Congenital Spinal Dislocation
Joseph Junewick, MD FACR
06/11/2010

History
15 month old male with spinal anomaly.

Diagnosis
Congenital Spinal Dislocation

Discussion
Congenital vertebral dislocation is a rare congenital spinal malformation characterized by a translatory or rotatory vertebral displacement, or both, at a single level, that results in an abrupt angulation of the neural canal. The more caudal vertebra is dysplastic and appears at first glance to be posteriorly dislocated into the vertebral canal as a posterior hemivertebra, but is actually well aligned with the more caudal vertebral column. Unfortunately, the present classification of complex congenital vertebral anomalies is confusing, and CVD has been grouped together with other congenital vertebral malformations under the terms 'segmental spinal dysgenesis', 'medial spinal aplasia', and others. Congenital vertebral dislocation is a distinct entity likely the result of early embryonic 'buckling'-which likely occurs by the 6th embryonic week, prior to the period of axonal outgrowth and the beginning of vertebral chondrification.

Findings
MR-Sagittal T1 T2 and IR and axial T2 images of the lower spine show anterior dislocation of the sacrum relative to the lumbar spine. Note the tiny central syrinx, fatty filum terminale and segmentation anomalies.

Reference
Disclaimer
This teaching site is partially funded by an educational grant from GE Healthcare and Advanced Radiology Services, PC. The material on this site is independently controlled by Advanced Radiology Services, PC, and GE Healthcare and Spectrum Health have no influence over the content of this site.

Content Download Agreement
The cases and images on this website are owned by Spectrum Health. Permission is granted (for nonprofit educational purposes) to download and print materials to distribute for the purpose of facilitating the education of health professionals. The authors retain all rights to the material and users are requested to acknowledge the source of the material.

Site Disclaimer
This site is developed to reach healthcare professionals and medical students. Nothing this site should be considered medical advice.

Only your own doctor can help you make decisions about your medical care. If you have a specific medical question or are seeking medical care, please contact your physician.

The information in this website is provided for general medical education purposes only and is not meant to substitute for the independent medical judgment of a physician relative to diagnostic and treatment options of a specific medical condition.

The viewpoints expressed in these cases are those of the authors. They do not represent an endorsement. In no event will Advanced Radiology Associates, PC, Spectrum Health Hospitals (Helen Devos Children’s Hospital) or GE Healthcare be liable for any decision made or action taken in reliance upon the information provided through this website.