

Oral presentation

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Repeatability, reliability and concurrent validity of the SRS-22 and EuroQol in patients with Adolescent Idiopathic Scoliosis

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Objectives

The objective of this study was to evaluate the repeatability, reliability, internal consistency, and concurrent validity of an adapted Norwegian version of the Scoliosis Research Society 22 questionnaire (SRS-22) and the generic health-related quality of life instrument EuroQol (EQ-5D and EQ-VAS).

Background

SRS-22 is widely used for evaluation of health-related quality of life in AIS. Its repeatability, which is essential for use in follow-up studies, and concurrent validity with EuroQol, which can be used for cost-utility analysis, have not yet been assessed.

Methods

The forward-backward translation of the English version of the SRS-22 was performed according to the guidelines for cross-cultural adaptation of outcome questionnaires. Fifty-seven patients with AIS of various ages and severity of deformity completed questionnaires including SRS-22, EQ-5D, and EQ-VAS twice with a two-week interval. The study was approved by the Regional Ethics Committee for Medical Research in Norway.

Results

There were no floor or ceiling effects on the score distributions. The study demonstrated moderate internal consistency and high reliability of the SRS-22 questionnaire, with Chronbach alpha and ICC ranging from 0.76 to 0.93 for

the 5 domains. Repeatability was excellent for all domains of SRS-22, with repeatability coefficients < 1 . Concurrent validity with EQ-5D was poor to moderate, with Pearson's r ranging from 0.01 to 0.58. However, total scores of the two instruments showed satisfactory agreement.

Conclusion

The SRS-22 outcome instrument has satisfactory repeatability, but the poor to moderate concurrent validity with EQ-5D suggests that the disease specific and the generic questionnaires measure different parameters.