

The incidence of dorsal and pelvis asymmetries in school-age children with hip dysplasia in the neonatal-infancy period

Marek Kluszczyński

- Correspondence: Marek Kluszczyński marek.kluszczyński@mechatronika.edu.pl

[Author Affiliations](#)

Rehabilitation Ward, Provincial Specialist Hospital in Częstochowa, Poland

Scoliosis 2007, **2**(Suppl 1):S33 doi:10.1186/1748-7161-2-S1-S33

The electronic version of this article is the complete one and can be found online

at: <http://www.scoliosisjournal.com/content/2/S1/S33>

Published: 12 October 2007

© 2007 Kluszczyński; licensee BioMed Central Ltd.

Objective

The aim was the comparative analysis of the incidence of dorsal and pelvis asymmetries in school-age children with hip dysplasia in the infancy period.

Study design

Fifty children aged from four to fourteen years, diagnosed with hip dysplasia in the infancy period, were included in the study. Using a Rippstein plurimeter [1], dorsal and pelvis asymmetries were examined. The control group included fifty randomly chosen children aged from twelve to sixteen years.

Results

Dorsal asymmetry was found in ninety percent of test group children, including a small asymmetry of 2–4 Bunnell degrees [2] in seventy-eight percent. In the control group, dorsal asymmetry was found in fifty percent of children, including a small asymmetry in forty-six percent. Pelvis asymmetry was found in eighty percent of test group children, predominantly an eight-type deformation with a right-side anterior superior iliac spine (ASIS) lowering in sixty-six percent and a left-side posterior superior iliac spine (PSIS) lowering in forty-six percent of children. In the control group, pelvis asymmetry was found only in forty-two percent of children.

Conclusion

A statistically significant, higher incidence of dorsal and pelvis asymmetries is found in children with single-hip dysplasia in their infancy period as against the children who did not experience dysplasia.

References

1. Green S, Buchbinder R, Forbes A, Bellamy N: **A standardized protocol for measurement of range of movement of the shoulder using the Plurimeter-V inclinometer and assessment of its intrarater and interrater reliability.**

Arthritis Care Res 1998, **11**:43-52. [PubMed Abstract](#) | [Publisher Full Text](#)

2. Bunnell WP: **An objective criterion for scoliosis screening.**

J Bone Joint Surg 1984, **66A**:1381-1387.