

## Osteochondritis Dissecans (OCD)

### Physiotherapy Service Therapies Directorate

This leaflet has been devised to act as a guide to you, of what to expect following your operation.

#### What do I need to bring into hospital?

- Toiletries and a towel.
- Dressing gown and slippers if you have them.
- Suitable clothes to go home in e.g. loose trousers/skirt.
- Diversional activity e.g. book/magazines.
- Walking aids if you use any at home.

#### When will I be admitted to hospital?

- You are admitted to ward, usually to the day case unit or children's ward, on the morning of your operation.
- It is important to follow the fasting instructions given in your letter to come in to hospital.

#### Day of surgery

- You will usually see your consultant, or one of their team, and the anaesthetist.
- You will sign the consent form for surgery, if not signed at the pre-op clinic.
- When it is your theatre time, you will be taken to theatre, usually walking or in a chair.

#### Operation

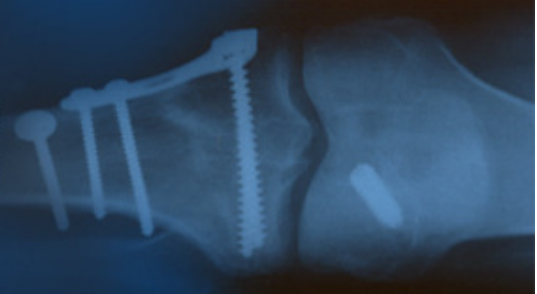
An arthroscopy is an operation, which allows your consultant to look inside your knee joint using a special camera.

#### How is it done?

The procedure is usually carried out under general anaesthetic.

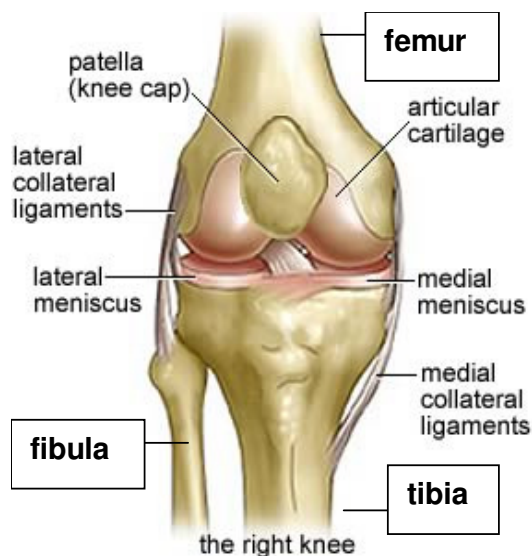
An arthroscopy involves inserting a fibre optic camera that is about the size of a pencil into the joint through incisions that are approximately 1cm in length. Fluid is then passed into the joint; this allows the structures in the joint to be seen. Then, using miniature instruments the structures can be examined.

Two or three incisions are often required, but occasionally it may be necessary to use a larger incision and it will be closed with staples.



## Patient Information

### Anatomy of a right knee joint



### Osteochondritis Dissecans (OCD)

This is a rare condition that affects the knee - estimated at 15-30 cases per 100,000 of the population. It occurs most often in young athletes but can occur in adults too.

The end of the bones, where a joint is formed, is covered with articular cartilage. This provides a smooth slippery surface that allows the joint to move smoothly.

The problem occurs when the bone underlying the articular cartilage is injured. The blood flow to the bone is damaged and this small area of bone can actually die.



The damaged area is under constant stress and it does not get time to heal being on a weight bearing surface. Within the knee this lesion can cause pain. If left untreated the damaged area may lead to arthritis later in life.

The usual symptom, initially, is a mild aching pain, but this gradually worsens over time. Moving the knee can become painful and it may be swollen. The pain may eventually stop you putting full weight through the knee when walking.

As the condition worsens, the area of dead bone may become detached and form a 'loose body'. The loose body can float around the inside of the knee joint and may cause the knee to give way or lock if the loose body gets in the way.



## Patient Information

X-rays and MRI scans are used to diagnose the problem and guide treatment.

### **Non surgical treatment**

This can take 10-18 months and requires you to stop doing everything that causes pain in your knee.

This means stopping sports and exercises that are weight bearing.

It may mean you use crutches for a while when your knee is sore. As pain settles then you can place more weight through the leg.

Regular scans may be required to check how well the knee is healing and to see if surgery is needed.

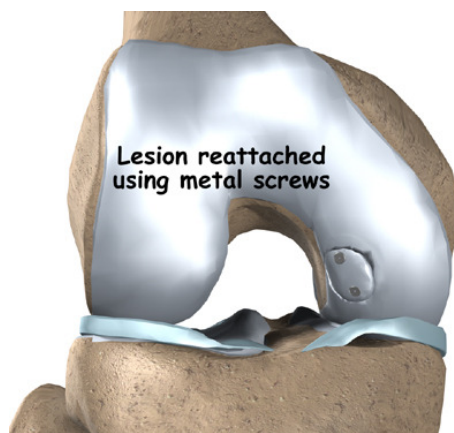
If the lesion becomes partially or totally detached, or the knee fails to settle after 18 months, then surgery is required.

### **Surgery**

The surgery involves having an arthroscopy. A small camera is inserted into the knee via two small incisions either side of the knee. This has been possible in half of our patients, the other half had to have an open procedure. This involves having a wound approximately 10 cm long on the front of the leg.

Your surgeon will aim to reattach the fragment using metal pins or screws to hold the fragment in place.

If the fragment does not fit perfectly into place anymore then it may need to be removed. The resulting hole in the cartilage can be treated with a cartilage resurfacing technique. This was required in only 1 of our last 15 patients at Warrington.



After surgery you will stay in hospital for 48 hours to help maintain your knee movement. Your leg will be placed onto a machine that bends and straightens your leg for you.

Putting weight through your leg is not allowed until 6 weeks after surgery, and is gradually increased by your physiotherapist as long as the knee is comfortable.



## Patient Information

**No** impact activities or sports are permitted until the x-rays show healing. This can take 3-9 months. You will have an x-ray at each visit to clinic to assess the healing.

A second operation is then required to remove the metal pins or screws. The removal of the fixation material is done by keyhole surgery, if possible. If not, an open procedure may be used. It is usually a day case operation. It can take 10-14 days for the wounds to heal and then a return to all desired activities is allowed. All our patients returned to sports 6-12 months after their second operation.

## After the operation

- You will wake up in the recovery area of the theatre.
- You may have 2 or 3 small wounds, which will be covered with a small dressing. If an open incision has been performed the scar may be 10cm long on the front of your leg.
- You will have a compressive wool and crepe bandage on your knee.
- It is normal for your knee to be a little sore and swollen for the first 48 hours.

It is very important after the operation to regain full range of movement of both knee bending and straightening. To help achieve this, you will stay in hospital for 24-48 hours and a machine will help to move the knee for you whilst you are recovering.

## Benefits

These things should be improved following your operation, but remember this will not happen immediately. It can take 2-6 weeks for the knee to become less swollen.

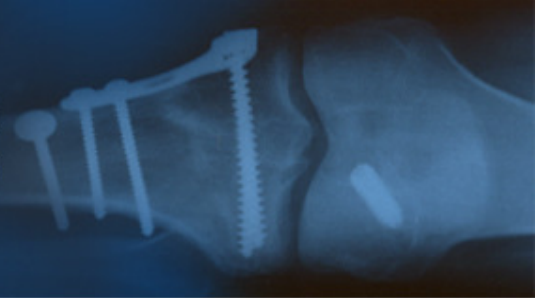
1. Reduction of pain.

Your knee should stop giving way or locking.

## Risks

- 1 in a 15 chance of further surgery if this technique fails.
- 1 in a 15 chance of a stiff knee requiring further operation to regain movement.
- 1 in a 15 chance of a portal infection.
- 1 in a 500 chance of septic arthritis (infection deep within the knee).
- 1 in a 100 chance of complex regional pain syndrome– An abnormal pain reaction to any surgery, which may need prolonged physiotherapy or a pain clinic appointment.
- 3 in a 100 chance of deep vein thrombosis (DVT) – clot in the calf for adult patients, but this is only a theoretical risk for children.
- Pulmonary Embolism (PE) – clot in the lungs. Very rare following keyhole surgery to the knee but potentially life threatening.
- Patients who take the combined oral contraceptive pill need to stop taking it 6 weeks prior to surgery, and use alternative precautions.

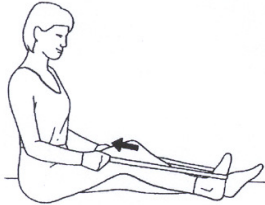
## Exercises



## Patient Information

The following exercises should be started immediately, once shown by your physiotherapist and continued at home. These should be performed 4 times each day.

1.



Long sitting. Put a band around your foot. Bend your knee as far as possible. Gently pull the band to bend your knee a little more.

Hold 5 secs. Repeat 10 times.

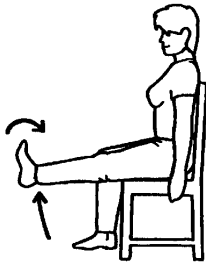
3.



In lying/sitting with leg straight. Lift your leg 2-3 inches only keeping knee straight.

Hold 5 seconds.  
Repeat 10 times.

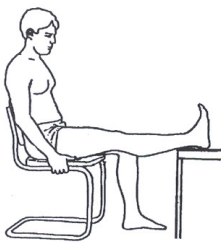
3.



Sitting on a chair, with the leg to be exercised supported on a chair as shown. Let your leg straighten in this position.

Hold 5 secs. Repeat 10 times.

4.



Sit on a chair. Pull your toes up, tighten your thigh muscle and straighten your knee.

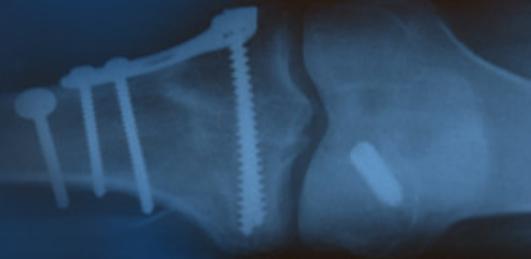
Hold approx. 5 secs. and slowly relax your leg. Repeat 10 times.

Walking short distances around your home should be fine. Gradually increase your walking distance as pain and swelling allow.

If at any times your knee becomes acutely painful, you can take pain-killing tablets and it may be worth using ice to reduce your symptoms.

To do this, make sure the ice is in a sealed bag, and then wrapped in a damp towel. Alternatively a bag of frozen peas wrapped in a damp towel may be used. Apply the ice for no longer than 10 minutes at one time. You can use ice every hour if necessary.

You will be seen around 2 weeks after the operation, as an outpatient, by your consultant's orthopaedic team. Staples/stitches will be removed now (if you have them) and it will be explained what was done during your operation.



## Patient Information

### **Walking**

You will not be allowed to place your foot on the floor for the first 6 weeks.

### **GENERAL ADVICE**

#### **Showering**

You may shower provided that you keep the affected area water tight, i.e. with a plastic bag or cling film around your leg and sealed. If the dressing becomes wet or soiled, please replace it with a clean dry one.

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