

ORAL PRESENTATION

Open Access

Differentiated approach to Chêneau brace choice for the scoliosis treatment

D Chekryzhev^{1*}, A Mezentsev¹, D Petrenko²

From 8th International Conference on Conservative Management of Spinal Deformities and SOSORT 2011 Annual Meeting

Barcelona, Spain. 19-21 May 2011

Background and purpose

To validate choice of the Cheneau brace according to scoliotic deformity type.

Materials and methods

Study group included 1700 patients with AIS treated by Cheneau brace [1]. Major deformity Cobb angle ranged 20°-40°, spinal rotation ranged 15°-35°. Age of the patients was ranged 11-15 years old. Radiologic measurements and clinical presentation of the spinal deformity during the investigation were assessed [2]. Mean follow-up was 5 years. In this study Rigo's clinical and radiological criteria [3] and SRS terminology were used.

Results

According to obtained data four scoliotic deformity patterns were defined: primary thoracic and secondary lumbar/thoracolumbar curve (pattern 1); primary thoracolumbar and secondary lumbar curve (pattern 2); primary lumbar curve with/without secondary thoracic curve (pattern 3); triple curve deformity (pattern 4). This classification allowed to define following 6 brace types: for 1 pattern - braces of T1, T2, T3 types. For 2 pattern - brace T3 type; for 3 pattern - braces of L1, L2, T1 and T2 types. For 4 type pattern - brace of CTL type.

Conclusions

Scoliosis deformity classification provides differentiated Cheneau brace selection according to the deformity pattern.

Author details

¹Orthospine Ltd, Kharkiv, Ukraine. ²Sytenko Institute of Spine and Joint Pathology, Kharkiv, Ukraine.

Published: 27 January 2012

References

1. Rigo M, Weiss HR: **The Cheneau concept of bracing- Biomechanical aspects.** *Stud Health Technol and Inform* 2008, **135**:303-319.
2. Lenke LG, Edwards CC 2nd, Bridwell KH: **The Lenke classification of adolescent idiopathic scoliosis: how it organizes curve patterns as a template to perform selective fusions of the spine.** *Spine* 2003, **28**: S199-207.
3. Rigo M, Villagrasa M, Gallo D: **A specific scoliosis classification correlating with brace treatment: description and reliability.** *Scoliosis* 2010, **5**:1.

doi:10.1186/1748-7161-7-S1-O32

Cite this article as: Chekryzhev et al.: Differentiated approach to Chêneau brace choice for the scoliosis treatment. *Scoliosis* 2012 **7**(Suppl 1):O32.

Submit your next manuscript to BioMed Central and take full advantage of:

- Convenient online submission
- Thorough peer review
- No space constraints or color figure charges
- Immediate publication on acceptance
- Inclusion in PubMed, CAS, Scopus and Google Scholar
- Research which is freely available for redistribution

Submit your manuscript at
www.biomedcentral.com/submit



¹Orthospine Ltd, Kharkiv, Ukraine

Full list of author information is available at the end of the article