

A 12-year-old boy is brought to the physician because of right groin pain, knee pain, and limping. He has had these symptoms for the past 2 weeks. He is at the 90th percentile for weight and 60th percentile for height. He is afebrile, and his other vital signs are within normal limits. Examination shows that the range of motion of the right knee joint is within normal limits but hip movements are restricted and the right foot points outward. There is external rotation of the right thigh on flexion of the hip. After confirming the diagnosis, which of the following is the most appropriate management?

- ☐ A. Aspiration and microscopic examination of the hip joint synovial fluid
- ☐ B. Closed reduction of the hip joint
- ☐ C. Conservative management with rest and analgesics
- ☐ D. Immediate osteotomy of the femoral neck
- ☐ E. Surgical pinning of the femoral head

Submit

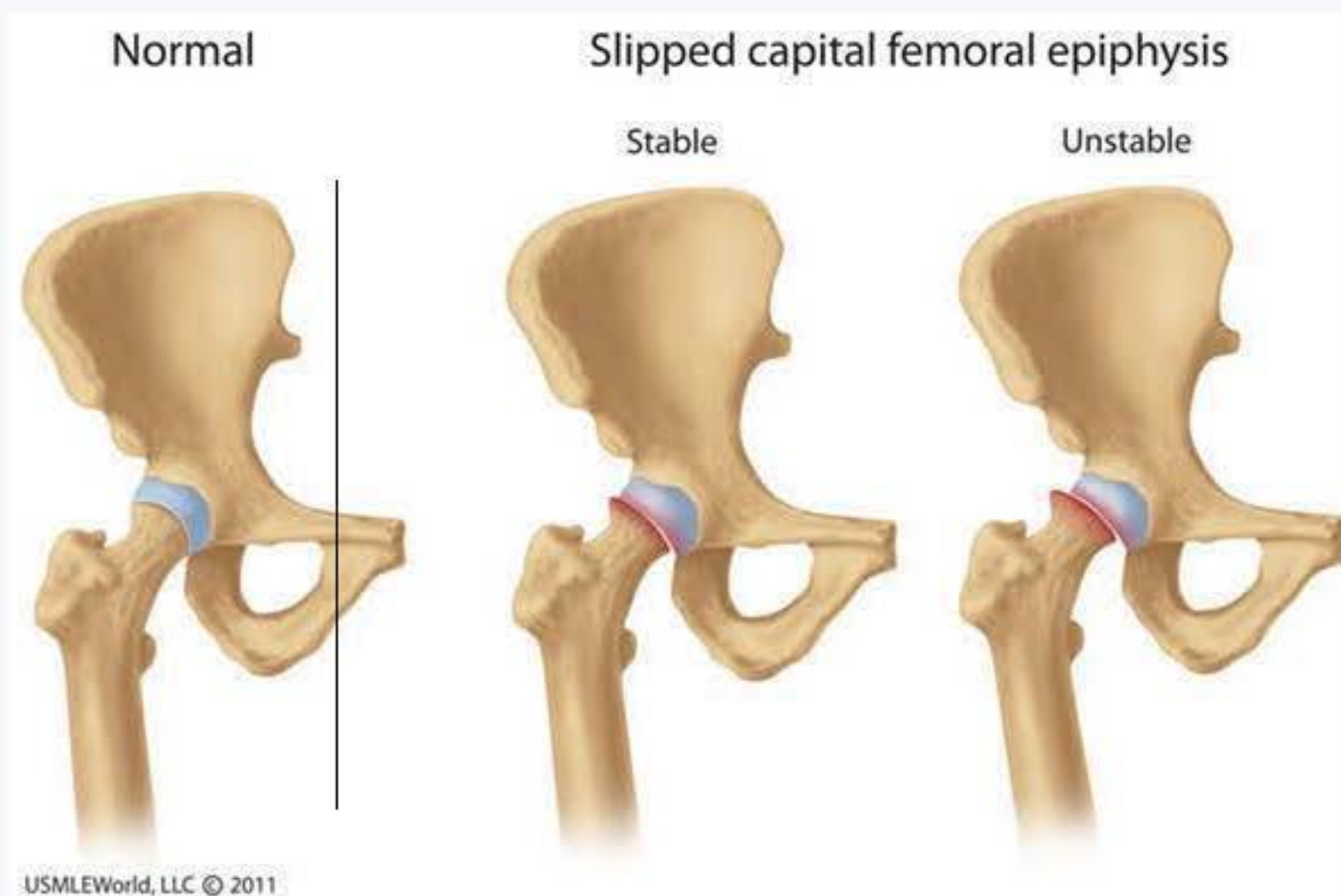


A 12-year-old boy is brought to the physician because of right groin pain, knee pain, and limping. He has had these symptoms for the past 2 weeks. He is at the 90th percentile for weight and 60th percentile for height. He is afebrile, and his other vital signs are within normal limits. Examination shows that the range of motion of the right knee joint is within normal limits but hip movements are restricted and the right foot points outward. There is external rotation of the right thigh on flexion of the hip. After confirming the diagnosis, which of the following is the most appropriate management?

- ☐ A. Aspiration and microscopic examination of the hip joint synovial fluid [3%]
- ☐ B. Closed reduction of the hip joint [12%]
- ☐ C. Conservative management with rest and analgesics [12%]
- ☐ D. Immediate osteotomy of the femoral neck [4%]
- ☒ E. **Surgical pinning of the femoral head** [69%]

[Proceed to Next Item](#)**Explanation:**

User Id: [REDACTED]





This patient has a slipped capital femoral epiphysis (SCFE), which is characterized by displacement of the femoral head on the femoral neck due to disruption of the proximal femoral growth plate. It is commonly seen in obese adolescent boys. The physis (i.e., physical junction between the femoral head and neck) weakens during early adolescence because it is rapidly expanding and primarily composed of cartilage, which does not possess the strength of bone. When exposed to excessive shear stress, which is magnified by obesity, the physis fractures and the femoral head slips posteriorly and medially relative to the femoral neck.

Patients typically present with hip or knee pain of insidious onset that causes limping. Acute presentations can occur. Diagnosis requires a high degree of clinical suspicion because knee pain (referred pain), not hip pain, is a common presenting complaint with this condition. Physical examination shows loss of abduction and internal rotation of the hip as well as external rotation of the thigh while the hip is being flexed. A frog-leg, lateral-view x-ray of the hip is the diagnostic imaging technique of choice.

Patients with SCFE should be promptly treated with surgical pinning of the slipped epiphysis where it lies (i.e., in situ) in order to lessen the risks of avascular necrosis of the femoral head and chondrolysis.

**(Choice A)** Joint aspiration and microscopic analysis are useful in the diagnosis of a septic joint or crystal-induced arthropathy.

**(Choice B)** Closed reduction is not advised due to the risk of further damage to the tenuous blood supply of the femoral head, which can lead to avascular necrosis.

**(Choice C)** Conservative management with rest and analgesics is indicated in the treatment of a tendinous or ligamentous strain.

**(Choice D)** Corrective osteotomies can cause avascular necrosis and might not correct the exact anatomic deformity. They are usually undertaken later in treatment if a patient experiences persistent pain and limited range of motion after initial repair and attempted rehabilitation.

#### Educational objective:

Slipped capital femoral epiphysis typically occurs in obese, early-adolescent boys. It should be promptly treated with surgical pinning of the slipped epiphysis where it lies (i.e., in situ) in order to lessen the risks of avascular necrosis of the femoral head and chondrolysis.

#### References:

1. [Slipped capital femoral epiphysis: diagnosis and management.](#)



displacement of the femoral head on the femoral neck due to disruption of the proximal femoral growth plate. It is commonly seen in obese adolescent boys. The physis (i.e., physical junction between the femoral head and neck) weakens during early adolescence because it is rapidly expanding and primarily composed of cartilage, which does not possess the strength of bone. When exposed to excessive shear stress, which is magnified by obesity, the physis fractures and the femoral head slips posteriorly and medially relative to the femoral neck.

Patients typically present with hip or knee pain of insidious onset that causes limping. Acute presentations can occur. Diagnosis requires a high degree of clinical suspicion because knee pain (referred pain), not hip pain, is a common presenting complaint with this condition. Physical examination shows loss of abduction and internal rotation of the hip as well as external rotation of the thigh while the hip is being flexed. A frog-leg, lateral-view x-ray of the hip is the diagnostic imaging technique of choice.

Patients with SCFE should be promptly treated with surgical pinning of the slipped epiphysis where it lies (i.e., in situ) in order to lessen the risks of avascular necrosis of the femoral head and chondrolysis.

**(Choice A)** Joint aspiration and microscopic analysis are useful in the diagnosis of a septic joint or crystal-induced arthropathy.

**(Choice B)** Closed reduction is not advised due to the risk of further damage to the tenuous blood supply of the femoral head, which can lead to avascular necrosis.

**(Choice C)** Conservative management with rest and analgesics is indicated in the treatment of a tendinous or ligamentous strain.

**(Choice D)** Corrective osteotomies can cause avascular necrosis and might not correct the exact anatomic deformity. They are usually undertaken later in treatment if a patient experiences persistent pain and limited range of motion after initial repair and attempted rehabilitation.

#### Educational objective:

Slipped capital femoral epiphysis typically occurs in obese, early-adolescent boys. It should be promptly treated with surgical pinning of the slipped epiphysis where it lies (i.e., in situ) in order to lessen the risks of avascular necrosis of the femoral head and chondrolysis.

#### References:

1. [Slipped capital femoral epiphysis: diagnosis and management.](#)