#### SURGERY - HIP ARTHROSCOPY

Because the hip joint is a ball and socket joint the joint surfaces are closer together than in the knee and so a space between the ball and the socket has to be created by placing some gentle traction on the leg to pull the ball out of the socket.

Hip arthroscopy is performed under general anaesthetic (asleep) to ensure that the muscles around the hip are fully relaxed. Two to four small incisions (portals, usually 5 - 10 mm each) are used to introduce the camera and the instruments needed to perform the procedures required. These incisions result in small scars which are often unnoticeable.

The procedure takes between 30 and 90 minutes depending on what interventions are needed in the hip.

#### AFTER SURGERY

Most patients have only mild discomfort when they wake up. There will be a dressing over the skin incisions. Often the irrigation fluid used during the procedure can leak out of the portals into the dressings after the operation and it is usual for the fluid to have a pink or red tinge. Small amounts of fluid may continue to drain for 24-36 hours.

Most patients go home the morning after the day of surgery. Patients are asked to take anti-inflammatory tablets for four weeks after surgery unless there is a reason not to.

There is usually no weight bearing restriction after the operation and you can put as much weight through the hip as is comfortable. Most patients use crutches for comfort for a few days. It is advisable not to over-exert too early after the procedure as this cause more discomfort and swelling. You should gradually reintroduce and build up activities as your symptoms allow.

You can drive a car as soon as you can do so without discomfort - usually within a few days. If your job is seated at a desk you can usually go back to work after two weeks. People with more physical jobs may need 6 weeks off before returning.

A slow return to sport can start often after 4-6 weeks. Some patients will still have some mild discomfort 3-4 months after the procedure. The degree of joint damage seen at arthroscopy is the most useful predictor of this.

#### RISKS AND COMPLICATIONS

Hip arthroscopy is a low risk procedure. Serious complications are rare and almost all resolve on their own with time.

General complications can occur after any operation and can include: Allergic reactions to medications, blood loss requiring transfusion, Heart attacks, strokes, kidney failure, pneumonia, urine infections.

Blood clots can occur after any type of surgery, usually in the calf veins. The risk of this is higher after bigger operations like joint replacement but it may occur with the most minor of procedures, or even without any surgery at all. Occasionally they can cause serious problems and, very rarely, even be life threatening. If you get calf pain or shortness of breath you should seek medical attention.

Damage to nerve or blood vessels: The most common of these in hip arthroscopy is temporary discomfort, bruising or numbness around the groin. This is related to the traction needed during the procedure and occurs in 2-8% of cases. Often it recovers within a few days but sometimes it can take longer to resolve.

Heterotopic ossification (formation of abnormal bone within the muscles around the hip) is a rare complication and a course of anti-inflammatory tablets helps to prevent this.

Other complications and risks include, failure to improve symptoms in the hip or recurrence of symptoms.

Infections can occur in the skin at the portal sites. Serious complications such as infection in the joint, bone fracture or permanent nerve injury are very

# **ARTHROSCOPY**

## INFORMATION FOR PATIFNTS







Arthroscopy is a surgical procedure in which an arthroscope is inserted into a joint. Arthroscopy is a term that comes from two Greek words, arthro-, meaning joint, and -skopein, meaning to examine.

Hip Arthroscopy, also referred to as keyhole surgery or minimally invasive surgery, is performed through very small incisions to evaluate and treat a variety of hip conditions.

This brochure is provided to give patients a better understanding as to the nature, risks and benefits of hip arthroscopy. It is important that you read it fully and ask questions if there is anything you do not understand.

### A/Prof. Andrew Bucknill BSc MB BS MSc (dist), FRCS (Tr & Orth), FRACS www.andrewbucknill.com.au

#### NORMAL HIP ANATOMY

The thigh bone (femur) and the pelvis, join to form the hip joint. The hip joint is a "ball and socket" joint. The "ball" is the bead of the femur, and the



"socket" is the cup shaped acetabulum (on the pelvis).

#### **PELVIS**

The pelvis is a large, flattened, irregularly shaped bone, constricted in the centre and expanded above and below. It has three parts: the ilium, ischium, and pubis:







The socket (acetabulum) is on the outer surface of the pelvis.

#### **FEMUR**

The femur is the longest bone in the skeleton. The upper part is composed of the Femoral head, Femoral neck, and Greater and Lesser trochanters.



#### CARTILAGE

The joint surface is covered by smooth white articular cartilage.

Normal cartilage cushions the joint and allows the joint to move with very little friction or wear. Cartilage is not seen on X-ray, so we see a "joint space" between the femoral head and acetabular socket.

The Labrum (latin for lip) is a a piece of cartilage attached along the edge of the socket like a lip or a gasket.

#### **DIAGNOSIS OF HIP CONDITIONS**

Hip conditions should be evaluated by an Orthopaedic surgeon for proper diagnosis and treatment. The following methods are used:

- Medical History
- Physical Examination
- Diagnostic Studies, which may include:

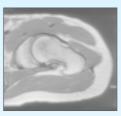
#### X-rays

A form of electromagnetic radiation that is used to take pictures of bones.



#### **MRI**

Magnetic Resonance Imaging (MRI). Magnetic pulses are used to create a computer image of soft tissue such as cartilage, muscle, tendon and ligaments.



#### CT Scan

For a Computed Tomography (CT) scan, an X-ray beam is used with a powerful computer to gain very detailed information, particularly about the bones. It an be used for detailed 3D

#### Non-Operative Treatment Options

• Rest & Activity Limitations

modelling and analysis.

- Anti-inflammatory Medications
- Painkillers
- Physical Therapy
- Corticosteroid Injection into the hip joint

# Hip Arthroscopy

#### INDICATIONS INCLUDE:

- Evaluation and diagnosis: Hip arthroscopy can be a very useful tool to help with this.
- Debridement of loose bodies: Bone chips or torn cartilage debris causing pain, catching and stiffness can be removed.
- Impingement can also be addressed at hip arthroscopy. Also known as FAI, this is when the femoral neck and the edge of the socket repeatedly impact each other, pinching and damaging the labrum. It may be caused by unusual bone shapes or particular activities. Untreated and with time, the damage may progress to osteoarthritis of the whole hip.
- Labral tears can be stabilised and sometimes repaired.
- Removal of adhesions, which are areas of scar tissue that can limit movement and cause pain.
- Partial Synovectomy: In patients with inflammatory arthritis, removal of portions of the inflamed synovium (joint lining) can help to decrease pain.

#### • THE PROCEDURE

Hip arthroscopy is key-hole surgery of the hip joint using a fibre-optic camera only 4.5mm in diameter. The camera is attached to a video monitor.

Hip arthroscopy allows the surgeon to safely see inside the joint and perform procedures to correct problems found.

instead of a bigger operation to get the same effect.

Compared to open techniques, incisions are smaller and recovery periods are shorter. Although not all patients can be treated with arthroscopy, in many cases arthroscopy can be used