

Oral presentation

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End of treatment results for SEAS exercises: a controlled retrospective study

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Background

The efficacy of SEAS exercises in the short term (1 year) is established in a controlled prospective study. The efficacy results at the end of treatment have not been presented.

Aim

To verify the end of treatment results of SEAS exercises.

Study design

Retrospective controlled study.

Population

One hundred and twenty two AIS patients of 13.8 ± 3.1 years at start, $15.8 \pm 11.9^\circ$ Cobb and $5.6 \pm 3.1^\circ$ Bunnell, who consecutively completed an exercise treatment (on average 2.2 ± 1.7 years), have been included. They have been divided into two groups: SEAS exercises (SE: 33) and usual physiotherapy (UP: 89).

Methods

The validated outcome criteria included Cobb and Bunnell degrees, hump, sagittal configuration and Aesthetics Index. Data was compared with similar control groups from the literature. Statistical analysis included paired t-test, ANOVA and Kruskal-Wallis tests.

Results

SE group showed a statistically significant decrease of maximal Cobb and Bunnell degrees and hump, with better sagittal profile and aesthetics. The UP group showed a

slight worsening of scoliosis parameters and flattening of sagittal profile. In addition, aesthetics improved for both groups when compared to similar controls in the literature.

Conclusion

End of treatment SEAS exercises demonstrate better results than UP and controls. Improvements were seen in almost all clinically important parameters.

References

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