# **Scoliosis**



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# The treatment of the congenital scoliosis by Cheneau's brace: summary of the first experience

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# **Background**

Normalization of the growth balance is the primary goal of the orthopedic treatment in children. The principle postulated in Delpech's (Hutter-Vallkman) Law is true for the treatment of many pathological conditions such as congenital clubfoot, developmental dysplasia of hip, Blount disease, etc. Brace treatment of the spinal deformity restores normal growth of the spine. We hypothesize that the principles of active correction are efficient in the treatment of the congenital scoliosis.

## **Objective**

To study the influence of the Cheneau's brace on growth of the wedged vertebra in children with congenital scoliosis.

### **Methods**

Seven patients (2 males, 5 females) with congenital spinal deformity due to formation failure were treated by Cheneau's brace. Mean age in this group was 5.6 years (range 2–9 years). Before the treatment, the average Cobb angle was  $35.4^{\circ}$  (range  $23^{\circ}-42^{\circ}$ ). The angle of the wedged vertebra was  $44.8^{\circ} \pm 4.3^{\circ}$ . A full-time bracing regimen was prescribed for all the patients.

#### Results at one year

After the beginning the treatment, the angle of the wedged vertebra was  $29.3^{\circ} \pm 5.6^{\circ}$  (35.4%), mean Cobb angle was  $20.1^{\circ}$  (55.1%).

#### Conclusion and recommendation

Patients will continue to use the Chenasu's brace. More time is needed to reach specific conclusions based on this preliminary data. However, our initial results allow us to continue this brace study as an evaluation for its effectiveness in congenital scoliosis treatment. The application of Cheneau's brace may change growth potential of the wedged vertebra.

#### References

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