

Oral presentation

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The best treatment for adolescent idiopathic scoliosis: what do current systematic reviews tell us?

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Introduction

Systematic reviews, the explicit combination of findings from multiple studies, can provide reliable and accurate conclusions about the effectiveness of interventions. This presentation summarizes six existing systematic reviews of non-operative treatments for AIS and discusses the practical implications of the findings.

Materials and methods

The Cochrane, Medline, DARE (Database of Abstracts of Reviews of Effects), and ACP Journal Club databases were searched for meta-analyses and systematic reviews of AIS treatment. The reviews were scored using the Oxman and Guyatt Overview Quality Assessment Questionnaire (OQAQ) to assess the scientific quality of the materials and methods leading to the conclusions.

Results

The search yielded six studies [1-7]. The major objectives included effectiveness of mass screening, exercises, bracing, observation and electrical stimulation. Based on the OQAQ scores, the Rowe review is extensively flawed, and its recommendations should be questioned. The Focarile and the Lenssinck reviews were the highest quality in this series, and as such, their recommendations should be considered the most valid and informative concerning treatment decisions.

Conclusion

Systematic reviews differ in quality, and all are limited by the availability and quality of published clinical evidence. Where level III and IV studies predominate, as in the case

of AIS, systematic reviews may produce contradictory or inconclusive results. Such is the state of knowledge regarding bracing – the balance of published evidence neither supports nor prohibits using a brace to treat scoliosis in the growing child.

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