

## **KNEE ARTHROSCOPY**

### Patient Information

#### **What is knee arthroscopy?**

Knee arthroscopy is minimally-invasive 'keyhole' surgery that is used to diagnose and treat a wide range of knee problems.

#### **What conditions are treated with a knee arthroscopy?**

Conditions that are commonly treated with arthroscopic surgery include meniscal tears, articular cartilage injuries, loose bodies and knee stiffness due to arthrofibrosis (fibrous bands that can restrict movement of the joint). Arthroscopy is also used to perform cruciate ligament surgery and assist treatment of unstable knee caps. It can also aid diagnosis where it may not be certain from clinical assessment including imaging such as a MRI scan, for example, by taking synovial biopsies.

#### **What are the benefits of knee arthroscopy surgery?**

The procedure generally aims to confirm the diagnosis and, for the majority of patients, the treatment is carried out at the same time. The benefit of 'keyhole' arthroscopic surgery is that it is less invasive and therefore the recovery is quicker and the pain is less than an 'open' operation.

#### **Are there alternatives to surgery?**

Usually, a diagnosis of your problem has been made by clinical assessment sometimes supported by x-rays or a MRI scan. It is less common that an arthroscopy is performed as a diagnostic procedure although this is sometimes indicated.

The treatment options including non-operative management specific to the diagnosis will be discussed with you and may include, for example, anti-inflammatories, physiotherapy, activity modification etc. The pros and cons of both operative and non-operative options will be discussed with you.

#### **What happens before surgery?**

You will already have had a conversation in the outpatient clinic regarding your diagnosis and treatment options. The surgical procedure, risks and potential

complications, likely recovery time including time off work and rehabilitation will all have been discussed with you. If you feel that you have further questions about your treatment, then we would be very happy to answer them prior to your surgery. Ultimately, it is your decision to go ahead with the operation or not and it is important that you feel fully informed.

You will usually have a nurse-led pre-operative assessment prior to your day of surgery to ensure that we are fully informed of any relevant medical history, medications and allergies. Sometimes, certain medications may need to be discontinued or modified in the peri-operative period e.g. blood thinning medication. If you have significant medical co-morbidities, your general health may sometimes need to be optimised prior to undergoing surgery.

### **What happens on the day of surgery?**

You will usually be admitted to hospital at least 1-2 hours before the scheduled operation time. This will allow the nursing staff time to perform any pre-operative checks and prepare you for surgery.

The anaesthetist will meet you prior to your operation and will confirm any relevant medical history, medications that you take and any allergies. They will discuss the type of anaesthetic and risks of anaesthesia.

Mr Johal will meet you once again before your operation and confirm that you have no further questions before your surgery. If not already done prior to your admission, you will be asked to sign an informed consent form as a record that you understand the procedure being carried out and the potential risks and complications. The side being operated on will be confirmed and marked.

### **What happens during the actual knee arthroscopy procedure?**

Surgery is usually performed under general anaesthesia, although other anaesthetic techniques may be used. Your knee is examined under the anaesthetic. A high definition fibre-optic camera and small instruments are passed into your knee through two or three small (1cm) incisions. The structures within your knee are assessed including the condition of the joint surfaces (articular cartilage), the meniscal cartilages, cruciate ligaments and the synovium (lining of the knee). The planned treatment, such as trimming or repairing a meniscal tear, is carried out at the same time.

The small incisions are closed with stitches or adhesive strips. Local anaesthetic is infiltrated into the incisions and into the knee joint to help with post-operative pain relief. Small dressings and a bandage are applied at the end of the procedure.

## What are the potential risks and complications of knee arthroscopy surgery?

Knee arthroscopy is generally a very low risk procedure and the absolute risk of complications associated with arthroscopy has been reported at about 1%. The whole surgical team will endeavour to make your operation as safe as possible. However, complications can happen.

There will be some specific risks or potential complications for the precise treatment that is planned at knee arthroscopy and these will be discussed with you.

Potential risks and complications of a knee arthroscopy procedure include, but are not limited to:

- **Anaesthesia** – Your anaesthetist will discuss the risks of anaesthesia with you prior to your operation.
- **Medical complications** - Any operation carries small risks of medical complications and this is very much dependent on your general health and lifestyle prior to surgery.
- **Scars** – Generally, the small incisions used for knee arthroscopy heal well but they can be sensitive or unsightly, especially if you are prone to keloid scar formation.
- **Infection** – The risk of surgical wound infection is low. You should aim to keep your wounds covered until the planned wound check. If you develop a high temperature, notice any pus in your wound or if your wound becomes red, sore or painful you should seek medical advice. If you develop deep infection in your knee joint (risk approximately 1 in 1000), you may require another operation to wash out the knee and a long course of antibiotics. Deep infection can cause permanent damage to the knee joint.
- **Nerve injury** – Damage to nerves around the knee (risk approximately 1 in 1,500) may lead to numbness or weakness in the leg or foot. This will usually improve but is sometimes permanent.
- **Blood vessel injury**
- **Deep vein thrombosis (DVT)** – The risk of blood clot in your leg is in the region of approximately 1 in 500-750. You will be risk assessed for blood clots and if you have risk factors such as previous DVT or PE, high BMI, family history or have a long total anaesthesia time (more than 90 minutes) you may be prescribed temporary cover to reduce the risk of blood clots (usually a heparin injection). You may also be provided with compression stockings. A DVT can cause pain, swelling and redness of the leg which can increase in

size significantly. You should seek medical advice if you are concerned post-operatively.

- **Pulmonary embolism (PE)** – The risk of a blood clot in your lung is approximately in the region of 1 in 1,500. You will be risk assessed as above for DVT and receive prophylactic treatment if you are deemed high risk. If you develop shortness of breath, chest pain or cough up blood after your surgery you should seek immediate medical advice or go to your nearest A&E department.
- **Swelling** – Some swelling of the knee is common and is expected after surgery and usually improves in a few weeks. Once your bandage is removed you should use regular ice packs or a cryotherapy cuff to reduce swelling.
- **Stiffness** – You will usually be instructed on range of movement exercises after your knee surgery. Occasionally, the range of knee movement that you are allowed may be temporarily restricted after your surgery, depending on the procedure performed.
- **Bleeding** – This will cause swelling of the knee and usually settles in a few weeks. If you have a lot of bleeding into the knee joint (haemarthrosis – risk approximately 1 in 100), you may need another procedure to wash the knee out.
- **Compartment syndrome** – This is a very rare complication of surgery, where a build-up of pressure within the leg could result in nerve, blood vessel or muscle damage.
- **Complex regional pain syndrome** – This is another very rare condition and the cause is not fully known. It can result in you experiencing severe pain and stiffness requiring physiotherapy and pain-killing medication. It can take many months or years to resolve.
- **Damage to structures within the knee joint.**
- **Damage or numbness to the skin under the tourniquet.**
- **Ongoing symptoms** – there is a risk that the pre-operative symptoms may not be resolved by the procedure.

The risk of death from a knee arthroscopy operation is very rare (in the region of 1 in 100,000).

### **Will the operation be performed as a day case procedure?**

The operation is usually undertaken as a day case procedure, such that you can go home 2-4 hours after the operation. You will need a responsible adult to take you home and be with you at home for the first 24 hours.

Sometimes, you may be required to stay overnight for medical reasons.

### **Will I be able to walk immediately after the operation?**

Most patients will be able to weight-bear and walk as comfortable after surgery but this depends on the exact procedure performed. Certain operations may require you to be non-weight bearing or partial weight bearing with crutches for a period of time.

### **What will happen in the early recovery period?**

You will be given instructions regarding weight-bearing and range of movement.

The outer bandage can usually be removed the morning after surgery and ice packs or a cryotherapy cuff may be used to help with swelling. The smaller dressings should be left intact until your post-operative appointment.

Mobilise gently according to instructions in the first 10-14 days. In the first 48hrs, elevate the leg to help reduce swelling.

Some blood staining of the dressings is common. If bleeding occurs, elevate the leg and apply pressure to the wound with a firm dressing or bandage. If excessive or not stopping please contact the ward for advice.

### **How much time will I need off work?**

Most patients will be advised to take two weeks off work, but this depends on your occupation, how you travel to work and the exact procedure performed.

Some procedures will require you to have weight-bearing or range of movement restrictions for a longer period, e.g. 6 weeks. Therefore, you may require longer off work.

**When will I be reviewed in clinic post-surgery?**

You will usually be reviewed in clinic at approximately 2 weeks post-surgery. Your wounds will be checked to ensure they have healed. The surgical findings and procedure will be discussed with you in detail, along with any ongoing treatment goals and rehabilitation guidelines.

**Important: This information is only a guide to help you understand your injury, treatment and what to expect. Please contact the Chiltern Knee Clinic for advice if you have any concerns about your injury, planned treatment and recovery.**