An active 14-year-old adolescent boy with left hip pain of 3 weeks in duration was referred for physical therapy consultation by his pediatrician, with a diagnosis of left quadriceps strain. His chief complaint was pain of insidious onset in his left groin and lateral hip that was exacerbated by standing and sitting. His body mass index was in the 91st percentile for his age (overweight), and he had recently started weight training for football. His past medical history was otherwise unremarkable.

On examination, his gait was found to be antalgic, with reduced stance time on his left leg. His passive left hip internal rotation range of motion and abduction range of motion elicited pain and were limited to 10° and 0°, respectively. Passive flexion range of motion and external rotation range of motion were pain free and comparable to his passive right hip range of motion. He exhibited significant weakness in left hip abduction and flexion.

Due to these findings, the physical therapist suspected slipped capital femoral epiphysis and immediately contacted the pediatrician to request radiographs. Slipped capital femoral epiphysis was confirmed by radiographs (FIGURES 1 and 2), and in situ pinning was performed by a pediatric orthopaedic surgeon the next day.

Slipped capital femoral epiphysis is most prevalent in children between 8 and 15 years of age, with many cases being undiagnosed. Slipped capital femoral epiphysis should be considered in this patient population in the presence of an antalgic gait, limited internal rotation, and poorly localized pain at the hip, groin, thigh, or knee. Effective screening and timely referral for imaging are crucial, given the strong correlation between time of diagnosis and successful treatment. Delayed diagnosis increases risk of complications, including avascular necrosis and chondrolysis.

References