

Oral presentation

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Effectiveness and quality of life of the brace 2000 compared with the Boston brace

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Introduction

Currently the effectiveness of brace treatment is being undermined by a lack of patient compliance. Therefore, the brace 2000 has been developed to improve the comfort and acceptance for the individual patient.

higher reported quality of life compared to the classic Boston brace.

Materials and methods

Pressure measurements were performed in 15 patients wearing the gold standard Boston brace and in 10 patients wearing the Brace 2000 in order to understand the efficacy between the two braces. The quality of life was measured by using the SRS 22 and Brace Questionnaire.

Results

Prior to participating the present study, the mean duration of brace treatment was 25.5 months for the Boston brace and 13.9 months for the Brace 2000. In the Boston brace group, the mean primary right thoracic curve was 35.8°, and the mean secondary curve measured 24.1°. The mean corrective force over the lumbar brace pad in standing position was 394 N, and over the thoracic brace pad was 453 N. In the Brace 2000 group, the mean primary right thoracic curve was 30.9°, and the mean secondary curve measured 16.0°. The mean corrective force over the lumbar brace pad in standing position was 404 N, and over the thoracic brace pad it was 567 N.

Conclusion

There is a tendency for the Brace 2000 to apply equal or greater pressure on the patient, but it is associated with a