

## October 2010 Case Study: Bilateral DDH with Unusual SCFE

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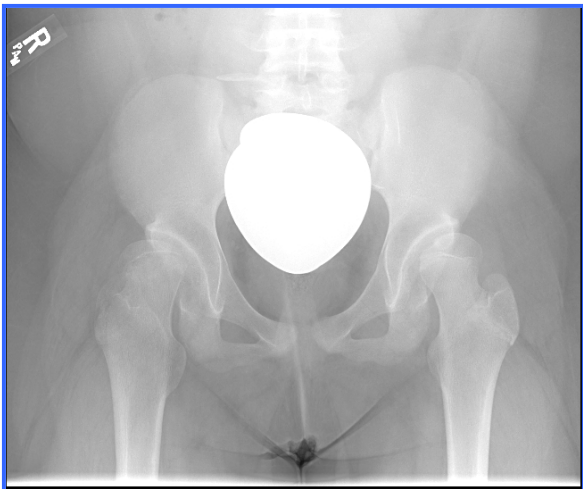
**History of Present Illness:** The patient is a 14-year-old female who was referred here today to the Orthopedic Clinic by her primary care provider for evaluation of right anterior medial knee pain that she has had over the past 1-2 months according to her mother who is here with her today. Her mother also reports that she has walked with a "strange" gait for the past 3- 4 months and that it has worsened in the last few weeks. She appears to lean to the right side and will occasionally limp on the right side. No knee swelling, locking, buckling, or giving way. She has had no previous x-rays. No previous orthopedic evaluation. Denies fever or recent illnesses. No family history of orthopaedic problems.

**Past Medical History:** Bipolar disorder, Developmental Delay, Mild Asthma, Obesity (BMI approx 40)

**Meds:** None currently

**Allergies:** NKDA

**Physical Examination:** The patient is a well-appearing, alert, conversant 14-year-old female in no acute distress. Height 154 cm, weight 186 pounds. HEENT: Atraumatic, normocephalic, nondysmorphic. Neck Supple. Chest: Clear to auscultation. Heart: Regular rate and rhythm. Spine: On forward bend, her spine is straight. No significant scoliosis or kyphosis. Sagittal balance appears to be normal. Examination of her gait is notable for significant Trendelenburg gait bilaterally, slightly more apparent on the right. She is able to weight-bear without too much difficulty. Her gait appears to be somewhat antalgic on the right side, however and there is clearly a Trendelenburg component with weakness of her hip abductors. Extremities: The right knee exam is normal. She has full passive and active flexion and extension of the knee. No joint line tenderness. No patellofemoral pain, full range of motion, no ligamentous instability. Examination of the right hip, however, demonstrates significant pain with any flexion greater than 90 to 100 degrees. She also has pain with abduction, internal rotation and she does have a mild obligatory external rotation with flexion. Left hip showed approximately 20 degrees of internal rotation, approximately 50 degrees external rotation. Thigh foot angle was fairly neutral. She has mild pain with maximum right hip abduction. She also has this on the left side. Neurologic: Normal in upper and lower extremity. Toes are downgoing to Babinski. Reflexes are 1+ at the knee, 1+ at the ankle



**Radiographs:** AP and frog view of the pelvis taken today demonstrates severe bilateral developmental hip dysplasia with underlying coxa valga. There is flattening of the femoral head, significant flattening of the acetabulum and approximately 50% uncoverage bilaterally. There is a questionable chronic slipped capital

femoral epiphysis (SCFE) noted on the right side. The frog lateral view demonstrates that the hips reduce nicely

A CT scan was done to evaluate the possible SCFE on the right side. The CT scan confirmed bilateral hip subluxation with coxa valga deformity. These findings are likely chronic changes related to prior DDH. The right proximal femoral physis is irregular and enlarged, with apparent posterolateral displacement of the proximal epiphysis consistent with chronic SCFE. The lateral displacement is atypical; however, is likely the result of pre-existing coxa valga deformity and hip subluxation.

**Impression/Plan:** The patient is a 14-year-old female referred to the Orthopedic Clinic today for right medial knee pain. She has severe bilateral developmental dysplasia of the hip right greater than left which has likely been a chronic issue for many years. She has significant acetabular dysplasia, bilateral coxa valga and approximately 50% of uncoverage of the femoral heads. The CT scan confirms that there is also a chronic slipped capital femoral epiphysis (SCFE) that will require stabilization through a percutaneous pinning to prevent future slippage. She will also likely require both femoral and acetabular osteotomies at a future date to normalize the position of the hip joint given the severe underlying dysplasia.

The patient was taken to the OR the following week for pecutaneous pinning of the right hip.

**Post-Operative Radiographs:**

