

Oral presentation

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## Curve pattern changes in idiopathic scoliosis

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### Introduction

Ponseti and Friedman suggest that curve type is genetically determined and that curve types do not change throughout its course. Nowadays, we see scoliosis as a more dynamic process. Therefore we ask ourselves can the natural history of idiopathic scoliosis can change during growth when the scoliosis is not treated.

### Aim

The goal of this study was to assess curve pattern changes in patients with idiopathic scoliosis who were not treated.

### Materials and methods

Forty eight patients were monitored who were not treated and had an idiopathic scoliosis. Curve pattern changes were classified according the SRS.

### Results

Forty eight patients (11 boys and 37 girls; 13 patients younger than 10 years and 35 patients older than 10 years) were monitored for a mean follow-up of 3 to 4 years. 8 patients (17%) showed changes in curve patterns. Six of these patients were younger than 10 years, while 2 patients were older than 10 years. There was no correlation between the curve severity and the curve pattern changes. We found no significant difference between the male and female patients. Single curves changed in double curves and vice versa during growth in 70% younger than 10 years and 18% older than 10 years.

### Conclusion

In this study, changes in curve patterns suggest that idiopathic scoliosis is not a fixed deformity, but a dynamic process especially in patients younger than 10 years.

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