INFORMATION FOR PATIENTS

Total knee replacement: The enhanced recovery programme

This leaflet aims to explain the enhanced recovery programme after total knee replacement surgery, to outline certain common risks and complications and explain what will happen when you come to hospital for your operation.

Introduction
A knee replacement has been recommended for you due to the severity of your arthritis. It is important you understand what to expect and feel able to take an active role in your treatment and recovery.

Your orthopaedic team consists of:

- Consultants
- Registrars and junior doctors
- Physiotherapists
- Occupational therapists
- Ward nurses
- Anaesthetists
- Theatre staff
- Pain management nurses
- Preoperative assessment nurses.

During your stay, which will be around 2-3 days, until you are safe to manage you will see a lot of the orthopaedic team members. They are here to assist with your needs and provide you with the best advice.

What is the enhanced recovery programme?
The aim of the programme is to increase your independence and allow you to return home safely and quickly and continue your rehabilitation.

Research indicates that improving health BEFORE surgery and early you do your exercises in bed, the better the overall result. Therefore, it is important for you to be in the best condition you can be. This includes, being close to your ideal weight, cutting out smoking and reducing alcohol intake. Furthermore, any health condition you may have should be well controlled.
What is a knee replacement?
In this operation an orthopaedic surgeon replaces the worn or damaged joint with an artificial one.

Benefits of surgery
A knee replacement is designed to provide benefits such as:

- **Reduced pain**
The majority of patients experience pain relief. It is normal and expected to have some degree of soreness immediately after the operation.

- **Decreased stiffness**
The aim is for you to have less joint stiffness than before the operation.

- **Increased function and mobility**
With a combination of reduced pain and stiffness your overall function and mobility is likely to be improved.

Risks of surgery
Knee replacement is generally a very successful operation and patients generally get an excellent result. There is however, a risk of complications; some of these are listed below:

- **Deep vein thrombosis (DVT - blood clot in the leg) and pulmonary embolism (PE - blood clot in the lung)**
DVT can occur after any operation but is more common after operations on the leg. It is also more common in patients who have had clots previously and in those people who are significantly overweight. All patients undergoing a knee replacement operation will have a risk assessment and managed appropriately. Sometimes a DVT may occur despite this.

  On rare occasions a DVT may break off and travel to the lungs resulting in a pulmonary embolism (PE). DVT may cause the leg to swell, and become excessively painful.

  A PE may cause chest pain or shortness of breath or significant air hunger.

Several methods are used to reduce the risk of a DVT and PE:

1. We mobilise patients as soon after surgery as their condition allows - sometimes it may be on the day of the surgery.
2. The use of elastic stockings during the day time after the operation.
3. All patients are given a blood-thinning agent in the form of injection or tablet, or a combination.
4. You will be discharged with a prescription of blood thinning medication.

- **Joint infection**
You will be screened for bacteria before you come into hospital to try to reduce the chance of infection. You may be given a special wash in order to minimise the risk of infection.

If you feel you are suffering from any kind of infection such as a water infection, tummy bug or tooth infection, please make the orthopaedic team aware before the operation.
You will be prescribed antibiotics in order to reduce the risk of infection. Symptoms of infection include, feeling unwell, running a temperature, a sharp increase in pain, or an increasingly leaky wound.

During your stay in the hospital you will be monitored regularly. However, if you experience any of these you should call the ward or the number at the end of this document or get in touch with your GP.

- **Loosening of the joint**
  This is where the implant can loosen from where it is fixed to your bone. Total knee replacements do have a limited life span of about 15 years.

- **Stiffness**
  Stiffness can sometimes occur and some patients can end up with less movement then they had before surgery. Evidence shows that regular exercises from before the operation can help. After the operation, putting ice on your knee and doing your exercises early helps in reducing this risk.

- **Nerve injury**
  All patients with knee replacements have an area on the side of their knee which remains numb for up to 2 years after operation. Rarely, a nerve at the back of the knee may be damaged which can compromise function.

- **Fracture**
  There are occasions when a bone may break during this procedure. Minor and tiny pieces of bone breaking are not uncommon and generally are of no significance. Very rarely it can be serious.

- **Medication and anaesthetic complications**
  Some patients experience nausea and vomiting. Some experience dizziness and low blood pressure. Steps are taken to reduce these and keep them to a minimum. You can help by eating and drinking after your operation, moving your feet and doing your exercises in bed.

- **Persistent pain**
  Knee replacement is a very good treatment for arthritis. However, the knee is never perfect. Most patient experience minor aches around the knee. Occasionally, although everything is fine, some patients experience moderate levels of pain and discomfort.

- **Muscle weakness**
  Occasionally, weakness in the muscles around the knee can occur causing you to limp and be painful. This is because they are cut during the surgery and take time to heal. Healing can also depend on the condition of the muscle before the operation. You can help by doing your exercises before and after your operation.

- **Memory problems/confusion**
  These can be related to the anaesthetic or the pain killers, or simply as result of the stress of the operation.
Summary
Knee replacement is a successful operation, but there are risks which may affect a small number of patients.

Preoperative assessment
Most patients will have an initial health screen on the day a decision is made to place their name on the waiting list.

Nearer the time of your operation, you will have a further visit to the department. You will have blood tests at either or both the visits and swabs will be done to ensure you are not carrying organisms which can cause infection.

These assessments are to ensure you are fit for surgery. Information will be given to you about your operation and about the enhanced recovery programme. You will also be given advice about any medications you may need to discontinue prior to surgery.

You will have some simple checks on your heart and lungs and blood tests will be taken. You will be asked about your previous medical history - please bring your regular prescriptions with you.

You will be invited to attend a hip and knee school group. Attendance at this group is compulsory. It will take place in the therapy department. The physiotherapist will discuss exercises, mobility expectations and ongoing recovery after discharge.

You will also be provided with elbow crutches to take home and practice with. The occupational therapist will also discuss their role and provision of equipment.

Your expected admission and predicted discharge date will also be discussed. You will only be discharged home when you are medically stable and can manage safely.

Your nurse will discuss your home circumstances with you so that together we can plan any help you may need after you are discharged.

You will receive a height sheet from occupational therapy, which you will need to complete and return to the hospital as soon as possible. This will enable the occupational therapy department to ensure that any equipment you will need on discharge will be available to you.

We aim to contact you by phone before admission; if this is not possible you will be assessed and any necessary equipment can be provided whilst you are on the ward.

Admission
You will be admitted on the day of your operation. Please be aware there may be some waiting about on this day so you may wish to bring a book or magazine to read.

You can eat until six hours before your operation. Up to two hours before your operation you can drink water or clear fluids such as diluted squash or cordial, or black tea or coffee.
A blood test may be necessary and a member of the surgical team will mark your leg for surgery.

**Anaesthesia for your operation**
When you are admitted, you will be seen by an anaesthetist who will discuss your anaesthetic and postoperative pain relief with you. For your procedure you will normally be offered a spinal anaesthetic with or without sedation. This involves a small injection at the base of the spine. This is a very safe and effective anaesthetic, which will temporarily numb you from the waist down and will help your early mobilisation. You will be fitted with a compression stocking on your un-operated leg before you go for your operation. The second stocking will be fitted on your operated leg in recovery.

**The operation**
At the end of the operation your knee will be bandaged and observations will be recorded regularly. From the operating theatre you will go into the recovery ward. The staff here will frequently:

- Check your general condition
- Take observations such as pulse and blood pressure
- Check your wound
- Assess if you need any further pain relief.

You will be given a drink in recovery or soon after you arrive back on the ward, and you will have an x-ray on the way back to the ward.

The ward staff will continue monitoring:

- Your temperature, pulse and blood pressure
- Your bladder and bowel function
- The return of feeling in your leg or lower body following the spinal anaesthetic.

You will be rolled to one side of the bed; changes in position help to prevent pressure sores.

**Pain relief**
Knee surgery is painful and we cannot make you completely pain free, but we will do all we can to manage your pain. You will have regular pain relief prescribed but if you feel your pain relief is inadequate at any time then you must let the ward nurses know so they can help you get more comfortable.

**Day of the surgery (day 0)**
You will be encouraged to sit up in bed after completion of the surgery and to eat and drink. You will be encouraged to move your feet and you should try to do the exercises that have been taught to you. If appropriate, the physiotherapist will encourage to get out of bed and start walking.

**Postoperative (day 1)**
You will be encouraged to be as independent as possible.
You will usually get dressed into your normal clothes. Please bring easy fitting clothes and well-fitting slippers when you are admitted.

You will be given pain relief and any other drugs you normally take. You will be encouraged to do the exercises taught to you at the hip and knee school. Further exercises will be provided. Assistance with mobilising to the toilet and dressing will also be given.

Compression stockings will be fitted and ice will be offered as often as needed. The physiotherapist will visit you daily during your hospital stay. Occupational therapy staff will undertake a full assessment on day 1 or day 2 after your operation. Your equipment will already be at home; if not this will be supplied to you during your hospital stay.

**Postoperative (day 2)**
You will be encouraged to attend to your own personal hygiene and continue with mobilising, including practicing stair climbing if necessary.

**Postoperative (day 3)**
You will attend to some of your own personal hygiene and continue mobilising. Further practice climbing stairs will be carried out if necessary. Once discharge criteria are met you will discharged home.

On discharge, you will be made an appointment with the outpatient physiotherapy team for the joint class.

**Follow up**
Following discharge, if you are concerned about your wound or anything else, please inform the ward.

If your GP or district nurse prescribes antibiotics for a possible wound infection you will need to let the ward, your consultant know as soon as possible. Your clips need to be removed about 12 to 14 days after the operation. The nursing staff will let you know the arrangements for this. You will be given an outpatient appointment to come back and see either the consultant, one of his team or an orthopaedic nurse specialist.

**At home**

*Will I be able to cope?*
You will be discharged when you are able to cope at home. You will need help with shopping and housework.

*Work and leisure*
It is often possible to return to work 2-3 months after your operation, however, each individual is different and your consultant will advise you.

Light exercise may be resumed at the advice of the consultant or physiotherapist.
You will be able to sit in the car and go out. When getting in the car push the seat fully back and place a cushion on the seat to make it level. Stand with your back facing into the car, sit down on the seat and gently slide yourself round (do not twist). Putting a plastic bag on the seat can help.

**When can I drive?**
You will normally be able to drive 6-8 weeks post operatively. You need to be safe and able to perform an emergency stop. You will also need to check with your insurance provider.

**What sort of food should I eat?**
A balanced, varied diet is recommended. Please continue to eat normally.

**Do I need to keep taking painkillers at home?**
Only continue to take pain relief if you require it.

**Exercises**
Do your exercises 3 to 4 times daily. Slowly increase your walking distance. It is normal for your leg to be swollen for some time. Continue with elevation at home when resting and after your exercises.

**When can I fly?**
The earliest you can fly is 6 to 8 weeks after your surgery when the risk of DVT or other complications returns to normal. Whilst going through customs, your artificial knee may cause security equipment to beep and you may need a closer inspection. There are no letters or documents that customs accept.

**Contact details**
You can contact ward 11 and speak to nurse in charge who should be able to help and advise you - telephone 01623 672367.

**Further sources of information**
NHS Choices: [www.nhs.uk/conditions](http://www.nhs.uk/conditions)
Our website: [www.sfh-tr.nhs.uk](http://www.sfh-tr.nhs.uk)

**Patient Experience Team (PET)**
PET is available to help with any of your compliments, concerns or complaints, and will ensure a prompt and efficient service:
**King's Mill Hospital**: 01623 672222
**Newark Hospital**: 01636 685692
**Email**: sfh-tr.PET@nhs.net

If you would like this information in an alternative format, for example large print or easy read, or if you need help with communicating with us, for example because you use British Sign Language, please let us know. You can call the Patient Experience Team on 01623 672222 or email sfh-tr.PET@nhs.net.
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To be completed by the Communications office
Leaflet code: PIL202104-04-TKRER
Created: July 2015 / Revised: April 2021 / Review Date: April 2023