

The classification of scoliosis braces developed by SOSORT with SRS, ISPO, and POSNA and approved by ESPRM

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Abstract

Purpose: Studies have shown that bracing is an effective treatment for patients with idiopathic scoliosis. According to the current classification, almost all braces fall in the thoracolumbosacral orthosis (TLSO) category. Consequently, the generalization of scientific results is either impossible or misleading. This study aims to produce a classification of the brace types.

Methods: Four scientific societies (SOSORT, SRS, ISPO, and POSNA) invited all their members to be part of the study. Six level 1 experts developed the initial classifications. At a consensus meeting with 26 other experts and societies' officials, thematic analysis and general discussion allowed to define the classification (minimum 80% agreement). The classification was applied to the braces published in the literature and officially approved by the 4 scientific societies and by ESPRM.

Results: The classification is based on the following classificatory items: anatomy (CTLSO, TLSO, LSO), rigidity (very rigid, rigid, elastic), primary corrective plane (frontal, sagittal, transverse, frontal & sagittal, frontal & transverse, sagittal & transverse, three-dimensional), construction-valves (monocot, bivalve, multisegmented), construction-closure (dorsal, lateral, ventral), and primary action (bending, detorsion, elongation, movement, push-up, three points). The experts developed a definition for each item and were able to classify the 15 published braces into nine groups.

Conclusion: The classification is based on the best current expertise (the lowest level of evidence). Experts recognize that this is the first edition and will change with future understanding and research. The broad application of this classification could have value for brace research, education, clinical practice, and growth in this field.

Keywords: Brace; Classification; Idiopathic scoliosis.

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