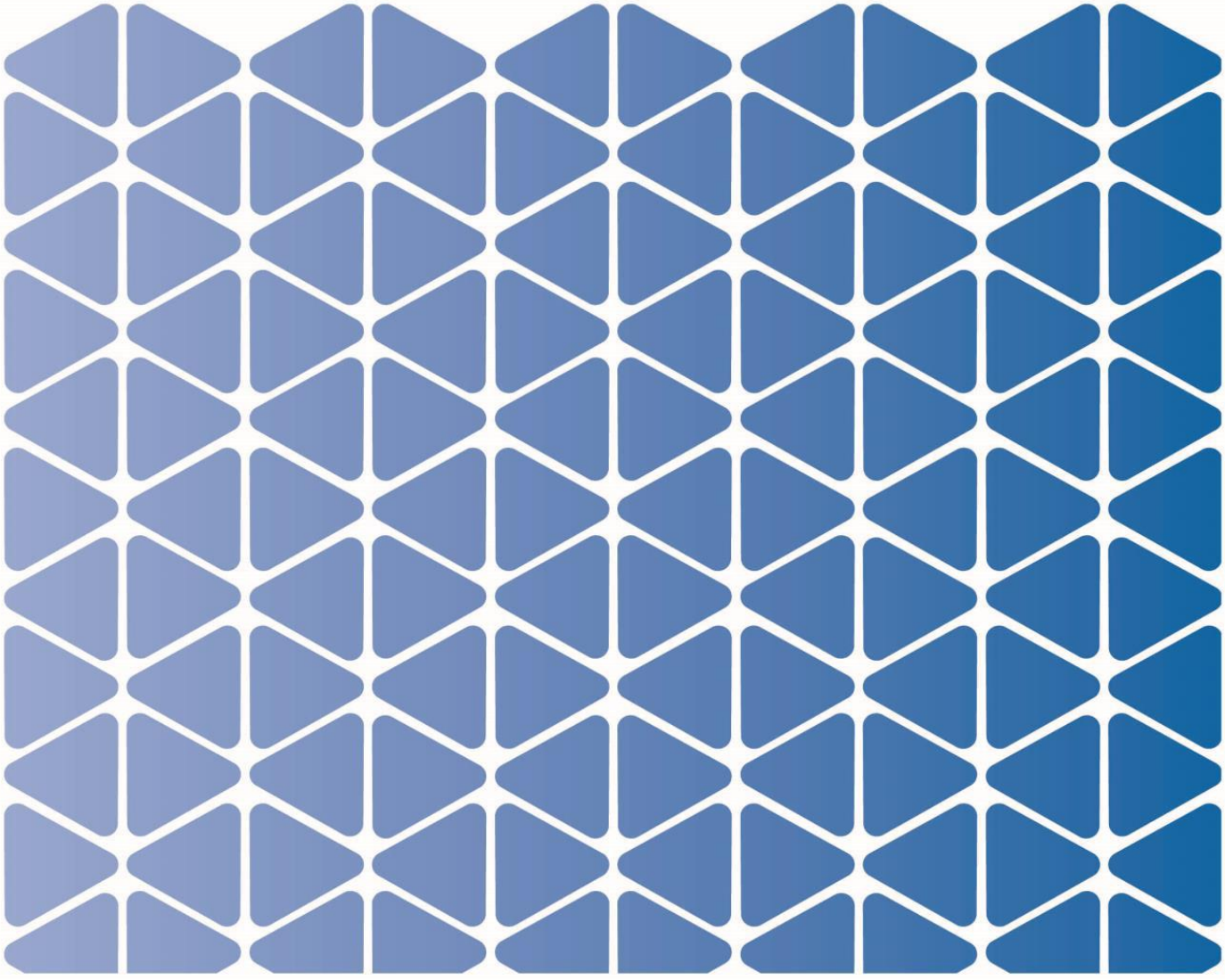
PATIENT INFORMATION

KNEE ARTHROSCOPY



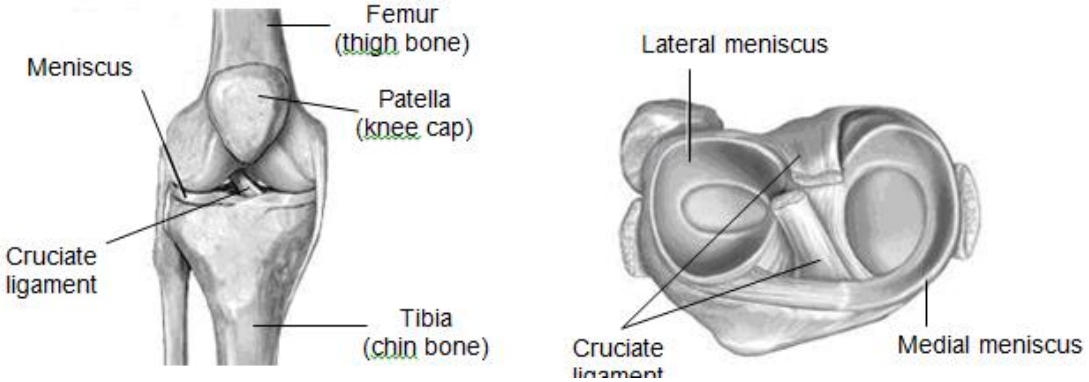
It has been recommended that you have a knee arthroscopy. This leaflet explains some of the benefits, risks and alternatives to the operation. We want you to have all the information you need to make the right decision. Please ask your surgical team about anything you do not fully understand or want to be explained in more detail.

We recommend that you read this leaflet carefully. You and your doctor (or other appropriate health professional) will also need to record that you agree to have the procedure by signing a consent form, which your health professional will give you.

In many cases, joint problems can be diagnosed using non-surgical methods such as MRI (magnetic resource imaging), or treated with physiotherapy. However, X-Ray and MRI are not always clear enough to make a proper diagnosis, particularly when the problem involves the soft tissue around a bone. Your consultant will discuss this with you if appropriate.

What is an arthroscopy?

Arthroscopy is a procedure to look inside a joint by using an arthroscope. An arthroscope is like a thin telescope with a light source. It is passed through a small cut in the skin into your joint and is used to light up and magnify the structures inside your joint.



The meniscus is a half-moon-shaped structure found between the femur (thigh bone) and tibia (shin bone) in the knee. There are two menisci in each knee, one on the inner side called the "medial meniscus" and one on the outer side called the **"**lateral meniscus."

The two menisci act as shock absorbers within the knee and also help spread the weight load. The meniscus is a type of cartilage (although it is different to the cartilage that lines the bones). The menisci may be torn during twisting movements of the knee.

Arthroscopy may be done to investigate symptoms such as knee locking, pain, swelling, or instability of a joint. An arthroscopy may show damage to cartilage or ligaments within a joint, fragments of bone or cartilage, which have broken off (‘loose bodies’), or signs of arthritis.

What is arthroscopic surgery?
In addition to simply looking inside, a doctor can use fine instruments, which are also passed into the joint through a small incision in the skin ('key-hole surgery'). These instruments may be used to take a biopsy, cut, trim and suture to repair structures inside the joint.

Arthroscopic surgery can be used for various procedures, which include:
- Taking out small bits of bone or cartilage that have broken off into the joint space. (loose bodies)
- Repairing torn ligaments.
- Removing damaged cartilage.
- Micro fracture of exposed bone to encourage fibrous cartilage healing
- Soft tissue release to help re-align the knee cap (patella).

An arthroscopy may be done if:
- There is a need to look inside a joint to find out exactly what is causing a problem such
  as pain, swelling, inflammation or arthritis.
- There is a tear in the cartilage of a joint (cartilage is the smooth, connecting tissue that acts as the shock absorber in a joint).
- There is a tear in one of the ligaments in a joint (a ligament is a band of fibrous tissue that connects bones together).
- There is a loose piece of bone in a joint.
- The joint has become unsteady.

How it is done
Arthroscopy is usually done under a general anaesthetic and may last from 30 minutes to over an hour, depending on the amount of work to be done.

The skin over the affected joint will be cleaned with an anti-bacterial fluid and then two small incisions made (one either side of your knee). One for the arthroscope and the other for an examining probe or any attachment that is needed to assist with the procedure. The joint is filled with a sterile fluid to make viewing the inside easier.

The surgeon will be able to see inside the joint using a camera and a TV monitor and, if possible, will repair any damaged areas or remove any unwanted tissue during the procedure.

At the end of the procedure the arthroscope and attachments are removed, any fluid is drained from the joint, and the incisions may be closed with paper tapes or stitches or may be left to heal on their own. A sterile dressing is used to cover the incisions and the joint may be bandaged.

Some procedures may require the use of a brace after the procedure. These can include: microfracture, meniscal repair, ligament reconstruction.

Microfracture can be carried out if there is an area of articular cartilage damage or there is an area of bone damage below the cartilage (osteochondral defect).

Microfracture creates small holes in the bone. The surface layer of bone, called the subchondral bone, is hard and lacks good blood flow. By penetrating this hard layer, a micro fracture allows the deeper, more vascular bone to supply the surface layer. This deeper bone has more blood supply, and the cells can then get to the surface layer and stimulate fibrous cartilage growth. You may be required to be non-weight bearing for 6 weeks if this is carried out.

Recovery
Recovery after arthroscopic surgery is normally much quicker than after traditional surgery and you will usually be able to go home the same day.

Your knee will swell a little after your operation. You should do the following things to help keep the swelling down:

- When resting have your leg straight out in front of you and raised so your ankle is higher than your hip.
- For the first week do not walk long distances (no longer than 15 minutes at a time)
- Once you have removed your outer bandage, apply ice to your knee (you will not be able to use ice if you do not have full sensation in your leg). Cover your knee with cling film or a plastic bag and place a large packet of frozen peas or crushed ice, wrapped in a damp towel, over the cling film. You could get an ice burn if you apply the ice pack directly to the skin so always use the cling film or plastic. The plastic also keeps the wounds dry.

Your surgeon will advise you whether you need to rest the joint or exercise it after the arthroscopy. They will also arrange to discuss the results of the arthroscopy with you at a later date.

Results
Most arthroscopies for sports-type injuries do allow a return to sport. However, arthroscopies for conditions such as arthritis often only relieve the mechanical symptoms temporarily and in some cases may make your symptoms worse.

Referral for arthroscopic wash out and debridement should not be offered as part of treatment for osteoarthritis, unless the person has knee osteoarthritis with a clear history of mechanical locking (not gelling, 'giving way' or X-ray evidence of loose bodies). (NICE guidance Feb 2008)

In the case of the knee joint, arthroscopy can normally treat damage to cartilage or ligaments successfully.

The scars from an arthroscopy are usually tiny and barely noticeable

Benefits of the procedure
Arthroscopic (key hole) surgery can often treat or repair joints without the need for a more traditional 'open' surgery of a joint, which involves a large cut. The 'keyhole' technique of arthroscopy has a lower risk of complications, less pain after the procedure, a shorter hospital stay and a quicker recovery.

Serious or frequent risks
Everything we do in life has risks. The risks of arthroscopic knee surgery include problems with:

Local
- the wound (for example, infection);
- swelling;
- bleeding from portal sites.
- some pain and stiffness around the joint after surgery;
- accidental damage to the joint;
- damage to the structures inside or near to the joint
- loss of feeling in the skin around the joint, this may be temporary or permanent;
- occasionally nerve damage;
- tourniquet related problems

General
- breathing (for example, a chest infection);
- the heart (for example, abnormal rhythm or, occasionally, a heart attack);
- blood clots (for example, in the legs or occasionally in the lung);
- unexpected reaction to anaesthetic;

Sometimes, more surgery is needed to put right these types of complications.

Most people will not experience any serious complications from their surgery. The risks increase for elderly people, those who are overweight and people who already have heart, chest or other medical conditions such as diabetes or kidney failure. As with all surgery, there is a risk that you may die.

You will be cared for by a skilled team of doctors, nurses and other health-care workers who are involved in this type of surgery every day. If problems arise, we will be able to assess them and deal with them appropriately.

Other procedures that are available
There are a few things that you can do to help manage your knee pain before opting for surgery, these include:
- Physiotherapy;
- Joint injections;
- Medication for pain relief.

Your consultant will discuss these options with you.

Your pre-surgery assessment visit

We will ask you to go to a pre-surgery assessment clinic where you will be seen by members of the medical and nursing teams of the surgical unit. The aim of this visit is to record your current symptoms and past medical history, including any medication you are taking. Your heart and lungs will be examined to check that you are well enough for surgery. Blood tests and x-rays will usually be taken or arranged during this clinic.

The members of the surgical team will check that you agree to have the planned surgery. If you have been given a consent form please bring it with you, alternatively you will be given a consent form in clinic. Make sure that you have read and understood this information before your clinic visit. If you have not understood any part of the information, you will be able to ask any questions you may have about your planned surgery.

Please contact us if you symptoms get better and you do not require surgery.

Being admitted to the ward

You will usually be admitted on the day of your surgery so you and we can prepare for the surgery. We will welcome you to the ward and check your details. We will fasten an armband containing your hospital information to your wrist. Your nurse will check your blood pressure, temperature and pulse.

We will usually ask you to continue with your normal medication whilst you are in hospital, so please bring it with you.

If you have had previous DVT (deep vein thrombosis) or PE (pulmonary embolism), or you are on warfarin prior to surgery we may give you heparin or clexane injections to reduce the risk of blood clots in your legs after surgery.

Your anaesthetic

We will usually carry out your surgery under a general anaesthetic. This means that you will be asleep during your operation and you will feel nothing.

Before you come into hospital

There are some things you can do to prepare yourself for your operation and reduce the chance of difficulties with the anaesthetic.

- If you smoke, consider giving up for several weeks before the operation. Smoking reduces the amount of oxygen in your blood and increases the risks of breathing problems during and after an operation.
- If you are overweight, many of the risks of anaesthesia are increased. Reducing your weight will help.
- If you have loose or broken teeth or crowns that are not secure, you may want to visit your dentist for treatment. The anaesthetist will usually want to put a tube in your throat to help you breathe. If your teeth are not secure, they may be damaged.

- If you have long-standing medical problems, such as diabetes, hypertension (high blood pressure), asthma or epilepsy, you should consider asking your GP to give you a check-up.

Your pre-surgery visit by the anaesthetist
After you come into hospital, the anaesthetist will come to see you and ask you questions about your general health and fitness.

- Your anaesthetist will discuss with you the different methods of anaesthesia they can use. After talking about the benefits, risks and your preferences, you can then decide together what is best for you.

On the day of your operation

Nothing to eat and drink (nil by mouth)
Please follow the instructions we give you about eating and drinking. We will ask you not to eat or drink anything (including chewing gum or sucking sweets) for six hours before your operation. We strongly encourage you to drink water, squash or unsweetened tea coffee (with NO MORE than one fifth milk) up to 2 hours before your procedure. This prevents you getting dehydrated.

Your normal medicines
It is important to let us know, **before you are admitted**, if you are taking:

- Anticoagulant drugs (for example, warfarin, aspirin or clopidogrel).
- Non-steroidal anti-inflammatory drugs (NSAIDs) such as ibuprofen and diclofenac as these may have to be discontinued before surgery.

If you are taking other medications such as for diabetes and heart conditions these may be continued.

Also provide us, and the anaesthetist, with a list of all the medications you are taking or have recently taken, including medicines prescribed by your family doctor and those bought “over the counter” without prescription, and also any herbal medications.

Please contact your pre-op assessment clinic:

- If you are unsure which medications you must stop. If we do not want you to take your normal medication, your surgeon or anaesthetist will explain what you should do.
- If you do not feel well and have a cough, a cold or any other illness in the four weeks before you are due to come your operation. Depending on your illness and how urgent your surgery is, we may need to delay your operation as it may be better for you to recover from this illness before your surgery.

Exercises
You can start these exercises on the day of your operation even when the large bandage is still in place. You should do your exercises at least 4 times each day. If you

have undergone a lateral release or have had a microfracture procedure, do only those exercises marked with an asterisk (*) until you are seen in Physiotherapy.

Week 1

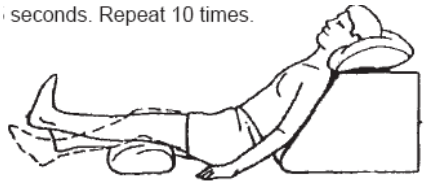
***Static Quadriceps Contraction**

Lying on your back. Press your knee down firmly against the bed.
Hold for 10 seconds. Repeat 10 times.

*** Knee flexion on sliding board**

Lying on your back, bend and straighten your knee on the operated side by sliding your heel up and down on a board. (This could be a smooth piece of hard board or an old tin tray).
Repeat 10 times.
Please wear socks for these exercises.

Inner range Quadriceps



Lying on your back with a rolled up towel under your knee. Raise heel off the floor until knee is straight (keep the knee on the towel).
Hold for 5 seconds. Repeat 10 times.

Week 2

Calf Stretches

Assume the position shown below. With your operated leg behind you lean your body weight forward until you feel a stretch in the back of your calf. Hold for 30 seconds. Repeat 3 times.

Hamstring stretches

Assume the position shown below. Straighten the operated Knee until you feel a stretch on the back of your leg. Hold for 30 seconds. Repeat 3 times

Knee flexion in prone

While lying on your stomach. Slowly bend your knee. Hold for 30 seconds. Repeat 3 times.

Standing on one leg

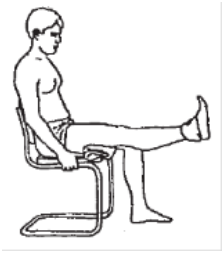
Stand on your operated leg while holding onto a sturdy object. Raise up slowly onto your toes. Repeat 10 times.

Week 3 onwards

Small knee bends in standing

In standing hold onto a secure surface. Gently bend both knees; this should only be a small movement of the knees NOT a deep squat. Then come back into a standing position.

Quadriceps strengthening



In sitting position, place a small weight (no more than 2 - 5 kgs) around the ankle of your **operated** leg. Straighten your knee. Hold for 5 seconds then lower leg slowly.

Step Up

Step up with one leg leading and then repeat with the other leg leading.

If you are active and play sport or have a manual job you need to start attending a local gym to strengthen the muscles around the knee. Most gym instructors will be able to devise a programme for you to building up your quadriceps and hamstring muscles. These might include:

- Use of static bicycle
- Use of stepper
- Use of treadmill progressing from walking to jogging as you are able.
- Quadriceps and hamstring exercises starting with small weights and low repetitions, building up as you are able.

Remember

- Exercises should be pain free
- To do hamstring and calf stretches after you have exercised.

Your anaesthetic

When it is time for your operation, a member of staff will take you from the ward to the operating theatre. They will take you into the anaesthetic room and the anaesthetist will get you ready for your anaesthetic.

To monitor you during your operation, your anaesthetist will attach you to a machine to watch your heart, your blood pressure and the oxygen level in your blood.

There are a number of anaesthetic choices for your operation. Your anaesthetist will explain which methods are suitable for you and help you decide which you would prefer.

- A general anaesthetic
- A spinal anaesthetic
- An epidural anaesthetic
- A combination of anaesthetics

General anaesthetic
General anaesthesia usually starts with an injection of medicine into a vein. A fine tube (venflon) will be placed in a vein in your arm or hand and the medicines will be injected through the tube. You will be unconscious for the whole of the operation and we will continuously monitor you.

Spinal anaesthetic
A spinal anaesthetic involves the injection of a local anaesthetic drug through a needle into your back to numb the nerves from the waist down. You will be awake during this procedure. The anaesthetic staff will support and reassure you during the procedure. A spinal should cause you no unpleasant feelings and usually takes only a few minutes to perform. Once the injection is finished you will be asked to lie flat as the spinal works is usually effective within 10 minutes. Once the injection is working fully you will be unable to move your legs or feel any pain below the waist.

Your anaesthetist will give you painkilling drugs and fluids during your operation. At the end of the operation you will be taken to the recovery room.

Pain relief after surgery
Pain relief is important as it helps you recover more quickly.

We will usually give you tablets, suppositories, or injections to make sure you have enough pain relief. Once you are comfortable and have recovered safely from your anaesthetic, we will take you back to the ward. The ward staff will continue to monitor you and assess your pain relief. They will ask you to describe any pain you have using the following scale.

0 = No pain
1 = Mild pain
2 = Moderate pain
3 = Severe pain

It is important that you report any pain you have as soon as you experience it.

What are the risks of anaesthetic?
Your anaesthetist will care for all aspects of your health and safety over the period of your operation and immediately afterwards. General anaesthesia is safer than it has ever been. If you are normally fit and well, your risk of dying from any cause while under anaesthetic is less than one in 100,000. This risk increases if you are older, having major surgery or have previous problems with your health.

Common side effects of having a general anaesthetic include drowsiness, nausea (feeling sick), muscle pain, sore throat and headache.

Side effects of having a spinal or epidural anaesthetic are headache (1%), low blood pressure, itching of the skin and temporary difficulty in passing urine requiring a catheter. Rare complications of a spinal anaesthetic are temporary loss of sensation in your legs, 'pins and needles' or muscle weakness in your legs. Permanent damage to the nerves is very rare. We will discuss with you the risks of your anaesthetic.

After your surgery

- Once the medical team are happy with your progress, we will usually take you from the recovery room to the general ward. You will need to rest until the effects of the anaesthetic have passed. You will have a drip in your arm to keep you well hydrated.
- Your anaesthetist will arrange for you to have painkillers for the first few days after the operation, as we mentioned earlier.
- You will have a large bandage on your knee. Under this bandage there will be stick-on dressings over the wounds (portals).
- After two days, you can remove the outer bandage and apply a double layer of tubigrip. The stick-on dressings underneath should stay on until the wounds have stopped oozing. Take the tubigrip off at night. Alternatively, you may be asked to leave the dressing on for 5 days and do not require tubigrip. When the wounds are dry, you may have a bath or shower.
- Excessive bleeding should not occur at any time. If excessive bleeding does occur, apply a pad of gauze, for example a clean handkerchief and apply a firm bandage over the wound for approximately 20 minutes. If bleeding does not cease after this time, consult casualty or your GP.
- We will encourage you to get out of bed and move around as soon as possible, as this helps prevent chest infections and blood clots. Usually, the physiotherapy or nursing team will help you with this.

You should see your doctor urgently if you:

- Have pain, redness, swelling or tenderness in the leg which is getting worse;
- Develop a high temperature;
- See fluid, pus or blood coming from the incisions;
- Develop numbness or tingling near to the joint.

Leaving hospital

Length of stay

How long you will be in hospital varies from patient to patient and depends on how quickly you recover from the operation and the anaesthetic. Most patients having this type of surgery will be in hospital for less than 24 hours.

Medication when you leave hospital

Before you leave hospital, the pharmacy will give you any extra medication that you need to take when you are at home.

Convalescence

How long it takes you to recover from your surgery varies from person to person. It can take up to three months. You should consider who is going to look after you during the

early part of this time. You may have family or close friends nearby who are able to support you or care for you in your home during the early part of your recovery period. After you return home, you will need to take it easy and should expect to get tired to begin with.

Dressings
You will have a large bandage on your knee. Under this bandage there will be stick-on dressings over the wounds.

After two days, you can remove the outer bandage. The stick-on dressings should stay on for five days. There may be dried blood on the dressings (this is normal), but there should be no signs of infection, such as yellow discharge or redness around the wounds. If there is, you should consult your GP.

There is no need to apply clean stick-on dressings unless the wounds are leaking. As soon as the wounds have stopped leaking and are dry, a dressing is no longer needed. You may also have a bath at this time.

Excessive bleeding should not occur at any time. If excessive bleeding does occur, apply a pad of gauze, for example a clean handkerchief and apply a firm bandage over the wound for approximately 20 minutes. If the bleeding does not cease after 20 minutes, consult Accident and Emergency or your GP.

Stitches
We will take out any clips or non-dissolving stitches that seal the wound after about 10 to 14 days. If you have left hospital before this time, we will ask you to make an appointment to visit your Practice Nurse to do this.

Personal hygiene
As soon as the wounds have stopped leaking, are dry and your stitches have been taken out, you may bathe or shower normal.

Diet
You do not usually need to follow a special diet. If you need to change what you eat, we will give you advice before you go home.

Exercise
We recommend that you avoid strenuous exercise and heavy lifting at least six weeks. You should do lighter exercise, such as walking and light housework, as soon as you feel well enough.

It is important that you do not return to jogging and running for six months and you should not return to contact sports for nine months after your operation.

Sex
You can continue your usual sexual activity as soon as you feel comfortable.

Driving
You should not drive until you feel confident that you could perform an emergency stop without discomfort – probably at least two weeks after your operation. It is your responsibility to check with your insurance company.

Work
How long you will need to be away from work varies depending on:
- how serious the surgery is;
- how quickly you recover;
- whether or not your work is physical; and
- whether you need any extra treatment after surgery.

You may return to light work after two weeks. However, return to heavy physical work will take longer and should be guided by your physiotherapist. Please ask us if you need a medical sick note for the time you are in hospital and for the first three to four weeks after you leave.

Outpatient appointment
Before you leave hospital we may give you a follow-up appointment to come to the outpatient department, or we will send it to you in the post.

If necessary, your physiotherapy outpatient appointment will be arranged for you at your local hospital where you Physiotherapist will guide you through the stages of rehabilitation and progress your exercises.

Contact details
If you have any specific concerns that you feel have not been answered and need explaining, please contact the following:

- **Alexandra Hospital**
  Ward 16 Staff (phone 01527 512104)
  Visiting times 2.30pm to 4.30pm and 6.30pm to 8:00pm
- **Kidderminster Treatment Centre**
  Ward Nursing Staff (phone 01562 512356)

Other information
The following internet websites contain information that you may find useful.
- www.patient.co.uk
  Information fact sheets on health and disease
- www.rcoa.ac.uk
  Information leaflets by the Royal College of Anaesthetists about 'Having an anaesthetic'
- www.nhsdirect.nhs.uk
  On-line health encyclopaedia
- www.worcestershirehealth.nhs.uk/acute_trust
  Worcestershire Acute Hospitals NHS Trust

Patient Experience

We know that being admitted to hospital can be a difficult and unsettling time for you and your loved ones. If you have any questions or concerns, please do speak with a member of staff on the ward or in the relevant department who will do their best to answer your questions and reassure you.

Feedback

Feedback is really important and useful to us – it can tell us where we are working well and where improvements can be made. There are lots of ways you can share your experience with us including completing our Friends and Family Test – cards are available and can be posted on all wards, departments and clinics at our hospitals. We value your comments and feedback and thank you for taking the time to share this with us.

Patient Advice and Liaison Service (PALS)

If you have any concerns or questions about your care, we advise you to talk with the nurse in charge or the department manager in the first instance as they are best placed to answer any questions or resolve concerns quickly. If the relevant member of staff is unable to help resolve your concern, you can contact the PALS Team. We offer informal help, advice or support about any aspect of hospital services & experiences.

Our PALS team will liaise with the various departments in our hospitals on your behalf, if you feel unable to do so, to resolve your problems and where appropriate refer to outside help.

If you are still unhappy you can contact the Complaints Department, who can investigate your concerns. You can make a complaint orally, electronically or in writing and we can advise and guide you through the complaints procedure.

How to contact PALS:

Telephone Patient Services: 0300 123 1732 or via email at: wah-tr.PET@nhs.net

Opening times:

The PALS telephone lines are open Monday to Thursday from 8.30am to 4.30pm and Friday: 8.30am to 4.00pm. Please be aware that a voicemail service is in use at busy times, but messages will be returned as quickly as possible.

If you are unable to understand this leaflet, please communicate with a member of staff.