

Oral presentation

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## Brace related stress in different braces for scoliosis treatment

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### Objective

The BSSQbrace questionnaire has been shown to be reliable with good internal consistency and reproducibility in estimating the stress scoliosis patients experience while wearing their brace. Eight questions are provided focusing on this topic. A maximum score of 24 can be achieved (from 0 for most stress to 24 for no stress). The subdivision of the score values is: 0–8 (strong stress), 9–16 (medium stress) and 17–24 (little stress).

### Study design

Two BSSQbrace questionnaires were posted to sixty-five patients under brace treatment from our "Chêneau light" data base [1]. All patients had another kind of brace prior to the "Chêneau light". The patients were asked to rate their stress level using one questionnaire for the current brace and the other for the previous one.

### Results

Sixty-three patients returned their fully completed questionnaires (mean age 13.6 years, mean Cobb angle 43.7 degrees). Stress level in the previous brace was 11.04 and in the "Chêneau light" 13.87. The differences were highly significant in the t-test;  $t = -4.67$ ;  $p < 0.001$ .

### Conclusion

The use of the "Chêneau light" brace leads to reduced stress and/or impairment for the patients under treatment compared to heavier brace models used so far.

### References

1. Weiss HR, Werkmann M, Stephan C: **Correction effects of the ScoliOlogiC<sup>®</sup> „Chêneau light” brace in patients with scoliosis.** *Scoliosis* 2007, **2**:2.