

Oral presentation

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Vertebral deformity corrected by bracing: retrospective selected case series of 10 scoliosis patients treated with a RSC Brace

Manuel Rigo*, Monica Villagrasa and Gloria Quera-Salvá

Address: E. Salvá Institute. Barcelona, Spain

* Corresponding author

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Background

Bracing can prevent curve progression in Idiopathic Scoliosis. Compliance and in-brace correction predict the end result. Part time, full time or even night time bracing may result in excellent in-brace correction. This is associated with a progressive correction of the spinal and trunk deformity as well as a correction of the vertebral deformity. This 10 patient series demonstrates a clear correction of the vertebral, spinal and trunk deformity.

Materials and methods

Retrospective selected case series of 10 patients (8 F, 2 M) diagnosed with IS, with a minimum age of 5 years and a maximum of 13, all of them treated with a RSC brace. Curve pattern: 7 thoracic, 1 thoracic double major and 2 thoracolumbar. Minimum observation time was 1 year and 3 months and maximum 5 years 5 months. Mean Cobb angle was 36° (25°–47°). All the patients showed an in-brace correction in their first brace > 45%.

Results and conclusion

Results are presented case by case. After a minimum of 1 year of observation all the patients showed a correction of the vertebral wedging in the apex \geq 50%. Four patients have finished the treatment, and they maintain a correction of the main curve higher than 10°. All the patients showed a marked correction of the trunk asymmetry. Some case reports have shown that correction of the vertebral deformity is possible. A retrospective series of selected cases demonstrate that this phenomenon is not rare. These results support the 'vicious cycle model'.

References

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