano M, Atanasio S, Zaina F, Negrini S. Adult scoliosis can be reduced through specific SEAS exercises: a case report. Scoliosis. 2008 Dec 16;3:20) and by some congress abstract about bracing and pain (Louise Marcotte, Charles-Hilaire Rivard, Christine Coillard. Adult scoliosis and the SPINECOR dynamic brace: some early results on efficiency. Scoliosis 2009, 4(Suppl 1):O56. Papadopoulos D. Adult scoliosis treatment combining brace and exercises. Scoliosis 2013, 8(Suppl 2):O8). These papers should be cited in the introduction and some comments added in the Discussion since there are no other data on the topic.

What was the baseline pain assessment? Please report it. Was any QoL or disability scale used? This would provide relevant information.

How long was the follow up? Were patients evaluated immediately after fitting the brace or after a while? Were the improvement persistent over time?

Which was the treatment protocol? How many hours per day were prescribed?

Can the author give more details about the brace? Is there any other paper on this brace?

The author stated that the brace in case 2 stopped the spondylolisthesis progression. Was this documented by serial radiographies over time? Was documented a progression before the beginning of the treatment?

The graph with pain and QoL refers to one patient only? Please give more details about when these measures were taken

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Declaration of competing interests:
I declare that I have no competing interests