

Clinical Study

Quality of life in normal and idiopathic scoliosis adolescents before diagnosis: reference values and discriminative validity of the SRS-22. A cross-sectional study of 1,205 pupils

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Abstract

BACKGROUND CONTEXT: The Scoliosis Research Society 22 Questionnaire (SRS-22) has shown to worsen with increasing deformity in adolescents with idiopathic scoliosis (AIS). However, all the studies have been performed on patients who have already been diagnosed and in relatively small samples. **PURPOSE:** The purposes of this study were to evaluate a large sample of consecutive patients before diagnosis to develop reference values and check the discriminative validity and correlation with deformity of the SRS-22.

STUDY DESIGN/SETTING: This is a cross-sectional study, with patients referred to a specialized outpatient scoliosis rehabilitation institute.

PATIENT SAMPLE: The recruited subjects were 1,205 consecutive adolescents, 75% females (13.7 ± 1.9 years), before their first scoliosis evaluation. Five subgroups were 0° – 10° Cobb (normal) and 11° to 20° , 21° to 30° , 31° to 40° , and greater than 40° (AIS).

OUTCOME MEASURES: The outcome measure is based on the SRS-22.

METHODS: The SRS-22 was used to examine the differences between the domains of the five subgroups and total scores, and it was correlated with Cobb degrees and curve location. We used one-way analysis of variance and Spearman rho test.

RESULTS: Apart from the self-image domain in both genders and all subgroups, all other scores were greater than 4 points with small standard deviations. Females showed significant differences among groups for all domains and total score ($p < .05$). In males, function, pain, and mental health did not show statistically significant differences among groups ($p > .1$). All differences found were less than the minimally clinically significant change (0.5 points). The correlations with the severity of deformity measures were very low ($r_s < 0.289$).

CONCLUSIONS: According to our results, deformity is apparently not a real issue for AIS before diagnosis made, treatment planned, and/or specialists interfere with their everyday life. Scoliosis Research Society 22 Questionnaire demonstrated some discriminative validity between small and large curves, but the differences found were small. © 2015 Elsevier Inc. All rights reserved.

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