Caudal Regression

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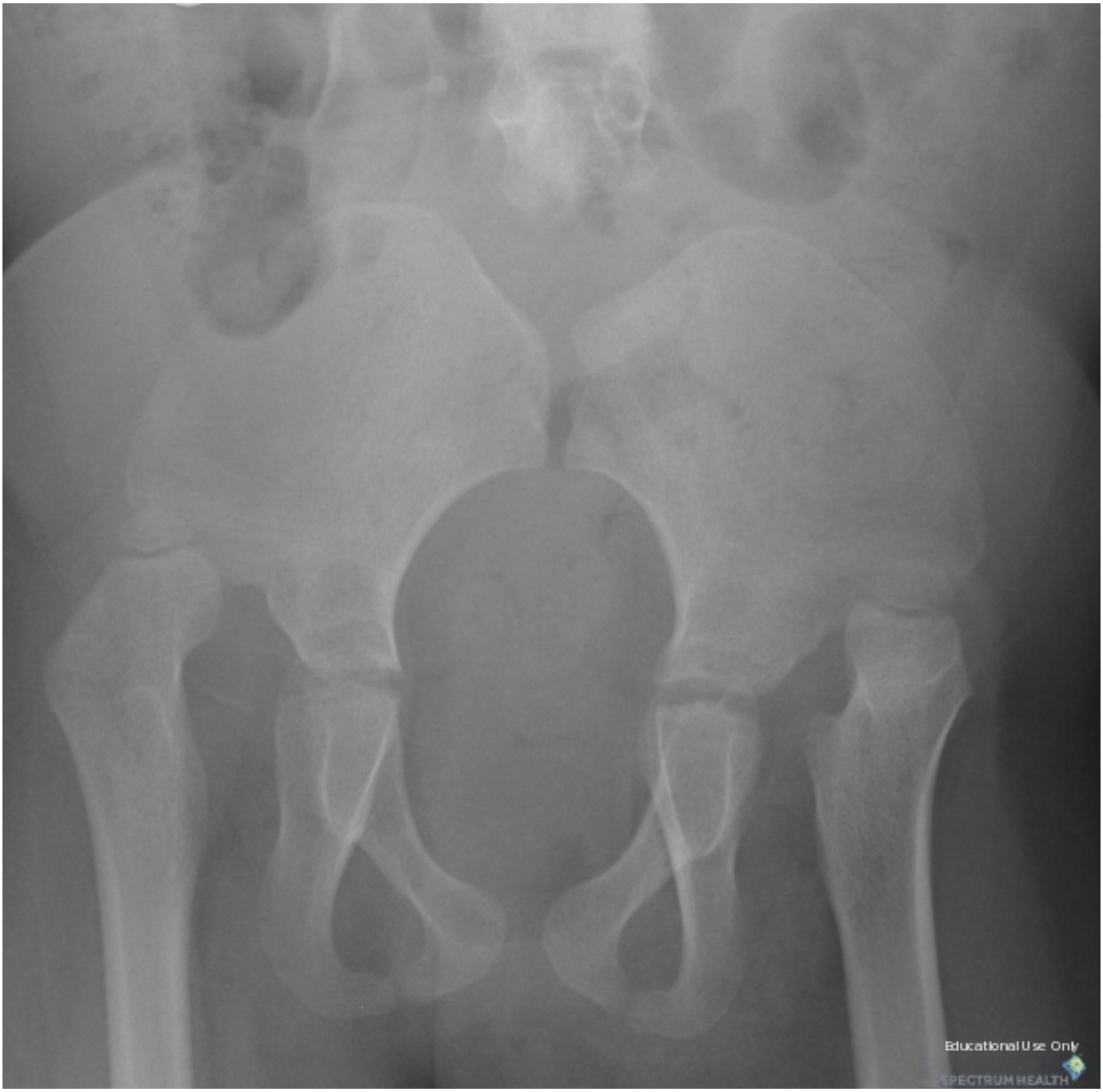
History
Child with lower extremity paraplegia.

Diagnosis
Caudal regression

Discussion
Caudal regression represents a spectrum of abnormalities related to disturbance of the caudal cell mass of the tail bud, including sirenomelia and lumbosacral agenesis. Caudal regression may be associated with anal atresia, abnormal external genitalia, renal anomalies and pulmonary abnormalities. There is often a history of maternal diabetes.
Multiple orthopedic anomalies are seen including foot deformaties, limb hypoplasia, hip subluxation, and muscle weakness. The spinal cord termination is characteristically blunted rather than conical and anterior and posterior nerve roots of the cauda equina are separated. Motor greater than sensory deficits and bladder and bowel dysfunction are common.
Caudal regression is classified by the degree of lumbosacral absence: Type I-partial unilateral sacral agenesis, Type II-bilateral partial sacral defects, Type III-total sacral agenesis, and Type IV-total sacral agenesis and absence of one or more lumbar vertebrae.

Findings
CR-Absent caudal spine (sacrum, coccyx and distal lumbar segments) with bilateral superior and lateral dislocation of the hips.

Reference
Lowe LH, Johanek AJ, Moore CW. Sonography of the neonatal spine: Part 2, spinal disorders. AJR (2007); 188:739-744.
Renshaw TS. Sacral agenesis: A classification and review of 23 cases. JBJ; 60:373-383.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