

## SCFE (Slipped Capital Femoral Epiphysis)

Slipped Capital Femoral Epiphysis (SCFE) is a hip disorder that involves the epiphysis (eh-PIFF-i-siss). This is the growing portion or ball on the top part of the femur (thigh bone). SCFE happens when the ball slips from the neck of the femur, similar to ice cream sliding off a cone on a hot summer day. It can occur in one or both hips.

Your child is considered to have “stable” SCFE if he or she can walk, even if he needs crutches. A child has “unstable” SCFE if he cannot walk, even with crutches.

### Causes of SCFE

When growth spurts happen, the epiphysis is stimulated to make the bone grow and can be weakened by this activity (Picture 1). This is why SCFE's typically occur during fast growth years (ages 9-16). SCFE affects twice as many boys as girls. No one knows what causes SCFE. Be sure to tell your child's health care provider if anyone related to your child has had SCFE. Some of the conditions that go along with SCFE are:

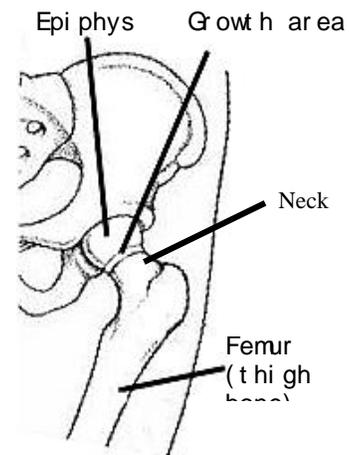
- Being overweight or obese
- Sports-related injuries or other trauma
- Thyroid problems or other metabolic or endocrine disorder.

### Signs of SCFE

Symptoms of stable SCFE can build up slowly. A child with SCFE may have one or more of these signs:

- Pain in the hip which may improve with rest
- A limp with walk or run
- Pain in the hip, groin, thigh or knee
- Trouble lifting the affected leg to do such things as climb stairs or get into a car or truck
- The leg or foot turned outward when the child walks

A child with unstable SCFE usually has a sudden onset of severe pain when he cannot move the affected leg.



**Picture 1** The epiphysis is the growing portion of the top part of the femur.

## Diagnosis

X-rays of the hip, thigh and pelvis area are taken to look for SCFE. X-rays of both hips are taken to compare. Sometimes the slip can be so small it may not be seen on plain X-rays. Grading the severity of the slip is based on the X-rays showing how far the ball has fallen off the cone (Picture 2). If your child needs any other tests, your health care provider will let you know.

### PLACE HOLDER For Picture 2

**Picture 2** Grade of the severity of SCFE by AP X-ray and Lateral X-ray.

## Treatment

Regardless of cause, pain or stability, almost all patients need surgery. The procedure is called in-situ fixation. It involves placing a single screw into the top of the femur. This is done to fix the bone in place and stop the slip. Most of the time, this surgery has a very good outcome. For severe SCFE, more than one screw may be used, or an osteotomy (os-tee-AHT-o-mee) may be done. If either of these treatments is needed, your child's health care provider will explain them to you.

## Why Treatment Is Important

It is important to diagnose and treat SCFE when symptoms are first noticed to help prevent long-term problems.

- Stable SCFE treatment is aimed at keeping the problem from getting worse. The worse the deformity, the higher the risk is for arthritis.
- Unstable SCFE can lead to reduced blood flow to the bone. This is called avascular necrosis (AVN). AVN causes the bone to die from the inside out, which can lead to deformity of the bone and early arthritis.

Sometimes, despite treatment, a child with SCFE can develop chondrolysis (Kon-DROLL-i-siss), which means damage to the cartilage. Cartilage is the soft connective tissue in the joint. When the cartilage is damaged, it can lead to a stiff joint and long-term pain. These problems are more common in unstable SCFE. Both of these problems are more common in unstable SCFE and both can result in arthritis.

## After Surgery

### Care of the Incision

- If staples were used, your child's incision will be covered by a dry gauze dressing for the first few days after surgery. Your child's nurse will tell you when to remove the gauze. The staples will be removed at your child's follow-up appointment.

### Care of the Incision, continued

- If closed with small strips of white tape (Steri-Strips™), the dry gauze dressing over your child's incision is usually removed before your child goes home. A clear dressing (Opsite) is placed over the Steri-Strips™. This may have been done in the Operating Room. This clear dressing stays on until your health care provider tells you to remove it, or until your child's follow-up appointment.
- Your child may shower if approved by his doctor. No tub baths are allowed until the doctor says it is okay.

### Activity

After the surgery, your child will need crutches or a walker for about 4 to 6 weeks. A physical therapist will teach your child how to use crutches before he goes home. If major surgery was needed, a wheelchair may be prescribed until your child can walk.

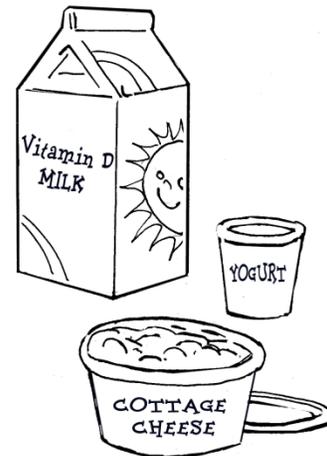
### Nutrition

Your child should be able to eat his regular diet after going home from the hospital. Good nutrition is an important part of the healing process. Be sure to include foods like milk and yogurt that are high in calcium and protein (Picture 3).

### Medications

Before you take your child home from the hospital, his nurse will talk with you about the type of medicines your child should take for pain.

- If your child needs a prescription for pain medication, we will give it to you with your child's discharge papers.
- All narcotic pain medications cause constipation. While on pain medicine, your child should drink lots of water and fluids and eat foods high in fiber. You may switch to Tylenol® (not Motrin® or ibuprofen) when the narcotics are no longer needed. Your child will also have instructions to use a stool softener or laxative (such as Miralax®). You can purchase these over the counter. Follow dosing directions in the package.



**Picture 3** Include foods in your child's diet that are high in protein and calcium.

## **When to Call the Doctor**

Call your child's doctor if any of the following occurs:

- Incision turns red
- Blood or fluid around the incision, except for small amounts on the first dressing
- Incision becomes more tender or swollen
- Incision begins to separate or come apart
- Your child runs a fever over 101° F
- Your child cannot have a bowel movement
- Any other questions or concerns

## **Follow-Up Appointments**

The doctor would like to see your child in two weeks. Please call the Orthopedic Clinic at (614) 722-5175 to schedule a follow-up appointment.