

Oral presentation

SpineCore treatment for early scoliosis: 15° to 24°

Christine Coillard, Alin B Circo and Charles H Rivard*

Address: Sainte Justine hospital, Montreal, Canada

* Corresponding author

from 5th International Conference on Conservative Management of Spinal Deformities
Athens, Greece. 3–5 April 2008

Published: 15 January 2009

Scoliosis 2009, **4**(Suppl 1):O34 doi:10.1186/1748-7161-4-S1-O34

This abstract is available from: <http://www.scoliosisjournal.com/content/4/S1/O34>

© 2009 Coillard et al; licensee BioMed Central Ltd.

Purpose

The purpose of this prospective observational study was to evaluate the effectiveness of the Dynamic SpineCor brace for early adolescent idiopathic scoliosis following the outcome SRS criteria.

Methods

From 1993 to 2007, 615 patients were treated by the SpineCor brace. 238 patients had a Cobb between 15°–24° and respected the inclusion criteria and 123 finished their treatment. For those 123 patients the assessment of brace effectiveness included; 1) percentage of patients who have 5° or less curve progression and the percentage of patients who have 6° or more progression at skeletal maturity, 2) percentage of patients who have had surgery recommendation/undergone before skeletal maturity, 3) percentage of patients who progressed beyond 45° at maturity and 4) 2-years follow-up beyond maturity to determine the percentage of patients who subsequently undergo surgery.

Results

Successful treatment (correction >5° or stabilization \pm 5°) was achieved in 88.6% (comparing with 82.7% for the 25°–40° cohort) of patients from the time of the fitting of the SpineCor brace to the point in which it was discontinued. 2 immature patients required surgical fusion while receiving treatment. From the total of 123 patients with a definite outcome, 76 have 2 years and 35 have 5 years follow-up.

Conclusion

The SpineCor brace is effective for the treatment of early adolescent idiopathic scoliosis, and it seems that the

results are better with an early bracing. Moreover, the positive outcome appears to be maintained in the long term.

References

1. Weiss HR: **SpineCor vs. Natural History – explanation of the results obtained using a simple biomechanical model.** *Stud Health Technol Inform* 2008, **140**:133-6.
2. Wong MS, et al.: **The effect of rigid versus flexible spinal orthosis on the clinical efficacy and acceptance of the patients with adolescent idiopathic scoliosis.** *Spine* **33**(12):1360-5. 2008 May 20:
3. Christine C, Alin C, Rivard CH: **Treatment of early adolescent idiopathic scoliosis using the SpineCor System.** *Stud Health Technol Inform.* 2008, **135**:341-55.