

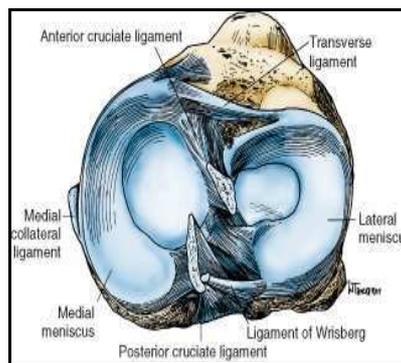
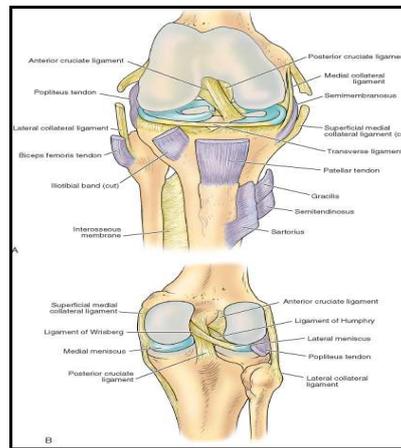
# KNEE ARTHROSCOPY PATIENT INFORMATION SHEET

## INTRODUCTION

It has been recommended that you undergo an arthroscopy of your knee. This information sheet is designed to explain what is involved in an arthroscopy, the reasons why you might require one and what to expect on the day of surgery and afterwards.

Most patients undergoing an arthroscopy are not ill - they just have a bad knee! I will try to explain below that the procedure you have been recommended is a simple procedure that needs to be performed for the correct reason, safely and at all times with an emphasis on avoiding complications.

## ANATOMY OF THE KNEE JOINT



## **WHAT IS AN ARTHROSCOPY?**

'Arthro' means *joint* and 'scope' is *to look at*; a knee arthroscopy therefore allows the surgeon to see inside your knee and directly inspect the bones, cartilages and other structures within the joint. This gives a much more accurate picture than any other investigation such as X-rays or MRI scans. In addition the surgeon can perform procedures to improve the function of the knee. In the modern era arthroscopies are only rarely required for just diagnostic purposes - nearly always a procedure is also undertaken to improve the function of the knee.

Arthroscopy is commonly known as 'key hole surgery' as the incisions are minimal and therefore reduce scarring and allow quicker recovery. Prior to the advent of the arthroscope, such operations would mean a full open operation with extensive scarring etc.

During an arthroscopy a small camera-type device is inserted into the knee and this relays pictures to a television screen. At the same time instruments can be inserted into the knee so that surgery can be performed e.g. removing a portion of meniscus ("cartilage"). After the procedure you will be given a video recording of the procedure.

## **REASONS FOR ARTHROSCOPY**

There are many reasons for an arthroscopy. Listed below are the most common ones. However please bear in mind one major principle - the decision to proceed to an arthroscopy is entirely one of YOUR choice. My role is to tell you what is wrong with your knee and what can (and cannot) be done to fix it - it is your decision as to whether you wish to proceed to surgery. There are very few knee conditions that deteriorate because surgery is not performed!

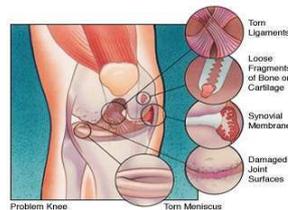
The commonest reason to undergo an arthroscopy is for relief of PAIN - only you know how much pain you are in. You therefore decide if the pain you are experiencing warrants an operation, albeit a relatively minor one.

1. To resect (trim) or repair a torn meniscus (cartilage). The menisci are two semi - circular structures of soft fibrocartilage which act as shock absorbers within the joint. They are often injured by twisting activities. If you have a tear in the meniscus the torn section is resected - 'trimmed' back to healthy stable meniscus. Occasionally it is possible to repair the torn cartilage, most commonly in the young adult or child.

An important principle here is that only the damaged meniscus is removed, not normal or healthy meniscus.



2. Arthroscopy allows a clear view and physical inspection of the cruciate ligaments. The cruciate ligaments are two strong ligaments, the anterior (ACL) and the posterior (PCL), which provide stability of the knee on twisting and pivoting activities. They are often injured in contact sports and skiing. The cruciate ligaments do not have the ability to repair themselves and it may be necessary to operate at a later date to reconstruct them. I do not normally need to perform an arthroscopy simply to visualise these ligaments however - MRI is usually sufficient for this.
3. Often through trauma or degenerative changes (osteoarthritis) small fragments of bone or articular cartilage can become loose within the knee joint. These can be removed and 'washed out' of the joint.
4. The smooth articular cartilage lining of the bone which allows smooth movement can be damaged when the knee is injured. This may result in a 'divot' of cartilage becoming loose and causing pain and/or locking of the joint. Via an arthroscopy the extent of the damage can be assessed and procedures carried out. The lesion can be shaved or a procedure known as *microfracture* performed where small 'pricks' are made in the bone to stimulate healing from the deeper levels. If the lesion is too large for this further surgery can be planned from the arthroscopy findings.
5. If the joint lining is particularly inflamed then a small area of this lining (biopsy) can be taken and sent for further investigations.
6. The kneecap (patella) can be a source of pain in the knee. The arthroscope allows inspection of the under surface of the patella. If there is any loose articular cartilage this can be shaved. Another procedure called a '*lateral release*' can be performed. This is the surgical division of the soft tissues on the outer aspect of the patella. These structures can be extremely tight causing the patella to track in the wrong position. This tightness over a long time can place excess pressure on the under surface of the patella resulting in pain.



These are the most common reasons to have an arthroscopy. There are other reasons and these will be explained to you if necessary.

## **PRIOR TO YOUR SURGICAL PROCEDURE**

### *Communication*

You are very welcome to ring or e-mail me with any questions prior to your procedure. If you use e-mail this is the best way as you can write directly to me at [martin.logan@harleystreetkneeclinic.co.uk](mailto:martin.logan@harleystreetkneeclinic.co.uk). I can either e-mail you back or call you as you wish. No question is too ridiculous to ask!

I will send you a copy of every letter I write to your GP and/or Physiotherapist - these are so you are kept "in the loop" about your condition. I try to minimise the use of technical or medical phrases, but some are used inevitably. If you want any further explanation, please feel free to ask!

If you have an e-mail address please let me have it.

### *Medical Insurance Authorisation*

Nearly all UK insurance companies will require your procedure to be authorised. If you have the correct information, this is remarkably easy.

They will need to know the following;

1. The Hospital - The BMI Weymouth Hospital, or the BMI Princess Margaret Hospital, Windsor
2. The Surgeon - Mr Martin Logan
3. The Anaesthetist - Dr Jill Pattison
4. The name of the procedure - ARTHROSCOPY
5. The Procedure Code - nearly always W8500 for an arthroscopy
6. Estimated length of stay - usually a day case.

If there are any issues with authorisation, please feel free to contact my office.

### *Drugs and medications*

Please let me know if you are taking any of the following drugs;

1. Warfarin - this must be stopped prior to surgery, and I will advise you of when and how.
2. Aspirin, clopidogril and other blood thinning agents - I normally ask you to continue to take these up to and including the day of your surgery, but I would like to know about them!
3. The oral contraceptive pill - I normally advise you to stop taking this (if it contains oestrogen) to minimise the risk of deep venous thrombosis (DVT). I will advise you individually about this.  
**Please note that with all forms of oral contraception, they do not work as efficiently around the time of a surgical procedure - please use additional contraception!**
4. Hormone replacement therapy (HRT) - it is advisable to stop taking this for 3-4 days before your operation and for 3-4 days afterwards to minimise the risk of DVT.

### *The day prior to your procedure*

On the day prior to your procedure a secretary from my office will call you and give you a specific time to come into hospital on the day of the procedure and what time to stop eating and drinking. The hospital paperwork will give 7am default admission time but the time of your admission could be as late as 2-3pm. Please call my office the week before your procedure if you have a preferred time of admission.

### *The day of the procedure*

On the day of the procedure please come to the hospital at the designated time. Your time of admission is normally two hours or so prior to the estimated time of the procedure - this gives you time to become acclimatised to the unit and also for a number of medical personnel to come and see you. Please bring some reading material!

I will always come and see you on the day of your procedure and ask you to sign a Consent Form for the procedure. I will also always put a mark on your leg to ensure that I perform the procedure on the correct leg! The Anaesthetist, the nursing staff and a Physiotherapist will also see you prior to the procedure.

You may be surprised that I recommend you wear a TED stocking (provided by the hospital) on your "good leg" prior to the procedure. The reason for this is to try to prevent you developing a Deep Venous Thrombosis (DVT) in your good leg, which can occasionally happen. Please keep this stocking on the good leg until the day after the procedure, when it can be removed.

You will normally simply walk down to the operating theatre, which is more enjoyable than going down on a trolley! Please bring a pair of slippers / trainers / sandals with you for this.

## **THE SURGICAL PROCEDURE**

A knee arthroscopy is almost always performed under a general anaesthetic. This can normally be done as a day case procedure, although on some occasions you may be advised to remain in hospital on the night of the surgery.

A tourniquet (a form of tight bandage) is placed around the thigh prior to the operation. This is inflated with gas throughout the procedure and minimises bleeding within the knee during the arthroscopy. The tourniquet rarely causes a problem, but may leave you with a "tight" feeling around the thigh for a day or two.

In most arthroscopies, two small incisions are made at the front of the knee. One incision is to introduce the arthroscope and the other to insert the instruments required during the procedure. In some cases additional incisions are necessary. Fluid is instilled through the arthroscope so that the knee is inflated and easily visualised.

Most arthroscopies take between 15 - 20 minutes to perform. At the end of the operation, the fluid is drained from the knee. Stitches are not usually required to close the wounds; steristrips, a type of sticky tape, temporarily hold the wounds closed. Local anaesthetic, and anti-inflammatory agents are injected into the knee to minimise discomfort after surgery. A bandage is then applied for 24 hours (this is normally removed the next day after your operation). With modern anaesthetic techniques, most patients usually wake relatively quickly and are aware of their surroundings within 15-30 minutes of the end of the procedure.



## **WHAT CAN YOU EXPECT AFTER YOUR ARTHROSCOPY?**

Unless advised to the contrary, you may place weight upon your knee immediately after surgery (although for the first time please do this under the supervision of a Nurse or Physiotherapist). You may go home once you are safely walking and you do not normally require crutches. You should not drive for 5-7 days after the operation. The Nurses on the ward will advise you further on this if necessary.

In 90% of patients undergoing routine arthroscopies there is little or no pain - this is because the procedure is relatively non-traumatic and also because a number of analgesic drugs are placed into the knee at the time of the procedure. If you are in any significant pain, further analgesics are given to you.

It is normal for the knee to feel a little uncomfortable on the day after your operation. This is because the local anaesthetic inserted into the knee at the end of the operation may have started to wear off. Pain-relieving tablets may be required for a few days. These will be given to you on discharge from hospital.

It is normal for the knee to “squelch” after an arthroscopy for a few days - this is the noise the fluid in your knee makes which is left behind after the procedure. The fluid is gradually absorbed within a few days the sensation then ceases. It is also normal for the knee to “click” for a few weeks after the procedure - this is the patella (kneecap) moving excessively with temporary wasting of the quadriceps (thigh) muscle. As the quadriceps returns to normal function this “clicking” also subsides.

The bandage stays on for the first 24 hours. You remove this yourself and dispose it. Underneath this is a water resistant dressing that stays on until you are seen back at the Consulting rooms 1 week later. You will have compression stockings on both legs. The stocking helps reduce the risk of developing Deep Vein Thrombosis (DVT). Please keep the stocking on the operated leg until you are seen in my out-patient clinic 7 days after the procedure (the stocking from your “good leg” can be removed the day after the procedure).

You can normally go home 3-4 hours after the procedure. I will always come and see you after the procedure before you go home, give you a CD-ROM / DVD of the procedure and explain what was found and what procedures were performed. This information will be repeated again at the first out-patient visit, as you may not remember everything that was said so soon after the anaesthetic!

## **THE FIRST WEEK AFTER SURGERY**

### *Communication*

If you have given me your e-mail address, I will e-mail you shortly after your procedure with the Operation Note and GP letter I formulate concerning the procedure.

These notes will also be e-mailed to the Physiotherapist who will be involved in your care postoperatively, so that they are aware of the details of the procedure you have undertaken.

### *Rest*

It is absolutely paramount to rest as much as possible for the first week after an arthroscopy. The commonest cause of pain after an arthroscopy is swelling - to avoid this elevate your leg as much as possible, walk on it as little as possible and apply ice or a pack of frozen peas to the knee. You will be able to walk up and down stairs perfectly well but try to do this as little as possible. Try to avoid housework and DIY and get others to do this for you! The more you rest in the first week the quicker your recovery will be.

### *Bleeding*

It is normal for there to be a little bleeding in the first day or so after your procedure. If this occurs please do not worry. Very occasionally there can be brisk bleeding in the first 3-4 days - if this occurs do not be alarmed but please come back to the hospital (at any time, day or night) - please do NOT go to your local A&E Department, as this is a good way of picking up a post-operative infection. Although your GP / Practice Nurse is perfectly capable of managing bleeding after your operation, it is my responsibility to sort out any problems, so unless you live a long way from Windsor please come back here.

### *Bathing*

When you go home after your procedure, the two small wounds on the knee will be covered by steristrips and a waterproof dressing. You will be given a few extra waterproof dressings when you leave hospital.

If you wish to shower in the first week after your procedure, please remove the TED stocking, wrap the knee in multiple layers of cling film above the water resistant dressing. A brief shower should be fine. Please do not have a bath for the first 14 days however as "stewing" the knee wounds in water is not a great idea! If after a shower the water resistant dressing comes off, simply remove it and replace it with another. Please leave the steristrips on however - if these come off it is not a disaster but make sure the wound is covered until I see you in the clinic.

### *Return to work*

As far as sedentary work is concerned, you should take at least one week from work after your operation - if you return to work and travelling too early your knee will swell and your recovery will be prolonged. However you are perfectly capable of working from home the day after your procedure - if you can make arrangements to make your home into your office for the first week you will be fine. After a week or so, most patients are able to travel by car, rail, bus etc and able to negotiate escalators and stairs etc. Please see my notes below about flying.

For more active and manual occupations, I will advise you individually about an expectation of when you should be able to return to work.

If you need a certificate about taking time from work, I can easily provide these for you at the first post-operative appointment. Alternatively please call my office (01753 868622) and a certificate can be sent to you. There is thus no need to make an appointment with your GP for this. No charge is made for certification.

### *Driving*

You may consider driving again after approximately 5-7 days, although please minimise this as you should rest as much as possible in the first week after an arthroscopy. However, please do NOT drive unless you are happy that you are safe. It may be in your interests to inform your motoring insurance company that you are resuming driving after your operation.

### *First out-patient visit after your arthroscopy*

I will normally invite you to be seen in the out-patient clinic 7 days after your procedure. This will be in the out-patient clinic at 9 Harley Street or at The Princess Margaret Hospital in Windsor depending on what suits you. A Nurse will remove your dressings and give you some general advice. I will then see you, explain the procedure and explain the CD-ROM images that I gave you after the surgery.

I will then let you know of the management plan for your knee, review physiotherapy that you will need and any other issues.

### *Flying and DVT (Deep Venous Thrombosis)*

This is not an easy area to advise on! The whole point about an elective arthroscopic procedure is that it should be as safe as possible with minimal risk of adverse events post-operatively.

There is all sorts of advice about this, much of which is contradictory. What is agreed is that flying in the period after surgery can increase the very small risk of deep venous thrombosis (DVT or "clots in the legs") associated with flying.

Theoretically you can fly immediately after your procedure with a minimal risk of DVT - however minimal does not mean nil!

I would personally advise that you avoid short-haul flights (2 hours or less) for 2-3 weeks after an arthroscopy and long-haul flights for approximately one month. Additionally if you fly within 6 weeks of a procedure, please wear flight socks or TED stockings on the flight and take aspirin (if safe - please ask me) - 75mg once per day for 5 days prior to the flight and 5 days after the flight. Long-haul flights in Economy are the most DVT-prone but even relatively short flights in First Class are a DVT risk.

If you are at high risk of DVT (the most important risk factor is a previous DVT!) then you will need to take extra care about this problem.

### **PROGRESS AFTER THE FIRST WEEK - WHAT TO EXPECT?**

No two arthroscopies are the same! Thus your recovery and return to sports and other activities depends on what was carried out in your procedure. A young patient undergoing resection of a simple meniscal tear will recover more quickly an older patient with osteoarthritic changes within the knee.

By and large recovery from the effects of an arthroscopy is relatively brief. If however you have a chronic condition such as osteoarthritis, the condition in itself may cause some pain and swelling for while.

MOST PATIENTS return to normal daily sedentary activities within one week of an arthroscopy and can walk relatively normally within 2 weeks. They can return to light gym activities (cycling, rowing etc) after 2 weeks with a gradual return to most gym activities within 4 weeks. Most patients can start to run and play ball sports at 4 weeks. Running is normally possible 3-4 weeks post-procedure. Most patients can play 18 holes of golf 4 weeks after the procedure. However it can take 8-12 weeks to fully recover from the procedure and have a full return to sport.

In some patients recovery is much quicker than this and in some much longer - everyone is different! Please also be aware that with a return to sport the knee can swell for a while - this is perfectly normal.

It is vital to realise that although arthroscopy is 'key hole surgery', it is still a significant procedure. It is normal for the knee to swell for 2-3 months after the operation and for the knee to feel a little unstable until the muscles are fully developed again. You may experience an ache and / or swelling at the front of the knee at the site of the incisions for 2-3 months.

*Please try to rest as much as you can in the first week after your arthroscopy. I have found from experience that patients who rest for the first week do not experience very much swelling or pain and regain their normal daily activities quicker than those who are too active initially.*

## PHYSIOTHERAPY AND REHABILITATION

Physiotherapy and rehabilitation are ESSENTIAL after an arthroscopy. If this area is neglected recovery is prolonged and the ultimate outcome may not be as good as it is with rehabilitation.

Physiotherapy starts immediately after the arthroscopy. Swelling should be minimised by rest and ice etc. in the first week or so after the procedure. Try to maintain as much hyperextension of the knee as possible. Return to walking as normally as possible without limping - both your Physiotherapist and I will explain this to you. Simple "straight leg raising" in the first week is probably the best exercise to concentrate on.

I will arrange for you to see a Physiotherapist 4-7 days after your procedure. This is normally at a location close to your home or workplace, not necessarily in Windsor. I will usually try to allocate or recommend a Physiotherapist to you before your procedure so that everything is in place for your recovery.

Please make sure that you check with your insurance company if you are covered for post-operative physiotherapy and how much you are covered for. Most UK insurance policies cover some rehabilitation. The number and periodicity of sessions varies from patient to patient but is typically 4-6 sessions over the first month.

## WHAT CAN GO WRONG AFTER AN ARTHROSCOPY?

There is no surgical procedure in existence that is without possible complications! Arthroscopy can result in a number of complications. However, these are infrequent and the procedure is one of the safest operations in Orthopaedic Surgery.

Complications include;

1. Bleeding after the operation. This is very rarely a serious problem.
2. Swelling of the knee - some swelling is inevitable after the operation. This can persist for 2-3 months but usually settles in 2-3 weeks.
3. Venous thrombosis ("clots in the veins"). Every attempt is made to minimise this complication. You may be given a drug called *low molecular weight heparin* at the time of surgery which thins the blood and decreases this risk. Unless the procedure is an emergency, patients should not be taking the oral contraceptive pill at the time of surgery. It is also advisable not to take hormone replacement therapy (HRT) at the time of surgery. Please ask for advice if necessary. **Always let me know if you or a close blood relative has experienced a DVT in the past.**
4. Infection - a rare but serious complication. MRSA is very, very rare in day case surgery - if an infection does occur it is normally an organism from your skin or bloodstream entering your knee.
5. Following a lateral release of the patella it is quite common to be bruised on the outer aspect of the thigh and calf as soft tissue and muscle is cut.
6. In rare cases you may develop a **chronic regional pain syndrome** - this is a poorly understood condition where the small nerve fibers in a limb "over-react" and cause pain, hypersensitivity and swelling for a period.
7. There are a number of rare other complications but these occur far less than 1% of the time.

**Please contact the hospital at which you underwent surgery if you are at all concerned that there is a problem. In particular, act immediately if you develop a fever, severe pain or significant wound problems.**

If you have any further questions or queries, please do not hesitate to contact me.

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Consultant Orthopaedic Surgeon

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