Reviewer’s report

Title: Correlation between compliance and brace treatment in juvenile and adolescent idiopathic scoliosis. SOSORT 2014 award winner.

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Reviewer: Theodoros B. Grivas

Reviewer’s report:

The submitted article entitled “Correlation between compliance and brace treatment in juvenile and adolescent idiopathic scoliosis” was the second SOSORT 2014 award winner. It received the second higher score after review by the scientific committee of the meeting and then the full article was additionally examined by the award committee comprised by three senior SOSORT members.

This study is a prospective one evaluating the association between compliance to brace treatment and the progression of scoliotic curve in patients with idiopathic adolescent (AIS) or juvenile scoliosis (JIS).

The used methods are sound (clinical and statistical) and the number of patients studied adequate.

The results shown that the curve progression and referral to surgery are lower in patients with better brace compliance. Bracing discontinuation up to 1 month does not impact on the treatment outcome. Conversely, wearing the brace only overnight is associated with a high rate of curve progression.

The study of the positive effect of good compliance on the success of juvenile and adolescent IS non-operative treatment using braces is needed and the elaboration of the literature with similar articles make firmer the option of the effectiveness of this type of treatment.

Level of interest: An article of importance in its field

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'