

Slipped Capital Femoral Epiphysis

What does it mean?

Slipped Capital Femoral Epiphysis, also known as “SCFE”, is a disorder of the adolescent hip. The head or ball of the top of the femur bone slips, typically in a backwards direction. The causes are not known, but it is known that there is a weakness of the growth plate of the femoral head. SCFE’s tend to occur shortly after puberty begins and during times of rapid growth.

What are symptoms?

The most common presentation of a SCFE is an adolescent with pain of the hip *AND/OR* knee for a period of several weeks to months. He/she may have an intermittent limp as well. The child may not be able to place weight on the affected lower extremity. Also, the affected leg may be turned outward compare to the unaffected leg.

In most situations, the slippage is a gradual, slow process, but may be sudden if it occurs with trauma.

Who is at risk?

The causes of slipped capital femoral epiphysis is not known. SCFEs occur more often in males. It is also known that many patients that suffer from SCFEs are overweight for their height. A SCFE may occur suddenly with a fall or trauma.

How is it Diagnosed?

The Healthcare Provider will take a thorough history and then perform a physical exam. Examination of the affected hip will show loss of motion. The limited motion of the hip will consist of loss of flexion and inability to rotate the hip in fully. With a SCFE, there is inflammation of the hip causing pain, especially with range of motion. The Physician will also evaluate how the patient walks.

Radiographs of the pelvis to include both hips is helpful in diagnosing a SCFE. The radiographs will show that the femoral head is slipping off and does not align with the rest of the femur bone.

What is the treatment for a SCFE?

Treatment for a slipped capital femoral epiphysis requires surgery. Surgery is needed to prevent the femoral head from slipping further. If the femoral head continues to slip without any intervention, limitation of the hip and premature osteoarthritis will occur.

Treatment usually begins quickly, within 24-48 hours of diagnosis. Treating the SCFE at the earliest stage will help with a better outcome of stabilization of the hip. The surgery typically consists of placing pins or screws through the femoral head to prevent further slippage.

The child will be admitted to hospital fairly quickly after the diagnosis is made. After the surgery is done, the patient will not weight bear for a period time and will need to use crutches or a wheelchair. The child will be followed closely for the next 18-24 months with Radiographs of the pelvis to evaluate if the

growth plate has fused. The patient will need to refrain from sports and physical activity for an extended period of time to help prevent complications.

What are the complications of a SCFE?

Avascular Necrosis of the femoral head , or AVN, is the most common complication of a SCFE. AVN is an alteration of blood flow to the femoral head caused by the slipping. Evidence of avascular necrosis on radiographs is not seen until 6 to 24 months after surgery.

Chondrolysis is another significant complication, though not as common as AVN. Chondrolysis is a loss of cartilage in the hip joint. This loss of cartilage may cause permanent loss of motion, stiffness, flexion contractures, and pain. The best treatment for chondrolysis is physical therapy and anti-inflammatory medications, such as NSAIDs.