

Limited evidence for efficacy of bracing for adolescent idiopathic scoliosis

Clinical question	How effective is bracing for adolescent idiopathic scoliosis?
Bottom line	There was very low quality evidence, from one prospective cohort study involving 286 girls, that a brace curbed curve progression at the end of growth (success rate 74%) and that bracing was more effective than observation (success rate 34%) and electrical stimulation (success rate 33%). There was low quality evidence, from 1 randomised controlled trial involving 43 girls, that a rigid brace was more successful than an elastic one (SpineCor) at curbing curve progression when measured in Cobb degrees. There were no significant differences between the 2 groups (those wearing a rigid brace versus those wearing an elastic brace) in the subjective perception of daily difficulties associated with wearing the brace. Adverse effects of braces were not discussed.
Caveat	Limitations of this review include the sparse data and studies available, and the fact available studies only included girls (there is 1 male with scoliosis for every 7 females), making it very difficult to generalise the results to males. No papers investigated primary outcomes (pulmonary disorders, disability, back pain, quality of life, psychological and cosmetic issues). Due to the very low quality of the evidence in favour of bracing, patients and their parents should regard these results with caution and discuss their treatment options with a multidisciplinary team.
Context	Adolescent idiopathic scoliosis is a three-dimensional deformity of the spine. While adolescent idiopathic scoliosis can progress during growth and cause a surface deformity, it is usually not symptomatic. However, in adulthood, if the final spinal curvature surpasses a certain critical threshold, the risk of health problems and curve progression is increased. Braces are traditionally recommended to stop curvature progression in some countries whereas their use is criticised in others. Braces generally need to be worn constantly, with treatment extending over several years. The most common type of scoliosis is discovered at 10 years of age or older, and is defined as a curve that measures at

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	least 10 _i (called a Cobb angle; measured on x-ray).
Cochrane Systematic Review	Negrini S et al. Braces for idiopathic scoliosis in adolescents. Cochrane Reviews 2010, Issue 1. Article No. CD006850. DOI: 10.1002/14651858.CD006850.pub2. This review contains 2 studies involving 329 participants.
Pearls No. 251	

[References]



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