Clinical evaluation of scoliosis during growth: description and reliability.

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The clinical evaluation, even today, remains a central point in the diagnosis, prognostic definition and treatment prescription regarding scoliosis. The clinical evaluation of a scoliotic patient has been established for a long time, but it has not been standardized. The aim of the present work is to report the most common clinical measures for the assessment of scoliosis, explain the usefulness of each clinical measurement, and report the repeatability and limits in order to help the physician in making appropriate clinical choices. METHODS: The height of the hump, the angle of trunk rotation, the sagittal and frontal profiles, and the Trunk Aesthetic Clinical Evaluation (TRACE) have been fully described, and their reliability and repeatability have been assessed. RESULTS: The measures analyzed showed good reliability and repeatability on the intra-operator basis. The inter-operator repeatability is usually not that good. CONCLUSION: The main measures of the clinical assessment of scoliotic patients have been tested, and their reliability has been evaluated. The knowledge of measurement error, as well as intra- and inter-operator reliability, are essential for the clinical evaluation and treatment of scoliosis. This is an unavoidable basis for decision making in the assessment and the treatment of scoliosis.

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