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Slipped capital Femoral Epiphysis

Slipped capital femoral epiphysis (SCFE) is a disorder of the **adolescent hip**. It develops during periods of accelerated growth, shortly after the onset of puberty. More common in Pacific Islander and Maori Population.

The ball at the upper end of the femur (thigh bone) slips off in a backward direction. This is due to weakness of the growth plate.

Symptomatic SCFE, treated early and well, allows for good long-term hip function.

Risk Factors / Prevention

- 1. It occurs two to three times more often in males than females.
- 2. A large number of patients are overweight for their height.
- 3. May be associated with minor trauma.

In most cases, slipping of the epiphysis is a slow and gradual process.

How does your doctor recognise?

Careful history Physical examination: Limitation of movement in certain range Observation of the gait/walking pattern The affected leg is usually turned outward in comparison to the normal leg. The affected leg may also appear to be shorter.

Hip X-rays. The X-rays help confirm the diagnosis by demonstrating that the upper end of the thigh bone does not line up with the portion called the femoral neck.





What Options do we have?

The goal of treatment is to prevent any additional slipping of the femoral head until the growth plate closes

If the head is allowed to slip further, hip motion could be limited. Premature osteoarthritis could develop.

Treatment should be immediate. In most cases, treatment begins within 24-48 hours.

Early diagnosis of SCFE provides the best chance to achieve the treatment goal of stabilizing the hip.

Treatment Options: Surgical

Fixing the femoral head with pins or screws has been the treatment of choice for decades. Depending on the severity of your child's condition, the surgeon will recommend one of three surgical options:

1. Placing a single screw into the thighbone and femoral epiphysis.

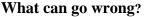
2. Reducing the displacement and placing one or two screws into the femoral head.

3.Removing the abnormal growth plate and inserting screws to aid in preventing any further displacement.

Common and safer operation is?

Accept the deformity and fix the head with a single screw to prevent fusion of the growth plate and by avoiding further slip.





There are several potential complications associated with a slipped capital femoral epiphysis.

1 The most common are **avascular necrosis** (collapse of the head) of the femoral head.

There is no way to identify children at risk for AVN or to prevent this complication

Evidence of AVN may not be seen on X-rays for 6 to 24 months



2. **Chondrolysis** or loss of articular cartilage of the hip joint is a devastating complication of SCFE. It may cause the hip to stiffen with a permanent loss of motion, flexion contracture and pain. The loss of motion may be a result of an inflammation in the hip joint.

This is still not fully understood by surgeons.

Aggressive physical therapy and anti-inflammatory medications may be prescribed.

Post-operative care.

Most likely, your child will be admitted to the hospital by a pediatric orthopaedist. Surgery is usually performed within 24 to 48 hours.

After surgery, your child will be on crutches for weeks to months.

A physical therapist will demonstrate how to use crutches.

The doctor will give you specific instruction about your child's weight-bearing status and activity restrictions. Follow the instructions closely.

It is important that your child be followed closely for 18 to 24 months after surgery. After the immediate postoperative period, X-rays every 3 to 4 months are needed to ensure that the abnormal growth plate has fused.

Your child may be restricted from certain sports and activities during this time of recuperation. This helps to minimize the chance of further complications.

There is 15% chances of involvement of the opposite hip. It is advisable to consult your doctor early if there is any pain in the opposite hip.