

ORAL PRESENTATION

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Good brace compliance, reduced curve progression, and surgical rates in patients with idiopathic scoliosis

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Aim

To examine the association between brace compliance and outcome.

Methods

495 (457 female) patients with late onset juvenile and adolescent idiopathic scoliosis were examined prospectively, before bracing, and at least 2 years after brace weaning. One spine surgeon examined all patients. 381 (353 females) answered a standardised questionnaire, and 355 had radiological examination after median 24 years. Compliance was defined as brace wear > 20 hours daily until weaning. Main outcomes were curve progression and surgery.

Results

At weaning, 76/389 compliers and 59/106 non-compliers had curve progression $\geq 6^\circ$ (OR: 5.2; 95 % CI: 3.3 to 8.2). At long-term, the numbers were 68/284 and 46/71 (OR: 5.8; 95% CI: 3.3 to 10.2), and 10/284 versus 17/71 had been operated (OR: 8.6; 95 % CI: 3.7 to 19.9).

Conclusion

We conclude that the risk for curve progression, and surgery, are reduced in patients with good brace compliance.

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Reference

1. Rahman T, Bowen JR, Takemitsu M, Scott C: The association between brace compliance and outcome for patients with idiopathic scoliosis. *J Pediatr Orthop* 2005, **25**(4):420-422.

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