Physical exercises and adolescent idiopathic scoliosis: results of a comprehensive systematic review of the literature.

Romano M, Fusco C, Minozzi S, Atanasio S, Zaina F, Negrini S.

ISICO (Italian Scientific Spine Institute), Via Roberto Bellarmino, 13/1 - 20141 Milan, Italy.

A previously published systematic review (2003) documented evidence on the efficacy of specific physical exercises to reduce progression of adolescent idiopathic scoliosis. A bibliographic search with strict inclusion criteria has been performed on the main electronic databases and through extensive hand search. We retrieved 19 studies: 1 randomised (RCT) and 8 controlled studies. A methodological and clinical evaluation has been performed. The 19 papers considered included 1654 treated patients and 688 controls. The highest quality study (RCT) compared 2 groups of 40 patients, showing an improvement of the curve in all treated patients after 6 months. We found 3 papers on Scoliosis Intensive Rehabilitation (Schroth), 5 on passive autocorrection-based methods (Schroth, side-shift), 4 on active autocorrection-based approaches (Lyon and SEAS) and 5 with no autocorrection. Apart from one, all studies confirmed the efficacy of exercises in reducing the progression rate and/or improving the Cobb angles. Exercises efficacy is proven by an RCT and several controlled studies. In 5 years 8 more papers have been published in indexed literature coming from all over the world and proving that interest on exercises do not come only from West Europe.

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