Slipped Epiphysis

What is a Slipped Epiphysis?

Slipped Upper Femoral Epiphysis (SUFE or SCFE) is a hip disorder which develops in childhood or early adolescence. Due to weakening of the growth plate at the top of the thigh bone, the femoral head (ball of the hip joint) "slips" from its normal position on the femur (thigh bone). As a result, there is a change in shape of the hip joint and in advanced cases the leg will shorten and foot point outwards.

Why does SUFE develop?

SUFE usually occurs in later childhood due to a transient weakening of the growth plate under the influence of hormones. In many situations, no underlying disorder to cause SUFE is identified. A significant proportion (approximately 20%) of children who develop SUFE will have the opposite hip also develop the condition within 6 months. Children who develop SUFE at a very young age or who have an underlying disorder predisposing to the condition are much more likely to have both hips effected.

What is the recommended initial treatment?

The principle of initial treatment is to prevent continued progression of the deformity. This involves an operation where a screw is placed across the weakened growth plate to stabilise the bone and prevent further slipping. This is best performed as soon as the diagnosis of SUFE is made.

What problems occur as an adult?

Due to the change in shape of the hip joint, the joint surfaces are predisposed to accumulate damage, resulting in early osteoarthritis. In addition, the hip joint may become stiff with reduced bending and twisting motions. SUFE is a leading cause of femoro-acetabular impingement (FAI) which may predispose to early development of osteoarthritis.

My hip has been good for many years, why is it painful now?

In adults, the hip does not become painful until enough damage has accumulated in the joint. The first symptoms are often mild groin discomfort. Once the joint becomes painful, gradual deterioration of the hip joint can reliably be predicted, however reducing your activity level may reduce the symptoms.

What treatments are available for adults with previous SUFE?

This depends on the presenting symptoms, shape of the hip joint and how much damage has accumulated within the joint surfaces. Many people can improve their symptoms without surgery, however as the deformity within the hip is
permanent, once the joint has become painful continued slow progression can be predicted. In people with early cartilage damage, joint preserving procedures such as hip arthroscopy (key hole surgery) can reliably improve symptoms. In some instances hip arthroscopy can also be used to correct a portion of the underlying hip joint deformity (procedure known as an arthroscopic osteoplasty, a bone re-shaping procedure). In younger adults with more significant deformity of the hip joint due to previous SUFE, an Open Debridement may be recommended. Ultimately, hip joints with end stage arthritis due to SUFE are best treated with an artificial joint replacement. In these situations, both hip replacement and hip resurfacing are effective solutions.

This information handout has been written by A/Prof Patrick Weinrauch for the purposes of patient education. The details provided are of general nature only and do not substitute for professional recommendations based an individual clinical assessment. 03/14.