

[Intervention Review]

Braces for idiopathic scoliosis in adolescents

Stefano Negrini¹, Silvia Minozzi², Josette Bettany-Saltikov³, Fabio Zaina¹, Nachiappan Chockalingam⁴, Theodoros B. Grivas⁵, Tomasz Kotwicki⁶, Toru Maruyama⁷, Michele Romano¹, Elias S. Vasiliadis⁸

¹ISICO (Italian Scientific Spine Institute), Milan, Italy. ²Department of Epidemiology, ASL RM/E, Rome, Italy. ³School of Health and Social Care, University of Teeside, Middlesbrough, UK. ⁴Faculty of Health, Staffordshire University, Stoke on Trent, UK. ⁵Orthopaedic and Trauma Department, "Tzanio" General Hospital of Piraeus, Piraeus, Greece. ⁶Department of Pediatric Orthopedics and Traumatology, University of Medical Sciences, Poznan, Poland. ⁷Department of Orthopaedic Surgery, Saitama Medical University, Kawagoe, Japan. ⁸Thrasio General Hospital, Athens, Greece

Contact address: Stefano Negrini, ISICO (Italian Scientific Spine Institute), Via Roberto Bellarmino 13/1, Milan, 20141, Italy. stefano.negrini@isico.it.

Editorial group: Cochrane Back Group.

Publication status and date: New, published in Issue 1, 2010.

Review content assessed as up-to-date: 29 December 2008.

Citation: Negrini S, Minozzi S, Bettany-Saltikov J, Zaina F, Chockalingam N, Grivas TB, Kotwicki T, Maruyama T, Romano M, Vasiliadis ES. Braces for idiopathic scoliosis in adolescents. *Cochrane Database of Systematic Reviews* 2010, Issue 1. Art. No.: CD006850. DOI: 10.1002/14651858.CD006850.pub2.

Copyright © 2010 The Cochrane Collaboration. Published by John Wiley & Sons, Ltd.

ABSTRACT

Background

Adolescent Idiopathic Scoliosis (AIS) is a three-dimensional deformity of the spine. While AIS 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 and criticized in others. They generally need to be worn full time, with treatment extending over years.

Objectives

To evaluate the efficacy of bracing in adolescent patients with AIS.

Search strategy

The following databases (up to July 2008) were searched with no language limitations: the Cochrane Central Register of Controlled Trials, MEDLINE (from January 1966), EMBASE (from January 1980), CINHALL (from January 1982) and reference lists of articles. An extensive handsearch of the grey literature was also conducted.

Selection criteria

Randomised controlled trials and prospective cohort studies comparing braces with no treatment, other treatment, surgery, and different types of braces.

Data collection and analysis

Two review authors independently assessed trial quality and extracted data.

Braces for idiopathic scoliosis in adolescents (Review)

Copyright © 2010 The Cochrane Collaboration. Published by John Wiley & Sons, Ltd.