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# Brace Dosage Is More Predictive than Curve Pattern in Adolescent Idiopathic Scoliosis

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We read with interest the paper by Thompson et al., and we think that the generalizability of the results should be further discussed.

The authors concluded that the curve pattern is predictive of bracing failures, but they needed to put together different patterns a posteriori in a subgroup analysis to reach statistical significance. Because of these methodological limits, these findings apply only to patients who wear the brace "part time," (1) since the average hours of wearing, according to their original data, was about 14 hours per day. (2)

When the authors considered patients wearing the brace more than 12.9 hours/day, the success rate increased, with both main thoracic and main lumbar curves. Higher dosage of brace wear provided better results, so if patients are more compliant, the predictive value of the curve pattern is less relevant.

Previous studies with higher brace dosage have shown that the curve pattern is not predictive. (3,4) Before

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looking for clinical predictive factors, we think it would be worthwhile to achieve a high brace dosage and a good in-brace correction. Instead of publishing a secondary analysis focusing on a single possible predictive factor, (5) it would probably be more useful to make a single analysis including several parameters to balance the effect of each of them. A regression model including in-brace correction and brace dosage together with Risser sign, curve pattern, baseline Cobb angle, BMI, and compliance would better clarify the role of each factor in brace-treatment outcomes.

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Conflict of Interest: None Declared