

Oral presentation

Open Access

Treatment of the congenital scoliosis by Cheneau brace: 2 year follow-up

J Cheneau^{*1}, D Chekrizhev², A Mezentsev² and D Petrenko²

Address: ¹39 rue des Chanterelles, 31650 Saint Orens, France and ²Sytenko Institute of Spine and Joint Pathology, 80 Pushkinskaya street, 61024, Ukraine

Email: J Cheneau* - cheneau.jacques@neuf.fr

* Corresponding author

from 6th International Conference on Conservative Management of Spinal Deformities
Lyon, France. 21-23 May 2009

Published: 14 December 2009

Scoliosis 2009, **4**(Suppl 2):O45 doi:10.1186/1748-7161-4-S2-O45

This abstract is available from: <http://www.scoliosisjournal.com/content/4/S2/O45>

© 2009 Cheneau et al; licensee BioMed Central Ltd.

Background

The treatment of congenital spinal deformities is a real challenge. The modern standard of treatment includes surgical interventions intended to correct or fuse the spine. In some cases, such an approach is impossible because of severe comorbidities. We hypothesized that a Cheneau brace might be effective in young patients with congenital spinal deformity. This paper is a continuation of our previous study.

Objective

The objective of this study was to study Cheneau brace treatment results in patients with congenital spinal deformities during 2-years follow-up.

Materials and methods

We investigated 7 patients with congenital formation failure. 2 patients had wedge vertebra, and 5 patients had hemivertebra. They were treated utilizing the Cheneau brace from 2007 to 2009. The mean age at the beginning of treatment was 5.6 years (range 2-9 years). A full-time regimen was prescribed for all the patients.

Outcome

We observed a significant improvement of Cobb angle, wedge angle, and Cheneau index after 1 year of bracing treatment. After 2 years, radiographic data did not change dramatically, but slightly improved (Table 1).

Conclusion

We conclude that Cheneau brace active correction principles provide correction and control of congenital spinal deformities.

Table 1: Analyzed data during follow-up

X-ray data	Cobb angle			Cheneau index			Wedge angle		
	Pts	Before treatment	1 year	2 year	Before treatment	1 year	2 year	Before treatment	1 year
1.WV	30	12	8	23.2	17.8	12.6	20	10	8
2.WV	24	18	10	39	31	16.1	23	21	10
3.WHV	20	8	2	42.3	27.3	18.35	24	15	11
4.WHV	23	19	18	40.5	40.3	23.51	30	24	14
5.WHV	15	10	10	31.21	15.6	16	30	22	23
6.WHV	69	54	54	-	-	-	-	-	-
7 MSA Thoracic/ Lumbar	18/19	22/12	24/7	41.24/29.9	28.4/28.8	16.2/10.2	29/19	19/12	15/7

Publish with **BioMed Central** and every scientist can read your work free of charge

"BioMed Central will be the most significant development for disseminating the results of biomedical research in our lifetime."

Sir Paul Nurse, Cancer Research UK

Your research papers will be:

- available free of charge to the entire biomedical community
- peer reviewed and published immediately upon acceptance
- cited in PubMed and archived on PubMed Central
- yours — you keep the copyright

Submit your manuscript here:
http://www.biomedcentral.com/info/publishing_adv.asp

