翻譯者 (Translator):

張薰文

輔英科技大學物理治療學系助理教授，高雄，臺灣

校閱者 (Reviewer):

徐碧真

成功大學物理治療學系副教授，臺南，臺灣

題目 (Title):

上神經幹分娩性臂神經叢損傷兒童脊椎曲度之評估

Assessment of Spinal Curvatures in Children With Upper Trunk Obstetrical Brachial Plexus Palsy.

摘要中文翻譯

目的：

未有研究報告上神經幹分娩性臂神經叢損傷對脊椎曲度的影響及曲度大小與上肢動作之關係。

方法：

使用脊椎滑鼠(Spinal Mouse)評估在矢狀面及額狀面的脊椎曲度特性。僅對實驗組使用主動動作量表(Active Movement Scale)評估上肢動作。

結果：

實驗組在額狀面的脊椎角度較對照組大。在分娩性臂神經叢損傷組中，25位兒童有11位兒童(44%)有C型胸椎脊椎側彎，而其中又有9位兒童有對側的脊椎側彎。肩關節外旋角度與脊椎側彎角度呈反比。此外，臂神經叢損傷兒童同時合併脊椎側彎者在肩關節外旋與肘關節屈曲的角度都較小。

結論：

上神經幹分娩性臂神經叢損傷可能會影響脊椎在額狀面的排列。尤其是肩關節外旋的角度不足可能造成軀幹代償而衍生成胸椎脊椎側彎的問題。

Original Abstract

PURPOSE:
Effects of upper trunk obstetrical brachial plexus palsy (OBPP) on the spinal curvature and relationship between the curvature degrees and upper limb movements have not been reported.

METHODS:
Spinal Mouse was used to assess spinal curvature characteristics in the sagittal and frontal planes. Upper limb movements were assessed with using the Active Movement Scale in only study group.

RESULTS:
The degree of frontal plane curvatures was higher in the study group. In the OBPP group, 11 of 25 (44%) children had thoracal C-shaped scoliosis. Nine of these children had contralateral side scoliosis. Shoulder external rotation was inversely correlated with scoliosis angle. Moreover, shoulder external rotation and elbow flexion were lower in children with scoliosis in the OBPP group.

CONCLUSIONS:
Upper trunk OBPP may affect frontal plane alignment. Especially insufficient shoulder external rotation scores may lead to constitute thoracal scoliosis as a result of trunk compensation.