SHORT COMMENTARY

Case of Preslip Capital Femoral Epiphysis: A Visual Vignette

Mai Adnan Banjar, MBBS, EDiR1,2*, Premilla Pillay, MD, FRCR1 and Salil Babla Singbal, MBBS, FRCR1

1Department of Diagnostic Imaging, National University Health System, Singapore
2Department of Medical Imaging, King Abdullah Medical Complex - Jeddah, Saudi Arabia

*Corresponding author: Mai Adnan Banjar, MBBS, EDiR, Department of Diagnostic Imaging, National University Health System, 5 Lower Kent Ridge Rd, 119074, Singapore, Tel: +65-67795555, Fax: +65-67795678

Keywords
Preslip capital femoral epiphysis, MRI, Pediatric hip

9-year-old presented with left thigh pain for several weeks. Physical assessment of gait noted external rotation of the left hip.

Anteroposterior and lateral radiographs of the hip demonstrated normal alignment. No fractures or dislocation. In particular, no femoral epiphysis slip was noted. The lateral view first interpreted as normal, although in hindsight there might have been subtle alignment irregularity (Figure 1).

MRI was performed which showed high T2/STIR signal intensity with slight widening of the physeal line of the left hip with no slippage or subluxation of the femoral epiphyses. Mild bone marrow edema of the adjacent epiphysis and metaphysis noted. Minimal joint effusion noted. The acetabulum and contralateral hip were normal (Figure 2).

Slipped capital femoral epiphysis (SCFE) is a disorder of the adolescent hip that occurs more in males, in which there is a Salter-Harris 1 fracture. The femoral metaphysis commonly displaces anteriorly, superiorly and laterally in relation to the epiphysis [1].

Early detection is important as complications such as avascular necrosis (AVN) of the femoral head, chondrolysis or early development of osteoarthritis may occur [2].

AP and frog leg lateral radiographs are used as first line imaging investigation. Multiple signs are

Figure 1: AP radiograph of the pelvis showing normal alignment of the left hip, kline’s line (dashed line) intersect part of the femoral epiphysis. Lateral view, there is subtle abnormal alignment of the left femur at the physis with no overt slippage.
Conflicts of Interest
The authors have no conflicts of interest to declare.

Author Disclosures
There are no competing interests; no funding, grants or equipment provided for the project from any source; and no financial benefits to the authors. This article has not been presented in any form previously.

Funding Information
None.

References

Figure 2: Coronal and axial STIR MRI shows high signal involving the physeal line on the left side with slight widening (arrow). No slippage of the femoral epiphysis. Minimal joint effusion. Mild surrounding bone marrow edema of the epiphysis and metaphysis. Normal right hip joint and proximal femur.