

Oral presentation

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Positive outcome in obese patients with adolescent idiopathic scoliosis treated with the SpineCor Brace

Valerie Vachon¹, Alin Circo^{1,2}, Christine Coillard^{1,2} and Charles H Rivard*^{1,2}

Address: ¹Research Center, Sainte-Justine Hospital, 3175 Côte Ste-Catherine, Montréal, Québec, Canada, H3T 1C5 and ²University of Montreal, Montreal, Canada

Email: Charles H Rivard* - chrivard@gmail.com

* Corresponding author

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Objective

To compare outcomes of SpineCor brace treatment [1] in AIS patients who were obese with the outcome in patients of normal weight.

Study design

From December 1994, 503 patients were treated using the SpineCor brace. One hundred eighty patients have a definitive outcome. The cohort of patients was divided into two groups according to body habitus. Obese patients were defined as those with a body mass index in the 85th percentile or greater [2]. Assessment of brace effectiveness included 1) number of patients whose curves progressed by ≤ 5 degrees; 2) number of patients whose curves progressed by ≥ 6 degrees; 3) number of patients with curves exceeding forty-five degrees at the end of treatment; and 4) number of patients who have been recommended/undergone surgery before skeletal maturity.

Results

The results demonstrate that AIS patients who are obese as well as patients of normal weight, treated by the SpineCor brace, have a positive outcome (62% and 66% of success respectively). This is not the case for overweight AIS patients following orthotic treatment using the three point pressure principle [3].

Conclusion

The results suggested that the use of a dynamic brace to improve scoliotic deformations through a new concept

and treatment approach re-establishes spinal function, while preserving body movement and growth without being interfered by body habitus.

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