

POSTER PRESENTATION

Open Access

Radiological evaluation of the eighth thoracic vertebra rotation in the pectus excavatum

Ryszard Tomaszewski*, Lumila Machala, Artur Gap

From The 10th Meeting of the International Research Society of Spinal Deformities (IRSSD 2014 Sapporo) Sapporo, Japan. 29 June - 2 July 2014

Objective

The main objective was to find the difference between the rotation of the eighth thoracic vertebra in symmetric and dissymmetric pectus excavatum in children.

Material and methods

An analysis of pre-operational 82 CT in children with the pectus excavatum deformity was made. Patients were divided into two groups depending on the chest deformation; the first one consisted of patients with symmetric pectus excavatum, there were 48 patients (9 girls, 39 boys), the mean age was 12,8 years (4-16), the average Haller index was 3,6 (2,2-7,1); in the second group with dissymmetric pectus excavatum there were 35 patients (8 girls, 27 boys), the mean age was 11,8 years (7-17), the average Haller index was 2,9 (2,4-5,8).

Results

In the first group the rotation of the eighth thoracic vertebra was found in 60,4% (29 patients), with mean rotation angle of 6,29 (2,6-32), the average Haller index was 3,7 (2,2-7,1), In the second group there were 45,7 % (16 patients) with the mean rotation angle of 4,72 (2,4-10,5), the average Haller index was 5(2,4-4,9).

Conclusion

The rotation of the eighth thoracic vertebra is significantly more common in symmetric pectus excavatum in children than in dissymmetric deformity.

Published: 19 January 2015

doi:10.1186/1748-7161-10-S1-P19

Cite this article as: Tomaszewski et al.: Radiological evaluation of the eighth thoracic vertebra rotation in the pectus excavatum. *Scoliosis* 2015 10(Suppl 1):P19.

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



Upper Silesian Child Health Centre, Katowice, Poland



© 2015 Tomaszewski et al; licensee BioMed Central Ltd. This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. The Creative Commons Public Domain Dedication waiver (<http://creativecommons.org/publicdomain/zero/1.0/>) applies to the data made available in this article, unless otherwise stated.