

Arthroscopy of the Hip

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Introduction to Hip Arthroscopy

Hip arthroscopy is the term used for keyhole surgery of the hip. It is a surgical procedure that has been around over the past twenty years, but has only recently gained popularity due to advancement in surgical techniques and a wider understanding of hip pathology. Whereas in the past options were limited for patients with hip problems and in some cases, hip replacement was inevitable, it is now recognised that hip arthroscopy can potentially postpone the need for hip replacement.

Hip arthroscopy is a minimally-invasive procedure used to evaluate and treat certain disorders of the hip. It is the alternative to open surgery where longer recovery periods are expected with an increased risk of infection and morbidity in older patients.

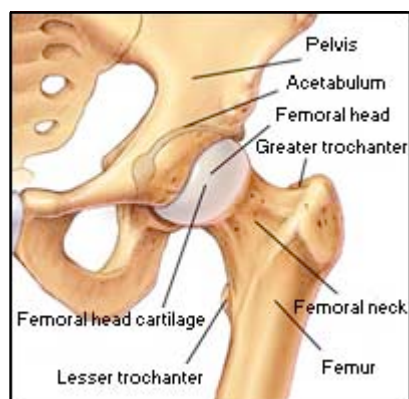
Hip arthroscopy at the Yorkshire Clinic is performed by Ernest Schilders, Consultant Orthopaedic Surgeon, who has a special interest in groin and sports injuries, and arthroscopic surgery of the hip. Ernest Schilders trained and qualified in Antwerp, Belgium, and has gained an international reputation through his treatment of high-profile, professional athletes, his research activities and publishing of articles. He is a renowned guest-speaker at international sports and medical conferences.

Hip Arthroscopy - What does the procedure involve?

At the Yorkshire Clinic hip arthroscopy is currently performed on an in-patient basis under general anaesthetic. Small incisions are made in the patient's hip area and a camera lens is inserted through these holes so that the surgeon may visualise the inside of the patient's hip joint. The visible area of the hip consists of two compartments: a central and a peripheral compartment. The central compartment is the area of the hip that contains cartilage and is the space between the ball and socket. Cartilage lesions and labral tears in this compartment can be visualised and treated. The peripheral compartment is the area of the femoral neck and the hip capsule. Bumps or so-called CAM deformities of the femoral neck can be removed. Labral tears can be treated with a resection of the tear or repair depending on the type of tear.

Anatomy of the Hip Joint

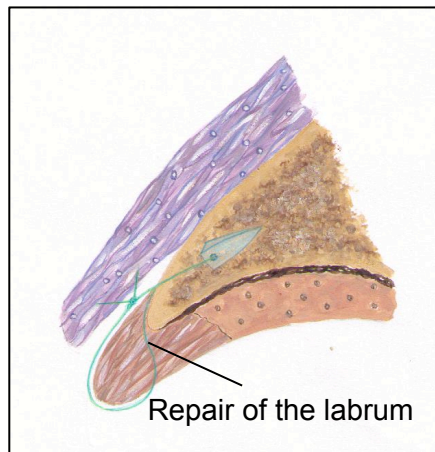
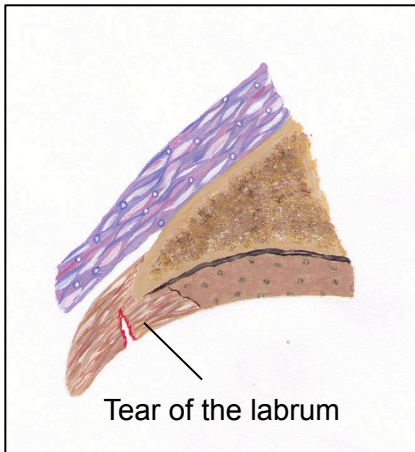
The hip is a ball (*femoral head*) and socket (*acetabulum*) joint. The socket consists of a bony part (*acetabulum*) which is surrounded by a thick soft tissue rim, which is known as the labrum. The acetabular labrum is horseshoe-shaped and the ends are connected by the transverse ligament. The hip joint is surrounded by the capsule, a thick soft tissue mantle.



Common Disorders of the Hip

Labral Tears

Labral tears can occur acutely as a result of trauma or over a longer period of time due to naturally-occurring wear and tear (*degenerative-type tears*). Labral tears can be classed as post-traumatic, degenerative, or as a result of femoro-acetabular impingement or instability of the hip joint. Labral tears can be debrided or repaired depending on the type of tear.



Femoro-acetabular Impingement (FAI)

Femoro-acetabular impingement of the hip is a relatively newly-recognised condition and occurs from a combination of abnormalities of the femoral head/neck and/or the acetabulum.

The anatomical deformity seen in a hip with FAI can be a bump (*known as a CAM deformity*) on the femoral neck, which impinges on the acetabulum when the hip is flexed and internally rotated. Acetabular deformity can also occur causing over-coverage of the femoral head.

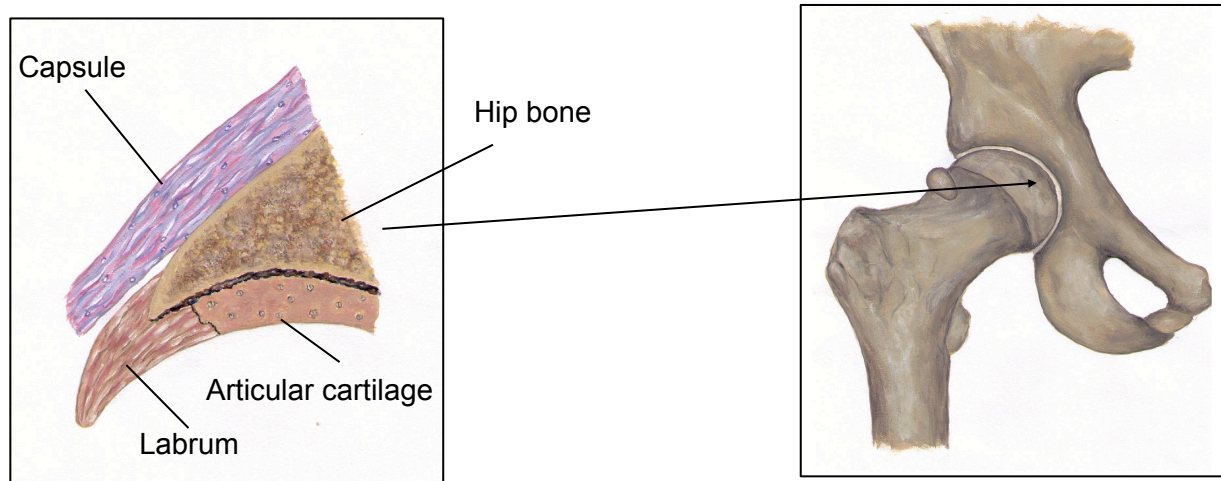
Impingement can then be caused by jamming of an abnormally-shaped femoral head into the acetabulum ring in forceful flexion and internal rotation or as a result of contact between the acetabular rim and femoral head/neck junction. As a result of this delamination (separation) of the articular cartilage and a labral tear can occur. There is growing scientific evidence that FAI is a precursor of osteoarthritis. Early detection and treatment of this condition can potentially delay the need for hip replacement.

Symptoms of Femoro-acetabular impingement

- Groin pain or pain over the anterior side of the thigh
- Difficulty putting on socks and shoes
- Pain with prolonged sitting or driving.
- A tendency to walk with the foot in an externally rotated (outward) position.
- Painful clicking in the hip
- Adductor symptoms (pain on the inside of the thigh)
- A gradually reduced range of motion

Articular cartilage lesions

Repetitive impact, trauma or arthritis of the hip joint causes a gradual loss of cartilage which in some cases can lead to debilitating pain and loss of sleep. In patients with sufficient remaining cartilage micro-fracture can be performed, which involves making small holes through the surface layer of bone (*subchondral bone*) to increase blood flow from deeper, vascularised bone and help stimulate cartilage growth.



Cross section detail of the acetabulum

Treatment Programme

During the first consultation with the consultant your medical history will be taken to gather information about any current complaints, the duration of your symptoms, any pain and limitations, injuries and past treatment with medication or surgery.

You will then undergo a physical examination of your hip to assess any pain or tenderness, range of motion, strength or weakness, instability or signs of impingement.

Finally, diagnostic investigations can be performed. A pelvic x-ray will be taken to evaluate any bony abnormalities, usually followed by an MRI scan (Magnetic Resonance Imaging) to give detailed views of the soft tissue structures of the hip.

The results of the evaluation and best treatment options will then be discussed with you.

If you require surgery

If surgery is agreed as the best option for you, your consultant will discuss the pros and cons of the surgery with you and answer any questions you may have.

Hip arthroscopy currently involves an overnight stay in hospital.

Your consultant will discuss planning for the period before and after your surgery with you. Planning for surgery is very important as you will be taking time out of your normal daily or working routine and these implications can be discussed with the consultant who will advise you of anticipated recovery periods and post-operative rehabilitation.

Preparing for your surgery

In some instances patients may be required to undergo a pre-operative assessment. Your general health is very important when considering surgery and you may be screened for blood pressure, heart conditions or diabetes if you have a known history of any of these.

It is therefore important to inform your consultant at the planning stage of your surgery if you do have any concerns regarding your health or are already taking any medication.

Once your surgery has been arranged you will be given admission instructions, which will advise you of the arrangements prior to coming into hospital such as starving instructions and what to bring with you when you attend hospital.

Possible complications following surgery

There are always some risks with any surgery, even arthroscopic procedures. These include possible infections and damage to surrounding nerves and blood vessels. However, modern surgical techniques and close monitoring have significantly minimised the occurrence of these problems.

After surgery, some pain, tenderness, and stiffness are to be expected; however, you should be alert for certain signs and symptoms that may suggest the development of complications.

When you are discharged from hospital you will be advised on your post-operative care regarding suture removal and wound dressing.

Possible complications following surgery:

- Fever after the second day following surgery
- Increasing pain or swelling
- Redness, warmth or tenderness which may suggest a wound infection
- Unusual bleeding (some surgical wound drainage is normal and may be required)
- Numbness or tingling in the lower limb extremities

Post-Operative rehabilitation & prevention of future problems

Post-operative rehabilitation is a key factor in achieving a good recovery and preventing any future problems. Prior to being discharged from hospital physiotherapy will be discussed and/or arranged with you if appropriate. You will also be advised on a home exercise programme consisting of stretching and strengthening exercises, which are vital following hip surgery. Results have shown that patients who comply with instructions and exercises prescribed by their orthopaedic surgeon and physiotherapist will have the best medical outcome following surgery.

Frequently asked questions about Hip Arthroscopy

How long would I need to be off work following surgery?

Office or sedentary work can be resumed one to two weeks following surgery. Heavy manual work should be between eight and twelve weeks.

How long before I am able to drive?

One to two weeks following surgery, as long as this does not cause any pain or discomfort and you are not taking strong medication.

Are there any restrictions following surgery?

Following hip arthroscopy patients are supplied with crutches and are usually required to partial weight-bear for three to six weeks whilst the site of surgery heals and depending if any cartilage treatment or labral repair has been performed.

What are the known complications of hip arthroscopy?

Although hip arthroscopy is recognised as a fairly safe procedure complications can occur as follows:

- Sciatic nerve injuries can occur due to prolonged traction or incorrect posterior portal placement.
- Pressure sores and pudendal nerve problems can occur due to direct pressure in the perineal area.
- Operative complications - Portals (incisions) to access the joint are made in a safe zone but there is a small risk of inadvertent damage to the lateral femoral cutaneous nerve. There is also a risk that damage to the labral and articular cartilage when entering the joint can occur.
- Post-operative complications - Infection and DVT are complications not specific to hip arthroscopy, although avascular necrosis of the femoral head, femoral neck fracture and heterotopic ossification can potentially occur.

How long should I wait before exercising?

Certain exercises are a mandatory part of rehabilitation and can be performed as soon as one-week post-op. You will be provided with a rehabilitation programme when you are discharged from hospital. Most patients arrange formal physiotherapy. Rehabilitation can be expected to take up to three months depending on the level of treatment performed.

What if I decide to postpone surgery for a while or don't wish to undergo surgery?

Non-surgical (conservative) treatment, such as physiotherapy and intra-articular steroidal injections can be applied in some cases depending on the level of the patient's symptoms and the type of pathology. However, in cases where severe pain and debilitation are experienced and it is deemed that the pathology will not respond to non-surgical measures, surgery will be advised as the best and sometimes only option.

Will surgery prevent any further cartilage damage and what are the chances of reoccurrence of the same problem?

Hip arthroscopy is performed as a pain-relieving measure, to treat bony deformities of the femoral neck (ball joint) and to repair soft tissue tears and cartilage damage. There is no guarantee that further cartilage damage will not occur over time or that a recurrent tear will not occur. Recurrent tears are, however, unusual, and hip arthroscopy is now recognised as a procedure that can potentially delay the need for hip replacement surgery.

What is the possibility that my hip symptoms will be worse following surgery?

Although this can never be ruled out, the reported incidence of this is very small and the majority of patients report excellent results with a full resolution in pre-op symptoms. When osteoarthritis is present within the joint there is a 30-50% chance that symptoms will not get better or that they may worsen. When a large number of loose bodies are present there is also a 10% chance that the symptoms may not be improved with arthroscopic surgery.

What can I do to help my symptoms whilst I am awaiting surgery?

These options can be discussed with your consultant. Rest, anti-inflammatories, steroidal injections and ice are all options.

Please note that this information leaflet is intended for guidance-use only.

Further benefits and risks of this procedure will be discussed by your surgeon at the consultation and/or consent phase of treatment.