The Sforzesco brace and SPoRT concept (Symmetric, Patient-oriented, Rigid, Three-dimensional) versus the Lyon brace and 3-point systems for bracing idiopathic scoliosis.

Negrini S, Marchini G, Tomaello L.

ISICO (Italian Scientific Spine Institute), Milan and Vigevano (PV) Italy.

We have developed a new rigid brace, the Sforzesco brace, according to a new concept SPoRT (Symmetric, Patient-oriented, Rigid, Three-dimensional, active). The aim of this study is to verify the first results of the SPoRT concept compared to a classical 3 point system. DESIGN: A pair-controlled retrospective study. POPULATION: 15 Patients (22 females), 14.0 +/- 1.7 years, 39.8 +/- 9.8 degrees Cobb (degrees C). We examined for differences between the two groups, at the start with SPoRT worst than LY. All degrees C and degrees B parameters (maximal, average and single localizations) decreased significantly in both groups, apart from thoracic degrees C in LY. SPoRT had better results than LY (P<0.05) for maximal degrees C and average degrees C. Moreover, degrees C clinical results were better (P<0.05) in SPoRT than LY. SPoRT had better results than LY in aesthetic (P<0.05) of the shoulders and waists. Brace is effective in the short term also in high degree curves, and SPoRT obtained statistically significant 80% better degrees C results than LY in the worst scoliosis curve, and 40% in the average of all curves, as well as better aesthetic.

PMID: 17108434 [PubMed - indexed for MEDLINE]