

Patient Information

Your Knee



Orthopaedic Department
Shrewsbury and Telford Hospital NHS Trust

Princess Royal Hospital
Apley Castle, Telford, Shropshire TF1 6TF.
Tel: 01952 641222 ext 4034

Website: www.sath.nhs.uk

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Welcome to the Princess Royal Hospital Telford

The information in this booklet aims to give you advice answer some of your questions about your Total Knee Replacement (TKR), before and after your operation. It is important that you play your part in your treatment and the aftercare of your new joint, so that it may improve your quality of life.

If you do not understand any part of this booklet, or if you have any further questions or comments, please write them down and bring them with you to your next appointment when they can be discussed. Alternatively if you feel you would like to talk to the Nurse Practitioner who works with your Consultant surgeon please call:

Please remember that the information in this booklet is only for guidance. Every patient is treated as an individual and treatment may vary depending on your consultant

The Hip & Knee Helpline

Notes

Telephone 01952 641222 ext. 4034

A Nurse Practitioner will answer your call if available, otherwise **please leave your name, telephone number and hospital number (if known)** on the answer machine and a Nurse Practitioner will call you back as soon as possible.

Notes Section

Please use this section to make a note of any questions or concerns that you may have or consider important. **Please bring this booklet to your outpatient appointments.**

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What Is A Knee Replacement?

A Knee Replacement is a major operation for severe Arthritis. The operation involves either complete removal of the knee joint and replacing it with a new joint made from metal and plastic components, or partial removal of the joint surfaces (usually 1 side only) - a uni-condylar replacement. This surgery is carried out to reduce the pain, and try to improve function. The surgeon will decide which form of replacement is best for you.

Benefits of a knee replacement

These include an aim to reduce joint/arthritis pain, along with an increase in mobility. As a result, many patients report an improved quality of life and a renewed ability to do more.

It is important that **you play your part in your treatment and the aftercare of your new joint.** By doing so your new joint should improve your quality of life.

Alternatives to surgery

The alternatives are medication to try and control the pain and physiotherapy to try and improve joint movement and reduce or control stiffness. However, the alternatives to this surgery have usually been discussed and tried prior to deciding that surgery is now appropriate and then being put on the Waiting List.

Outpatient Clinic Appointments

Date	Seen by	X-Rays	Comments

Patient UK

Provides leaflets on health and disease translated into 11 other languages as well as links to national support/self help groups and a directory of UK health websites.
Website: www.patient.co.uk

Arthritis Research Campaign

Arthritis Research Campaign is a UK charity dedicated to curing it. Their website is for anyone who wishes to know more about arthritis, the charity and how to help find the cure.

Telephone: 0870 850 5000

Email: info@arc.org.uk

Website: www.arc.org.uk

National Joint registry

Whether you are a patient who is going to be undergoing surgery in the coming weeks, or a friend or relative of a patient, this area gives you information about what to expect and why the work of the NJR is so valuable and how you can help.

www.njrcentre.org.uk

British Orthopaedic Association

Patient Information

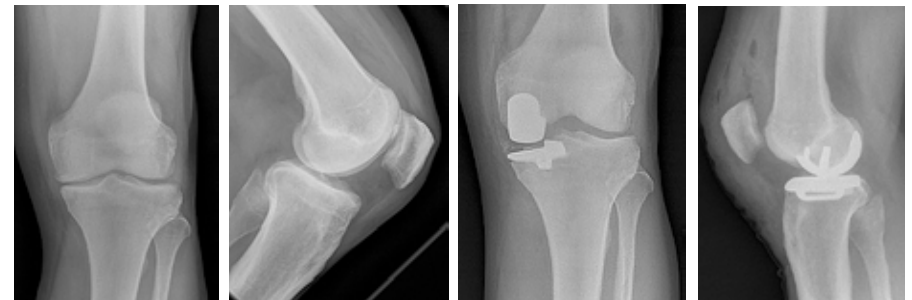
<http://www.boa.ac.uk/PI/Pages/Patient-Information.aspx>

Website: www.sath.nhs.uk

Preoperative and postoperative images of total and partial knee replacement:



Knee arthritis and after Knee replacement [front & side view].



Knee minimal arthritis and Partial knee replacement [front & side view].

Risks of a Total Knee Replacement operation

Total knee replacement is a major operation. It has a very high success rate (90% less pain) but as with any major operation there are some risks involved. Patients are seen and assessed in a pre-operative assessment clinic to make sure they are as well as possible before the operation. Every effort is made to reduce the risks of all complications.

Complications

As with any operation there is a risk from both the anaesthetic and the operation. This is major surgery.

Pain

A total knee replacement is major operation and can be painful although some patients tell us it is not as painful as an arthritic joint. You will be prescribed analgesia (pain relief) and it is advisable to take this regularly to enable you to effectively perform your exercises. Bearable post operative pain and inflammation is part of the healing process and takes time to settle.

Bruising and swelling

You will have severe bruising and swelling, but this will usually settle. However, it may take several weeks and your leg may swell towards evening for up to 6 months after your operation.

Wound infection

There is also a risk of infection. Nursing staff will observe and re-dress your wound as necessary. Chest infection can occur post-operatively; early mobilisation is encouraged and can help prevent chest infection. If you are a smoker this increases the risk of chest infection and can delay wound healing.

Further information is available from:

<http://www.boneandjointproblems.com/index.html>

Provides some explanations around your joint problem with possible treatment options.

NHS Direct - A nurse-led advice service, run by the NHS, for patients with questions about the diagnosis and treatment of common conditions.

Telephone: 0845 4647

Website: www.nhsdirect.nhs.uk

NHS Local – Provides a range of services for the public in the West Midlands

www.nhslocal.nhs.uk

<http://www.nhs.uk/conditions/Knee-replacement/Pages/Kneereplacementexplained.aspx>

Enhanced Recovery:

The following websites provide further general information about enhanced recovery:

<http://www.nhs.uk/conditions/enhanced-recovery/Pages/Introduction.aspx>

<http://nhslocal.nhs.uk/search/Enhanced%20Recovery>

Equip

A West Midlands NHS website which signposts patients to quality health information and provides local information about support groups and contacts.

Website: www.equip.nhs.uk

Who can I contact for help?

If you have any questions, note them down and ask the Nurses, Doctors or Therapists to answer them for you.

Hip and Knee Helpline - 01952 641222 and when directed to do so key in the extension number: - 4034

Nurse Practitioners:

Vicki Gill..... 01952 641222 (bleep no. 002)

Lorraine Petford..... 01952 641222 (bleep no. 203)

Jill Kelson 01952 641222 (bleep no. 086)

Pre-Assessment 01952 641222 ext. 4763

Orthopaedic Ward 11 01952 641222 ext. 4011

Occupational Therapy 01952 641222 ext. 4102

Physiotherapy 01952 641222 ext. 4103

Complaints

If you have a complaint, please contact the Nurses or Doctors straight away. If they are unable to resolve your complaint, then please ask to use the Hospital Complaints Procedure. Your complaint will be investigated and addressed.

Patient Advise and Liaison Service (PALS)

PALS are a confidential service that will act on your behalf when handling patient and family concerns. They can also help you get support from other local or national agencies..... 01952 282888

Blood clots

A DVT (deep vein thrombosis) is a blood clot in a vein. This may present as a red, painful and swollen leg. The risks of a DVT are greater after any surgery (especially bone surgery). In some cases part of the clot may pass in the blood stream and be deposited in the lungs (a pulmonary embolism – PE). This is a very serious condition which affects your breathing. You will be given medication for 5 weeks post surgery through a needle to try and limit the risk of DVTs forming (you will be shown how to administer this so you can do it yourself post discharge).

Starting to walk and getting moving is the best way to prevent blood clots from forming. Regular leg exercises and ankle rotation, pulling and pushing your toes towards and away from your body helps to avoid a DVT.

Fracture/Bone Damage

Your surgeon will reshape your bone to accommodate your new knee replacement implants. There is a slight risk that the bone can fracture. This may require fixation, either at the same time or at a later operation.

Pressure sores

If you remain in bed for any length of time there is a risk of damage to the skin and soft tissue (pressure sores). You will sit out the first day following surgery and be encouraged to mobilize.

Nerve damage

Due to the nature of the surgery, there is a slight risk that damage to nerves may occur. Superficial nerve damage may also occur. This commonly leaves an area of painful numbness which can be unpleasant but not serious.

Knee Stiffness

The Physiotherapist will work with you and give guidance to make your rehabilitation as easy and quick as possible after your surgeon has worked their magic with the operation but the person that gets you better is **YOU!** You need to have the courage and determination to perform your exercises as instructed, and safely work through any pain or discomfort if possible. Painkillers may support you to do this.

Small Risk of Death

With all surgery there is a small risk of death (1 in 200 patients) due to the stress of the Anaesthetic or surgery, or pulmonary embolism (a blood clot forming in the lungs). This risk is largely dependent upon your health history, which **must** be accurate.

Stroke and heart attack

Strokes and heart attacks can also occur usually in higher risk patients. Again, this risk is largely dependent upon your health history, which **must** be accurate.

Do's and Don'ts

- Do take regular short walks on even ground. Gradually increasing the distance as you get stronger.
- Do wear sensible shoes.
- Do use crutches until advised otherwise.
- Do when climbing stairs – put un-operated leg first
- Do when going downstairs – put operated leg first
- Do continue with Ankle and Foot exercises at Home
- Avoid twisting your knee
- Do not sit or lie with a pillow underneath your knee, this may encourage a permanently bent knee

Follow up

Your first check up appointment will normally be within 10 weeks. If all is going well at this stage you can expect to return to light exercise including gardening, walking, swimming and golf. You should avoid high impact sports such as jogging.

Do enjoy your new knee

Kneeling and twisting the knee

It is advisable to avoid kneeling on or twisting your new knee for **12 weeks**, as it will be painful and needs time to settle in. You can go swimming when the wound is healed, do not do the breast stroke as this twists the knee. Stick to front / back crawl. Most patients cannot or prefer not to attempt kneeling.

Driving

It is usually 6 -12 weeks before you can start driving and only when your leg is strong enough to use the brake / clutch. The reaction time of the operated leg is not back to normal until 8 weeks after the operation. Do not attempt to drive until **after** your first out patient follow-up. You may need to check with your insurance company before you start driving that you are covered.

Sexual Intercourse

This is up to you and how you feel.

Work

If you still work this will be discussed with you but usually you will be off work 12 weeks.

Flying

Flying is not recommended for 3 months following a Total Knee Replacement due to the increased risk of blood clots. It is advisable not to go on a long haul flight (more than 4 hours) for 6 months.

Our Enhanced Recovery Programme - Helping patients to get better sooner after surgery

The Orthopaedic Department at The Princess Royal Hospital, Telford uses the system of enhanced recovery for all planned knee replacements.

What is Enhanced Recovery?

It is a progressive approach to planned surgery that ensures patients are in the best condition for treatment, have different care during their operation, and experience the best possible post-operative rehabilitation and recovery.

Patients on enhanced recovery pathways recover more quickly following surgery, and so can leave hospital and get back to normal activities sooner.

The aim of the programme is to enable a quick yet safe recovery.

What are the benefits of Enhanced Recovery?

The enhanced recovery programme is about improving patient outcomes and speeding up a patient's recovery after surgery. Our programme focuses on making sure that patients are actively involved in their own recovery process. It also aims to ensure that patients always receive best and proven care at the right time.

There are four main parts to our enhanced recovery programme:

- Pre-operative assessment, planning and preparation before admission (including practising your post-operative exercises before you come into hospital).
- Reducing the physical stress of the operation (smaller incision, unique anaesthetic techniques, and reduced time on the operating table).
- A structured approach to immediate post-operative management, including regular pain relief and prevention of nausea and vomiting.
- Early mobilisation (and fewer complications as a result).

Having an operation can be stressful, both physically and emotionally. Enhanced recovery programmes aim to get you back to full health quickly.

Research shows the earlier you get out of bed and start walking, eating and drinking after your operation, the better.

How does it work?

Depending on your operation, you could go home sooner than traditionally expected. Therefore, it is important to plan and prepare for your return home before you go into hospital.

At your pre-assessment visit, we will review your home circumstances and carer arrangements for when you return home.

Sick Notes

Please ask the nurses for sick notes; these will only cover the time you are in hospital. Any others come from your GP.

Discharge Arrangements

The Therapist will visit you while you are in hospital to ask questions about your home situation. If you are concerned about how you will manage on discharge speak to your Therapist or your ward nurse.

Equipment

The Therapist may recommend equipment that could help you on discharge. The main area of difficulty is bathing. You will not be able to get into a bath for 12 weeks. If you have a shower over your bath you may benefit from a bath board.

After You Leave Hospital

You may feel tired and require rests; this should pass within a few weeks. You must try to get back to normal as soon as possible, so do not sit for long periods as it is important to move about to prevent blood clots or excessive joint stiffness. The amount of walking is not restricted. Be guided by the physiotherapists. 3-4 twenty minute gentle walks with crutches per day in the first few weeks is sufficient.

Bending comes as the swelling reduces but please work on leg extending daily.

Wound Care - Clips or Sutures?

Your dressing will be removed and your wound checked. It is not necessary to have a dressing once the wound has healed. If you have clips to your wound these will normally be removed about 2 weeks following your operation. The staff will organise their removal at your GP surgery or by the District Nurse as you have usually gone home by this time.

If the wound is sutured they are usually absorbable. Dissolvable sutures dissolve by themselves over a few weeks, if however the area becomes swollen or painful or any discharge appears you need to see your GP immediately.

What about informing my relatives and contacts?

With your permission, the nurses and doctors will keep your relatives and contacts up to date with your progress.

How long will I be in Hospital?

The average stay following a knee replacement is 3 - 5 days. You will not go home until you are ready. Remember, everyone is different.

Before You Leave Hospital

You will either be given an appointment or one will be sent to you for you to come back for a check up within 10 weeks. You need to use your crutches for 6 weeks. You may need to continue physiotherapy as an outpatient and this appointment will be made prior to discharge.

Preparation for your procedure - Before you come into hospital.

Home Exercises

You are shortly coming into hospital to have your knee joint replaced. Your Physiotherapist recommends that you attempt the following exercises for the next few weeks before your admission for this operation: -

Quadriceps Strengthening Exercises

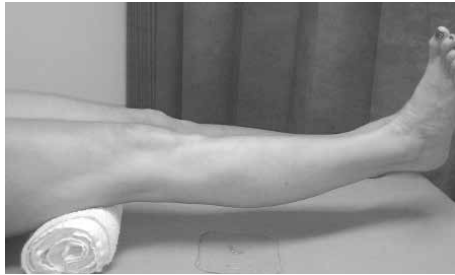
Static quadriceps

1. Sitting on a firm surface with your back supported
2. Tighten your knee so that your knee is as straight as possible
3. Pull your toes up towards you
4. Hold for 10 seconds, and then slowly lower your leg back down
5. Repeat 10 times three times a day



Inner range quadriceps

1. Sit on a firm surface
2. Place a rolled towel under your leg to bend it.
3. Keeping the back of your knee on the towel, raise the lower part of your leg until the knee is straight and your heel is off the surface.
4. Hold for about 10 seconds, and then relax.
5. Repeat 10 times. Please repeat this 3 times daily.



Straight leg raise

- Sitting on a firm surface as the first exercise
Tighten your knee so that your knee is as straight as possible
Pull your toes up towards you
Lift the leg so that your heel is 4-6" off the surface
Hold for 10 seconds, and then slowly lower your leg back down
Repeat 10 times three times a day



Day one – after the operation

You will be encouraged to eat and drink as normal. If you have a drip, this will normally come down. The nursing staff will assist you with your toileting needs and washing, and encourage you to change your position to ensure you do not become sore or stiff. You are encouraged to dress in your usual clothes. Your dressing will be reduced to a 'lighter' dressing. If you have a drain it will be removed (usually painless). You will have bloods taken.

You may be escorted to have an x-ray to check the position of your knee replacement. Don't worry if this is not done on the first day as it does not affect your progress.

You will be assisted to stand and sit out in the chair by either a Physiotherapist or Nurse. You will start bending and straightening your knee, and strengthening the muscles around your knee. You will walk at first using a Zimmer frame, then progress onto crutches when you have regained some confidence. You may have a splint on your knee to hold it straight. You will be shown how to safely administer the blood thinner (Tinzaparin), given as a small injection under the skin with a fine needle.

Sleeping

You will be offered painkillers rather than sleeping pills to help you sleep. If you cannot sleep despite the painkillers please let the nurses know. Sometimes a hot drink or reading a few pages of a book can help relax you off to sleep. Remember you probably won't sleep the night of the operation as you have already 'slept' whilst under anaesthetic. It also tends to be noisy in hospital wards, and remember you are out of your normal environment.

Washing

You can wash the wound as soon as the clips are removed (usually after 12 days). Soap and tap water are entirely adequate. Salted water is not necessary. You can wash or bathe the rest of yourself normally.

The Days to Discharge

The Physiotherapist will see you daily, gradually increasing your exercises and walking. You will be shown how to use the stairs safely with your crutches, and daily Physiotherapy will continue until you are ready for discharge home.

You will be shown how to climb the stairs /steps prior to discharge by the physiotherapist.

Knee flexion

Sitting on a firm surface as the first exercise
Bend your knee as far as it will go taking your heel towards your bottom
Hold for 10 seconds and then slowly straighten your knee keeping your foot on the surface
Repeat 10 times three times a day



Hamstring Strengthening Exercises -

Sitting on a firm surface as the first exercise.
Bend your knee to a height of about 6 inches.
Tighten the knee by digging down and back with your heel.
Hold for about 5 seconds, and then relax.
Repeat 10 times. Please repeat this exercise 3 times a day



The Pre-admission Clinic

An appointment will be forwarded to you to attend the pre-admission clinic. **Failure to attend could result in postponement of your surgery.**

The clinic is designed to assess your fitness for surgery by taking a detailed health and surgical history. We also perform an assessment of your home circumstances and your usual day-to-day abilities and limitations based upon your health. You will be asked to complete an orthopaedic assessment questionnaire as part of our assessment. We use all this information gathered to start to assess and plan what additional help and support you may need during your hospital stay and on your return home. **The appointment can take up to three hours.** This Clinic is run by Specialist Nurses, and you may see a Doctor or Orthopaedic Nurse Practitioner. A nurse will make sure all tests, investigations and routine paperwork are completed, and depending on your history, an Anaesthetist may also wish see you to assess risks and plan any special measures. Any questions you may have can be asked in the clinic, and you may like to bring along a friend or relative for support.

Please bring with you a current medicine prescription or your medication in their original boxes, and a sample of urine.

Moving whilst in bed

You will be encouraged to move and change position regularly whilst you are in bed; this is to relieve pressure on your back and bottom. This movement is important as it reduces the risk of pressure sores, blood clots, chest infections and will make it easier when you get up with help and start to walk.

YOUR MOVEMENT MAY BE RESTRICTED TEMPORARILY IF YOU HAVE HAD A SPINAL ANAESTHETIC – your legs will feel numb and you will need help to stand.

Drinking and Eating

You can eat and drink as normal on your return to the ward; this will obviously depend on how you feel. You should try to eat a light diet and drink normally as soon as you feel able as this will make you feel better generally, as well as helping to clear the after-effects of the anaesthetic quicker.

Passing Urine

It is important that you pass urine and empty your bladder within 6-12 hours of the operation. If you find using a bedpan or bottle difficult, the nurses may assist you to the toilet or commode. If you still cannot pass urine, let the nurses know and then steps can be taken to correct the problem. This may mean that you have to have a tube passed into the bladder, this is called a catheter. One will be passed if necessary and will be removed as soon as you are mobile enough to walk to the toilet. You may have to have antibiotics while the catheter is in place to help prevent any possible infection.

away. This can help to reduce bruising and swelling after this operation. It may be a special type of drain so that some of your own blood may be transfused back to you.

Your post-operative pain management will be decided by your surgeon and anaesthetist, personalised to your needs. Occasionally we use a pump connected to your arm delivering a 'pain killing' drug. It is called a patient-controlled analgesi (PCA). The amount of 'pain killer' is controlled by pressing a button. The Anaesthetist and Nurses will explain how this works. It is usually discontinued after 24 hours. After this you will be offered painkiller tablets regularly.

You may have oxygen either via small, short tubes in your nostrils or through a face mask for a few hours or overnight on your return to the ward. An Intermittent calf compression device may be attached to your calves to help prevent blood clots and help circulation whilst in bed.

Constipation and nausea

It is worth remembering that most painkillers can cause constipation. You are advised to inform the ward staff if you experience problems. It is quite normal for your bowels not to open for a day or so after the operation (depending on your usual bowel pattern).

Orthopaedic Nurse Practitioner

The operation will be explained to you, including its risks and benefits. You will be asked to sign a consent form for the operation and for the National Joint Registry. Your usual medicines will be discussed with you and recorded in your notes. You will be asked to complete the Oxford Knee score questionnaire (unless you have already completed one).

Doctors Appointment

The doctor will interview and examine you if necessary.

Diet

You will recover more quickly if you are healthy beforehand. Try to eat a healthy diet in the time leading up to your operation. If you have any concerns about your diet, discuss them with your GP. If necessary, you can be referred to a dietician. If you are overweight, it is **very important** to reduce your weight in preparation for your surgery. This will help to reduce any risks associated with an Anaesthetic.

You may be supplied with 6 cartons of a high carbohydrate lemon flavoured drink. These drinks are an important part of your pre-operative preparation and help to improve your post-operative recovery. **The evening before your operation** you will need to drink **4** cartons. **The day of your operation** you may need to drink **2** cartons before **6.30am**.

Smoking

Smoking cigarettes will compromise healing after surgery and make you more prone to complications. It is best to stop smoking. If you wish to give up smoking, we can refer you to the Hospital Stop Smoking Service (previously called Help 2 Quit). Alternatively you can contact the Smoking Cessation Nurse on extension 4464 or bleep 256, or your GP practice.

Contraceptive Pill or Hormone Replacement Therapy (HRT):

Women may need to stop taking the contraceptive pill or HRT **six weeks** before treatment because of the increased risks of blood clots.

What happens when you arrive at hospital?

Welcome to the Ward

You will be shown to your bed and then have some basic tests done, such as pulse, temperature, blood pressure and urine tested.

Medication

You will be asked to hand in any medicines you may be taking, so that your drug treatment in hospital will be correct. Please tell the nurses of any allergies to drugs or dressings.

Visit by the Anaesthetic Team

The Anaesthetic Team, who will be giving your anaesthetic, will interview and examine you.

Transfer to Theatre

You are taken to Theatre on your bed, accompanied by a Ward Nurse and a Theatre Porter. You will be wearing a cotton gown. Wedding rings will be fastened with tape. Removable dentures and spectacles will be left on the ward (or removed in the reception area of the theatre). There will be several checks on your details on the way re: dental treatment and previous anaesthetics you have had plus any anaesthetic problems in the family, this may seem repetitive but is essential to your safety during the anaesthetic and operation.

What happens during the operation?

Your surgeon will make a cut over the front of your knee to remove the damaged joint. The joint is replaced with the new knee joint and your wound will be closed with either clips or dissolvable stitches and then covered by a bulky dressing, you may also have a splint in place.

What happens after the operation?

Although you will be awake a minute or two after the operation ends, many patients don't remember anything until you are back in the ward. On return to the ward you will be monitored. This may include checking your blood pressure, pulse, oxygen saturation and temperature. You may have a drip into a vein in your hand/arm until you start drinking again and antibiotics may also be given to you this way.

Occasionally you may have a tube coming from beneath your knee wound into a bottle to drain any excess blood