

In a hip with SCFE, the capital femoral epiphysis remains in the acetabulum, but the femoral neck slips, deforming the femoral head and stretching blood vessels to the epiphysis. Most cases of SCFE are idiopathic, although it can be associated with endocrine disorders, such as hypothyroidism, low growth hormone levels, pituitary tumors, and renal osteodystrophy. The cause of idiopathic SCFE is multifactorial and includes obesity, physeal architecture and orientation, and pubertal hormone changes that affect physeal strength. Although obesity stresses the physeal plate, SCFE can also occur in children who are not obese.

Diagnostic Evaluation

SCFE is suspected when an adolescent or preadolescent displays clinical signs of a limp or complains of hip, groin, thigh, or knee pain. See [Box 29-8](#) for additional clinical manifestations. The diagnosis is confirmed by anteroposterior and frog-leg hip radiographs that reflect a change in position of the proximal femoral epiphysis. Radiographs show medial displacement of the epiphysis and uncovered upper portion of the femoral neck adjacent to the physis. There is a widened growth plate and irregular metaphysis.

Box 29-8

Clinical Manifestations of Slipped Capital Femoral Epiphysis

Very often obese (body mass index >95%)

Limp on affected side

Possible inability to bear weight because of severe pain

Pain in groin, thigh, or knee

- May be acute, chronic, or acute-on-chronic
- Continuous or intermittent