Patient Information



Your Exeter Primary Hip Replacement



Please bring this leaflet when you attend pre-operative assessment clinic & for your operation

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The Exeter Hip Unit

Introduction

The Princess Elizabeth Orthopaedic Hospital (PEOH) was founded in 1927 as a result of efforts by surgeon Brennan Dyball and Dame Georgina Buller. In 1931 Norman Capener was appointed as surgeon in charge of the PEOH. Capener was fundamental to the establishment of orthopaedic surgery throughout Devon and Cornwall, overseeing a rapid expansion of the service. Dyball and Capener wards are named after these eminent surgeons.

Robin Ling succeeded Capener in 1963. During his tenure at the PEOH, Ling alongside Dr Clive Lee of the University of Exeter, developed the Exeter Hip Replacement. Subsequent research and development of the Exeter Hip has resulted in it becoming one of the most widely used and successful hip replacements in the world; by 2010, the Exeter Hip had been used in a million hip replacement procedures over a period of forty years.

In 1997, the Princess Elizabeth Orthopaedic Centre (PEOC) at the Royal Devon and Exeter's Wonford site opened and the old PEOH site closed. Today, the centre continues to develop its reputation as a centre of excellence for orthopaedic surgery, training and research both nationally and internationally. There are a total of twenty-three orthopaedic consultants based at the PEOC, six of whom specialise in hip replacement surgery and comprise the Exeter Hip Unit: Mr Matthew Hubble, Mr Jonathan Howell, Mr Matt Wilson, Mr Al Amin Kassam, Mr Michalis Panteli, and Mr Jonathan Evans. Mr John Charity is responsible for the hip fracture service and also specialises in hip replacements.

We strive to provide high quality of care at the PEOC but we recognise that standards of healthcare can always be improved. As such, we have developed an ethos of continuous improvement in all aspects of our activities. The standards of care across the Royal Devon and Exeter hospital are audited internally and externally by the Care Quality Commission. A copy of its latest report is available by contacting:

Care Quality Commission Citygate, Gallowgate Newcastle upon Tyne NE1 4PA

Telephone: 03000 616161

Website: www.cqc.org.uk

Email: **enquiries@cqc.org.uk**

Coming in to hospital Information

You can find more information on the Hospital website:

https:royaldevon.nhs.uk

Total hip replacement

The hip joint

The hip joint is a ball and socket joint between the top of the thigh bone and the pelvis. It lies deep in the groin. It consists of:

- A ball (femoral head) at the top of your thigh bone (femur).
- A socket (acetabulum) in your pelvis.

Ligaments and muscles help keep the ball within the socket whilst allowing a large range of movement. In a healthy joint the surfaces of the ball and socket are covered by a smooth material called cartilage which provides shock absorbance and lubrication. However, the cartilage can become worn, which can result in pain, stiffness and restriction of your normal daily activity. This process is known as osteoarthritis.

X-ray of normal hip



X-ray of arthritic hip



Hip function

The hip joint bears the full weight of your body. In fact, when you walk, the force transmitted through your hip can be up to three times your body weight.

As well as transmitting weight, the hip needs flexibility so that you can function normally. Muscles surrounding the hip such as your buttock (gluteal) and thigh muscles (quads) are also important in keeping your hip strong and preventing a limp.



Alternatives to Surgery

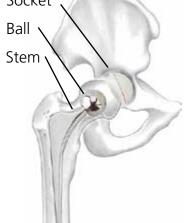
Before considering surgery, it is important to try other alternatives. Painkillers such as Paracetamol, exercises to maintain the flexibility and strength of your legs, the use of a walking stick and weight loss can enable many people to manage the symptoms of osteoarthritis effectively without needing an operation.

Why do I need a Hip Replacement?

A hip replacement operation is considered when other treatments for osteoarthritis are no longer effective. The aims of the operation are to relieve the pain from your hip and to enable you to carry out your normal activities more comfortably. We use hip replacements with a proven track record and the results from the Exeter Hip Unit are among the best in the world.

A total hip replacement involves relining the hip socket with a dense polyethylene or ceramic cup and replacing the ball with a stainless steel or ceramic ball on a metal stem that fits in the thigh bone.

Socket



Robotic-assisted Hip Replacement

We are fortunate in Exeter to have the latest technology to assist with hip replacement surgery. Robotics are increasingly used in orthopaedics to aid with the planning and completion of surgery.

The use of the robot requires an additional CT scan prior to surgery, as well as the usual X-rays, and also requires some additional incisions. The surgeon is always present at surgery and in charge of your operation. The robot simply acts as a skilled assistant.

The robot is not capable of carrying out all types of hip replacement surgery and it may not be appropriate for your case. Your surgeon will discuss this with you if they feel your case is appropriate for the use of the robot and if you have any questions about this, the team will be happy to answer these at any of your clinic reviews.

Getting ready for your operation

Preparing yourself and your home

You can help to reduce the risk of some complications by keeping fit before you come into hospital:

- Maintain a healthy diet. If you are overweight, use the waiting time before your operation to steadily reduce your weight.
- Stop smoking. Advice and help can be found on
 - www.nhs.uk/smokefree or discuss the options with your GP. It is very important that you cease smoking for at least eight weeks before your surgery so that your lungs and breathing improve
- See your dentist for a check-up, particularly if you do not have regular dental checks.

 Have a check-up at your GP practice if you have long term health problems such as diabetes, high blood pressure, anaemia or heart problems

With planning, some patients are able to return home later the same day after their surgery, others may need longer to achieve their postoperative goals. However, we aim to discharge you safely as quickly as possible.

The following simple preparations before your surgery can help your recovery and discharge home.

- Practise the hip exercises on pages 9 to 11 so the muscles are as strong as possible before the operation.
- Have your house ready for your arrival back home.
- Clean and do the laundry. Put clean sheets on the bed.
- Arrange easy access to items in cupboards e.g. clothes, food etc.
- Prepare meals and freeze them in single serving containers.
- Make sure that you have enough of your prescribed medicines to last for a few weeks after you return home.
- Pick up loose rugs and tack down loose carpeting.
- Make sure there is room to walk from room to room without obstacles getting in your way. A wheeled trolley may be useful to carry food any distance.
- Arrange to have help with heavy domestic tasks such as hoovering.
- If you are a carer for a loved one, arrange for alternative support.
- Arrange care of pets if necessary.
- Cut the grass; tend to the garden and other necessary outside work.
- You may find it helpful to arrange for a friend or relative to stay with you for a few days after you return home.

- If you wish to arrange a convalescent stay or private support for home, please contact Care Direct (0345 155 1007) who will be able to give you more information.
- Arrange for a family member, friend or other means to collect you after your surgery.

Pre - operative hip exercises

Perform the following exercises on a daily basis to maintain muscle strength and movement prior to surgery. PLEASE DO NOT DO THEM AFTER YOUR HIP REPLACEMENT OR BEFORE REVISION HIP SURGERY UNLESS ADVISED BY YOUR SURGEON OR PHYSIOTHERAPIST.



 Put the foot of your unaffected leg on a low step and hold a banister or wall for support.

Lean forward whilst bending this knee. Keep your body upright and the feet flat on the floor and step.

You should feel a gentle stretch at the front of the affected hip.

Hold this stretch for up to 30 seconds.

Relax and repeat five times on each leg.



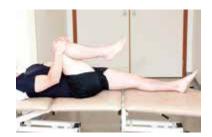
2. Lie on your back.

Bend the knee of
the affected leg so
that your foot rests
flat on the bed.

Allow the bent knee to fall out to the side until you feel a stretch on the inside of the thigh.

Hold the stretch for up to 30 seconds.

Relax and repeat five times.



3. Lie on your back. Pull your legs alternately up onto your chest, keeping the opposite leg flat down on the bed. Hold the stretch for up to 30 seconds.

Relax and repeat five times.



 Lie flat on your stomach with your legs wide apart for 20 minutes once a day.

If achieving this position is very uncomfortable, lie flat on your back with your legs wide apart for approximately 20 minutes once a day.

This will stretch the front of your hip and inside of your thigh.



5. Stand on the affected leg (use a support for balance if necessary).

Bend the knee of the unaffected leg, lift the foot off the floor and keep your balance for up to 30 seconds.

Concentrate on holding the pelvis level.

Potential post-operative complications and precautions

We expect you to make a rapid recovery after your operation and to experience no serious problems. However, it is important that you should know about minor problems, which are common after this operation, and also about more serious problems that can occasionally occur. The following section describes these, and we would particularly ask you to read this. The headings from this section will also be included in the consent form you will be asked to sign before your operation.

Prior to your operation we would like you to visit the website

www.consentplus.com which gives you the information you need about the benefits and risks of hip replacement. If you don't have access to a computer, please ask a family member or friend to help you with this. Complete the questionnaire on the website and print off the certificate so that your surgeon can answer your questions when you attend the pre-operative assessment.

Spinal anaesthetic risks

A spinal anaesthetic is routinely used in a hip replacement operation and has the following possible risks and side effects.

Common side effects (risk of 1 in 10 to 1 in 100)

- Low blood pressure which can make you feel sick or dizzy. This can be treated by giving you fluid through a drip or drugs to raise your blood pressure.
- Itching- this is common if morphine-like drugs are given in the spinal anaesthetic. It can be easily treated if you let the nurses know you are experiencing it.
- Temporary headache. This can be treated with simple painkillers
- Difficulty passing urine after the catheter is removed following surgery (urinary retention). This may require a catheter to be re-fitted temporarily into your bladder.

Rare side effects (risk of 1 in 10,000)

Nerve damage can result in loss of sensation, pins and needles or muscle weakness. If it occurs it usually gets better in days or several weeks. Permanent nerve damage is even rarer and has about the same chance of occurring as major complications of general anaesthesia.

Very rare side effects (risk of 1 in 100,000)

Death is a rare complication of all types of anaesthetics and usually happens as a result of four or five complications arising together. There are probably about five deaths for every million anaesthetics given each year in the UK.

General anaesthetic risks

A general anaesthetic is less often used during hip replacement. It has some risks, which may be increased if you have chronic medical conditions, but in general they are as follows:

- Common side effects (risk of 1 in 10 to 1 in 100) include bruising or pain in the area of injections, blurred vision and sickness. These can usually be treated and pass off quickly.
- Infrequent complications (risk of 1 in 100 to 1 in 10,000) include temporary breathing difficulties, muscle pains, headaches, damage to teeth, lip or tongue, sore throat and temporary problems with speaking.
- Extremely rare and serious complications (risk of less than 1 in 10,000). These include severe allergic reactions and death, brain damage, kidney and liver failure, lung damage, permanent nerve or blood vessel damage, eye injury, and damage to the voice box. These are very rare and may depend on whether you have other serious medical conditions:

General surgical risks

Wound problems

The wound is usually completely healed 10-14 days after surgery, however If your General Practitioner or District Nurse has any concerns, he/she should contact your surgeon as continued wound problems may indicate a superficial infection. Please contact PEOC if there is any drainage, redness, pain, odour or heat around the incision. Take your temperature if you feel warm or sick. If it exceeds 38°C please seek urgent medical advice either by contacting your General Practitioner or attending the Emergency Department.

Thromboses and emboli (blood clots)

Blood clots in the leg veins (deep vein thrombosis) or on the lungs (pulmonary embolus) can occur after any major surgery. The simplest ways of reducing the risk of blood clots is early exercise, walking and drinking plenty of fluids. Whilst in hospital you will also be prescribed a daily injection of fragmin, (a blood thinning drug). When you are discharged, you will usually be given blood-thinning medication to take every day for several weeks.

If a clot occurs, despite these measures, you may need to be admitted to the hospital to receive intravenous blood thinners. Prompt treatment usually prevents the more serious complication of pulmonary embolus.

Signs of blood clots in legs

- Swelling in the thigh, calf or ankle of either leg that does not go down with elevation of the leg.
- Pain, tenderness and heat in the calf muscle of either leg.

If you recognise the signs of a blood clot you should contact your GP promptly.

Signs of a Pulmonary Embolus

- Sudden chest pain.
- Difficult and/or rapid breathing.
- Shortness of breath.
- Sweating.
- Confusion.

This is an emergency and you should call 999 if a pulmonary embolus is suspected.

Infection

A deep infection of the joint most often starts when bacteria gain access to the hip joint and

great lengths are taken in theatre to reduce the risks of this happening. Operations are carried out in clean theatres and sterile clothing is worn by the surgical team. You will be given preventative antibiotics at the time of surgery.

Despite all the precautions taken, infections can still occur at any stage in the life of a hip. An early deep infection (within the first six weeks) may sometimes be cured by washing the joint out in theatres, followed by a course of antibiotics. Sometimes it is necessary to remove the new hip, treat the infection with a long course of antibiotics and then replace the hip again at a later date.

If you develop signs of an infection (e.g. urine or chest infection, tooth abscess, leg ulcer) at any time after your operation, please remind your GP/ dentist that you have a hip replacement. If your hip suddenly becomes painful, it is important to see your GP so that infection in your hip replacement can be ruled out.

Signs of Infection

- A marked increase in swelling or redness at the wound site.
- Leaking of the wound.
- Increase in pain in the hip
- Fever greater than 38°C

If you develop any new redness around the wound or if the wound leaks after leaving hospital, it is important that you see your General Practitioner for advice or telephone the local hip unit for advice (01392 403509 during office hours)

Bleeding/ Haematoma

It is normal for a hip to swell following surgery but occasionally some blood can collect within the muscles and cause more persistent pain, swelling and bruising.

Medical problems

Complications of myocardial infarction (heart attack), stroke or death can occur after hip replacement as with other forms of major surgery. The anaesthetist will not allow the

operation to proceed if it is felt that the risks of these issues are significantly higher than normal.

Fat embolism

This is rare and is caused by the fat within the bones (marrow) getting into your lungs at the time of surgery and causing breathing problems. Although this can be serious it is most commonly treated with extra oxygen.

Urinary problems

The anaesthetic used can make it difficult to pass water following the hip replacement and in the majority of people a catheter is inserted into the bladder during the hip replacement operation. This is usually removed the morning after surgery.

Blood Transfusion

Blood transfusion following hip replacement is rarely needed. If your blood count is very low or if you are showing symptoms of anaemia (low blood count), the team looking after you may recommend a blood transfusion. If you do not want a blood transfusion for religious or other reasons, please make your team aware before your operation.

Risks specific to total hip replacement

Implant wear and loosening

On average, more than 90% of hip replacements are still working well after 10 years. However, all artificial joints do wear gradually over decades. This can occur without symptoms but may be seen on x-rays. It is for this reason that we will often follow you up with check x-rays for many years after your surgery, even though your hip may not be causing you any problems.

If your hip does wear and loosen, your surgeon may recommend a revision hip replacement.

Dislocation

A dislocation occurs when the ball comes out of the new hip socket. This most commonly

happens in the first six to eight weeks after surgery when the tissues around the new joint are healing. During your stay in hospital, the physiotherapists and occupational therapists will teach you ways of minimising this risk. You can reduce the risk of dislocation by moving within your comfortable limits.

Artificial hips usually dislocate when the hip is bent up and across towards your opposite shoulder e.g. when sitting with your legs crossed at the knee or when reaching down to your foot. You may be advised to avoid these positions.

Signs of Dislocation

- Severe pain.
- Rotation/shortening of leg.
- Unable to walk/move leg.

If the hip does dislocate it needs to be relocated and this is either done in the Emergency Department or in theatre. If a hip dislocates on more than one occasion, your surgeon may discuss the need for further surgery to stabilise the hip joint.

Fractures

Very rarely fractures (breaks) of the bone can occur during the operation. These are almost always identified during surgery or on the check x-ray following. Occasionally this requires further surgery or the surgeon may simply slow down your activities for several weeks to allow the fracture to heal.

Leg length difference

The surgeon will always aim to make your legs equal length after surgery and in the vast majority of cases it is possible to achieve this. Small differences may not cause any problems but if the difference is significant it can be corrected by using a shoe insert or heel-raise.

Nerve damage

The skin over the outer side of the hip can feel numb for at least 12 months after your surgery and this is normal. Very rarely, one of the main nerves that run past the hip is compromised by the surgery and stops working. This can cause a foot-drop, or paralysis of other muscles in the leg or numbness affecting part or all of the leg. Although the nerve often recovers over a period of months the paralysis, pain or numbness can persist.

Blood vessel injury

Damage to major blood vessel is very rare but can occur. This can cause extra bleeding and bruising and often requires surgery to repair the damage.

Hip Pain, stiffness, limp.

The muscles and other deeper tissues affected by the hip replacement take several months to heal and so can feel stiff, this is most noticeable when you take the first few steps after sitting for a while. Over time you will notice this less and less and after the first few months, you should find you have enough movement in your hip to carry out all your normal daily activities. Some people find that it always remains difficult to reach down to their feet, for example to put on socks and cut toe nails, but aids and adaptations are available to help.

Ectopic bone or heterotopic ossification (extra bone formation)

The body may form new bone in the tissues around the hip in response to the trauma of the operation. This tends to occur only in the immediate recovery phase but can occasionally lead to long-term stiffness of the joint.

Allergies

The hip replacements that we use are manufactured from a number of materials that may include surgical stainless steel, titanium alloy, high density polyethylene and ceramics. A very small level of nickel is present in most of the hip replacements that we use. It is extremely unlikely that you will have an allergy to your implant even if you have experienced a rash to your watch or earrings. In Exeter, we have never used the 'metal on metal' joints that have been found to cause more serious reactions. Tell your surgeon if you are concerned about allergies.

Leg swelling

It is normal for a hip to swell following surgery and often this can affect the whole leg because the normal muscle pump in your leg is temporarily disturbed. This can be accompanied by bruising around the hip in the days after the surgery and, occasionally, this bruising will extend down the leg, sometimes into the foot.

The swelling tends to increase through the day and go down overnight because your leg is elevated. Standing for long periods can aggravate it and is best avoided initially.

Maintaining your ankle exercises, walking regularly and avoiding standing or sitting for long periods will help prevent or reduce the swelling. In addition, lie flat on your bed for an hour during the day with pillows supporting your thigh and lower leg. Having your foot slightly higher than your hip and heart helps the fluid drain from your foot.

If the swelling increases or if it is accompanied by tenderness in the calf or groin, a temperature, or breathing problems you should ask your GP for advice.

Preparation for surgery

Prior to your operation you will be asked to attend a preparation for surgery assessment. We need to make sure you are as fit and healthy as possible for your anaesthetic and that any problems can be dealt with before surgery. Occasionally further tests or treatment are needed which may delay your operation until you are fit for surgery.

Your assessment will last for three to four hours. It is fine to eat and drink normally before you have your assessment.

Please bring with you:

- Any medication you are taking or a current prescription from your GP
- Any forms which you have been sent to complete before your appointment(s)

Your assessment will involve a full medical and nursing review. This usually includes the following:

- Height, weight and Body Mass Index (BMI) measurement
- Blood pressure and pulse measurement
- A blood sample
- A swab from your nose and throat to check you are not a carrier of MRSA
- An ECG (heart tracing)
- A hip X-ray.
- Details about your medical and surgical history
- Details about your home situation
- Advice on stopping some medications before surgery
- Information about your admission into hospital including pain management
- Discussing your plans for discharge and transport home after your operation

The Occupational Therapist may see you and make sure you are planning ahead for your return home after the operation.

You may also see the Pharmacist who will ask about you medicines and will advise you whether you need to stop certain medicines before surgery. Please check with the preparation for surgery team if you are taking the contraceptive pill or HRT as these may need to be stopped for four weeks before your operation.

You will also see a surgeon, possibly at a separate appointment in consent clinic who will discuss the operation and the risks and benefits of surgery. At this you will be asked to sign a consent form giving the surgeon permission to carry out the operation.

The Orthopaedic Preparation for Surgery Team will look forward to assessing you prior to your operation. If you have any concerns regarding your assessment please call us on **01392 404049**.

Bone Donation

During hip replacement the damaged bone we remove is normally discarded. However, with

your permission, we can store this bone in our 'bone bank'. This bone can be used to help other patients who require bone grafts during an operation. The following couple of pages give an explanation of how the process of bone-banking works.

An opportunity to help others

In order to save your bone for future use, we require the following from you.

- A completed health questionnaire; this is to ensure your bone is suitable for donation and to exclude the possibility of transmitting disease. All information you give will be treated in the strictest confidence.
- A blood test performed at the time of your operation. Currently the mandatory blood tests are those for HIV, Hepatitis B, Hepatitis C, HTLV and syphilis. These tests are similar to those carried out by the National Blood Transfusion Service for blood donors.
- A consent form giving us permission to store your bone for future use and to permit us to take blood. We ask you to study the exclusion criteria below, and not to donate if you fall into any of these categories.

■ Exclusion criteria

- Patients who would prefer not to donate their bone.
- Patients who have or have had cancer.
 This does not include basal cell carcinoma, which is a form of skin cancer.
- Patients with any inflammatory arthritis including rheumatoid, ankylosing spondylitis, etc.
- Patients who suffer from Crohns disease or ulcerative colitis.
- Patients with immunodeficiency or immunosuppression.
- Patients who have had previous surgery on the same joint.
- Patients who have received a blood transfusion or blood products after 1980.
- Patients who at any time in their lives

may have injected themselves with nonmedically prescribed drugs, or have had sexual contact with individuals who have done so

- Patients who have had sexual contact with homosexuals.
- Patients who have had sexual contact with the native population in Africa or Thailand or who have had sexual contact with those who have done so.
- Patients who have been or had sexual contact with a prostitute, or have ever contracted syphilis.
- Patients suffering from, or at risk of, Creutzfeldt Jakob Disease (CJD) or Gerstmann Straussler Scheinker Syndrome (GSS). This includes:
 - Recipients of pituitary derived growth hormone, human dura mater grafts, or corneal grafts
 - Members of recognised familial CJD or GSS families;
 - Patients with unexplained neurological illness or dementia.

What happens next?

If you think you meet the criteria and would like to become a bone donor, please complete the confidential history form when you attend your consent clinic appointment before your operation. During this appointment someone from the Bone Bank will come to speak with you.

Remember that becoming a bone donor is entirely your own decision. If you do not wish to we understand, but if you would like to it is an opportunity to help others by donating bone which would otherwise be discarded.

If you have any questions concerning the donation of bone,

please raise them either when you come into hospital or phone the Bone Bank Co-ordinator on **01392 403504**.

What if I change my mind?

If you are accepted as a donor but decide for whatever reason

to change your mind please notify a member of staff at the time

of your admission for surgery. If you have already donated and

you have doubts please contact the Bone Bank Co-ordinator on

01392 403504.

Your Hospital stay

What to bring in to hospital:

This Patient Guide: It will be referred to during your stay in hospital

Your medication: You should bring all your usual medication into hospital with you in the original containers, they will be locked away in a medicine locker beside your bed. Please bring them in their original containers rather than decanting them or bringing in single strips. This is so we can check your dosage instructions and positively identify them as belonging to you. Please ensure that if you are taking regular medication you have a supply to last when you get home.

Daywear: Lightweight loose fitting clothing and underwear (they will be easier to get on after surgery).

Nightwear: Lightweight pyjamas or nightdress and mid length dressing gown (so not to get in the way when you are walking after the operation).

Footwear: Good supportive walking shoes. Slipons, narrow or high heels are not safe

Toiletries: Face cloths (towels will be provided) and soap.

Aids: If in current use - gadgets, walking sticks, crutches and wheelchairs. Ensure all items are marked with your name.

Glasses / hearing aids: Please bring your glasses and hearing aids with you, in an appropriate container.

Something to keep you occupied e.g. a radio (with personal headphones) or books and magazines.

Do not bring valuables with you. However, a small amount of money will be useful to cover purchases from the shop / trolley. You may wish to bring small change for the TV. If you cannot avoid bringing jewellery or valuables with you we would strongly recommend that you hand them over to the nurse, who will give you a receipt and then put them in the hospital safe.

Day of surgery:

What to do

You will be asked to stop eating food (including sweets and chewing gum) six hours before your operation. Please continue drinking nonfizzy water, clear fluids, black tea or coffee (no milk) until 6.30 am unless you have been told otherwise. You may also be given special pre- op drinks to take until two hours prior to surgery.

Please arrive as directed on your admissions letter.

If you become ill, however mildly, before you are due to come into hospital, please let us know by contacting your Consultants secretary or, if on the day of surgery Orthopaedic admissions on **01392 408402**.

What to expect - immediately prior to surgery

Once on the ward a nurse will go through your personal details and plan your individual nursing care with you. This is another chance to ask any questions you may have and it is a good idea to write them down when they occur to you. The nurse will also tell you the estimated time of your operation. Operating lists run all day so this may be in the afternoon.

A doctor will see you on the ward. The doctor will talk about your operation and then ask you to sign a consent form, if you have not already signed one in the pre-operative clinic.

An anaesthetist will see you on the day of surgery to discuss a number of things: your general health; any previous illnesses, even if you don't have any problems now; any previous anaesthetics, especially if there have been difficulties with anaesthetics in the past; your current medication and any allergies; the types of anaesthetic suitable for your procedure and their risks and benefits (see page 12-17). Sometimes the anaesthetist will prescribe a 'premed', which will help you to relax and/or help with pain control and nausea. You can request an outpatient anaesthetic consultation before the day of your operation if you are worried about your fitness for surgery or have concerns regarding the risks of surgery and anaesthesia.

The usual anaesthetic is a combination of a spinal with a general anaesthetic. If you are having a spinal anaesthetic, you can decide whether you would prefer to be wide awake, relaxed and sleepy (sedation) or have a general anaesthetic. Your anaesthetist will be able to talk to you more about these options.

a) Spinal anaesthetic

This involves placing a needle into your back, injecting anaesthetic into the fluid surrounding the spinal cord, and then removing the needle. The spinal anaesthetic is performed by the anaesthetist in the operating theatre. It is performed with you either sitting on the side of the bed with your feet on a stool or lying on your side with your knees curled up into your chest. Usually it only takes a few minutes to perform a spinal anaesthetic and you should not have any unpleasant feelings. As the injection is made you might be aware of pins and needles or a tingling feeling in your back and your legs will feel heavy and numb. The injection provides anaesthesia for the lower abdomen, pelvis and both legs for about two to four hours, but sometimes the effect can be present for up to 18 hours.

The advantages of a spinal anaesthetic include reduced blood loss during the operation, decreased risk of blood clots forming in the legs and excellent pain relief immediately after the operation. It helps to reduce sickness and vomiting and allows for an earlier return to eating and drinking after the operation. Older patients are often less confused after the operation compared with a general anaesthetic.

b) General anaesthesia

General anaesthesia means inducing an unconscious state using drugs. To do this, we will need to place a needle in a vein (probably in your hand or arm), and then drugs and fluid given through it. You will fall asleep 30-60 seconds after receiving the drugs, and will be woken up when the operation is over. During the operation you may have a tube placed in your mouth or windpipe to help with your breathing. The anaesthetist will monitor your pulse, blood pressure, breathing and blood oxygen levels; making sure that everything is safe whilst you are asleep.

Before you go to theatre, you will be given a theatre gown to wear. When it is time for your operation, one of the nurses from theatre will take you to the anaesthetic room.

The operation

When you have been anaesthetised, you will be taken into the operating theatre. The operation to replace your hip takes about 60-90 minutes and during this time the anaesthetist will remain with you, monitoring you to ensure you are safe.

Post-operative care

Day 0 - Day of Surgery

At the end of surgery, you will remain on the recovery ward for one to two hours under the care of a specially trained recovery nurse who will monitor your progress and make sure that pain is well controlled. You may find several items in place to help your recovery. An oxygen mask over your mouth and nose helps your breathing. Sometimes a tube will have been placed in your bladder (urinary catheter). This is usually in place only for a short time and makes passing urine easier after the operation.

You will then return to the Orthopaedic ward. Only one or two close family members or friends should visit you at this time. You will be aware of calf pumps on both lower legs. These will help maintain good circulation in the legs and help to prevent blood clots forming in your legs.

The staff will encourage you to mobilise on the

same day as your surgery unless there is a medical reason not to. The physiotherapists will visit you later in the day to help you out of bed and take a short walk. You may also be sent for a check X-ray of your new hip. You can be discharged home once you and the clinical team are satisfied with your progress. For many people this may be on the day of surgery.

Pain Management

You may experience some discomfort or pain following surgery. You will be given regular painkillers so you are able to exercise and move your new hip. Scoring your pain from 1 to 10 can help you and the nurses decide which painkillers are most suitable:

- Mild pain (1 3)
- Moderate pain (4 6)
- Severe pain (7 10)

Please remember to let the doctors and nurses know if your pain score is four (moderate) or above or if the pain stops you doing your exercises.

If the pain is significant, pain killers may be given to you through a drip into your arm. This is called PCA (Patient Controlled Analgesia). You will be given more information about this if it is used. You can also be referred to the Pain Specialist Nurses if your pain is difficult to manage.

Some painkillers can cause side effects including:

- Drowsiness
- Nausea or sickness
- Indigestion and 'heartburn'
- Constipation

Day 1 - After Surgery

The intravenous 'drip' and catheter can be removed as soon as you are drinking regularly. You will have an X-ray of your hip if this was not done the previous day. The clinical team will confirm with you the day and time of your discharge home.

You will be encouraged by the physiotherapists and nurses to move and become more active

through the day. You can sit in a chair and walk using a walking aid such as crutches or a walking frame to begin with.

The following exercises help the circulation and reduce swelling in the legs and should be repeated frequently for the first six weeks after your surgery. You can start these on the day of your operation:

- Move your ankles and feet when you are sitting or lying.
- Lying on the bed with your leg straight, pull your toes up and tighten your thigh muscles by pushing your knee down against the bed. Hold for five seconds. Relax and repeat.
- Lying on the bed, squeeze your buttock muscles together and hold for five seconds. Relax and repeat.
- Lying on the bed, bend the knee of your operated leg whilst keeping the knee pointing upwards. Keep the foot in contact with the bed. Relax and repeat.
- Lying on the bed, take your operated leg out to the side, keeping the knee straight and toes pointed to the ceiling. Relax and repeat.
- When sitting, keep the foot on the floor, bend the knee on the operated leg as far as comfortable, sliding the foot towards the chair, as you do this exercise take care to have the knee rolled outwards and avoid the leg rolling in. Relax and repeat.

Subsequent days

Your wound and general health will be checked by the nurses.

By now you should be feeling stronger and be able to move from the bed and chair and walk to and from the bathroom yourself with the help of a walking aid. You will be encouraged to get dressed and sit in a chair for longer periods.

Before you are discharged home, the Physiotherapists will show you how to climb a flight of stairs safely.

Once you have begun to mobilise, an Occupational Therapist will see you on the ward and ensure that you are independently getting in and out of bed, can manage to get on and off a chair and toilet and are able to get dressed. They will ensure that you have planned your discharge and have appropriate equipment at home.

Discharge from hospital

Day of Discharge

You can be discharged home once you and the clinical team are satisfied with your progress. For many people this may be on the day of surgery, or the following day.

Discharge Planning

Before you are discharged you will be given

- A discharge summary
- A letter to the GP practice or community nurse so that you can arrange a wound check
- A spare dressing
- Medication including pain killers. You can arrange further supplies through your GP
- An outpatient appointment letter (usually six to eight weeks following surgery)
- Any equipment provided by the Occupational Therapist

Your GP will receive a letter from your Surgeon with details of the operation performed and treatment given.

If you have any questions please do not hesitate to ask for information, either whilst you are in hospital or by giving us a call when you get home.

The following section is designed to help you through the transition from hospital to home but always follow any specific advice given to you by the hospital team.

After major surgery you may feel reassured to have a friend or family member to help with simple chores and give moral support for a few days.

Pain Management

It can take time for pain to settle and everyone reacts differently. If your pain stops you from moving comfortably or prevents you sleeping at night, then you should continue with painkillers. As you recover from your surgery, you will find that you do not need to take painkillers as frequently.

Opiate medications are offered to all of our patients for the immediate post-operative period for short term use only. In line with national guidance, we ask that you do not continue to use them beyond the hospital's recommendation unless you have discussed this with your GP.

Wound healing

All wounds progress through several stages of healing. You may experience sensations such as tingling, numbness and itching. You may also feel a slight pulling around the stitches or staples and a hard lump forming. These are perfectly normal and are part of the healing process. The wound is normally closed with a dissolvable suture (which does not need to be removed) and covered with a water resistant dressing that is usually kept in place until you have a wound check 12- 14 days post operatively. Scarring is variable and depends on your individual skin type. When the wound is completely healed (usually by 10-14 days), apply non-perfumed, moisturising cream to the scar.

Caring for Your Incision

- Keep your incision covered with the dressing until it is healed, usually 10-14 days.
- You may have a light shower provided that the healing wound is well protected by a waterproof dressing so that the incision does not get wet.
- Keep the incision dry

Eating

Due to your lack of activity you may lose your appetite or suffer from indigestion. Small meals taken regularly can help.

Going to the toilet

The difference in diet, the change in level of activity and the prescription of medication can lead to irregular bowel habits which should correct itself in time. If you are suffering from constipation, you can help yourself by eating a high fibre diet with plenty of fresh fruit and vegetables.

Becoming mobile again

It is important to walk on a regular basis and to steadily increase the distance as you recover. You can progress to using one crutch or a stick held on the side opposite to your operated leg as soon as you feel safe and comfortable to do so. As you improve you can walk around the house without a walking aid and then progress to walking outdoors without assistance. However, if you are uncomfortable or limp when walking then continue to use your walking aid.

Rest and activity

The operation is the beginning of a process of recovery which takes several months to complete, so it is possible you may feel tired and rather vulnerable in your first weeks at home. You should plan to steadily increase your activity day by day but also to set aside time each day to rest with the leg elevated to reduce any swelling and bruising.

As a general rule, gradually build up the amount of walking and activity you do guided by what feels comfortable for your hip. You will have days with less pain and others with slightly more discomfort. If you have an uncomfortable day, reduce your activities a little and then steadily increase them again.

Remember, an artificial hip is different to a normal joint and should be treated with respect. The risk of dislocation is greatest in the first six weeks whilst the tissues around the joint are healing and you are recovering from the surgery.

Move your hip as you feel comfortable. Do not push the hip into discomfort or pain, or allow others to force it. The range of movement and function will improve steadily over time.

Sleeping

You may sleep in any position including lying on either side, unless otherwise instructed. You may find it more comfortable to lie on your unoperated side with a pillow between your legs to support the operated hip. Taking your prescribed painkillers before going to bed at night can also help you rest more comfortably.

Sitting

Choose a chair which has a seat which is high enough for you to get comfortably in and out of. Chair arms will help you get up and down safely in the first few weeks of surgery.

Stairs

You will be taught to manage the stairs whilst you are in hospital. Use a bannister rail if there is one, and hold the stick or crutch in the other hand as shown in the following pictures:



Going up – lead with the unoperated leg first, followed by the operated leg and then the stick or crutch.



Going down – put the crutch or stick on the step below, then step down with the operated leg, followed by the unoperated leg.

Keep this method up until you feel strong enough to walk upstairs normally.

Washing / bathing

You are likely to feel more comfortable having a shower or wash rather than a bath in the first six weeks. Provided you keep the wound covered with a waterproof dressing whilst it is healing, you can have a shower as soon as you feel able to do so. A rubber mat will help reduce the risk of slipping in the shower.

Dressing instructions following hip surgery

You will be able to dress yourself after your operation. Avoid forcing and overstraining the hip. You may find it easier to sit on the side of the bed or in a chair with your clothes next to you initially. A long handled aid can be helpful if you find it a strain to reach your lower legs and feet.

Begin to wear shoes as soon as possible. When putting on shoes and socks, it is easiest to reach down on the inside of the operated leg to avoid uncomfortable twisting of your hip (see pictures below). A long handled shoe horn can assist with putting on shoes and socks





Travel & Driving

You can return to travelling as a passenger in a car or on public transport when you feel confident and safe to do so, starting with short journeys.

You can return to driving once you are walking comfortably without a walking aid and feel safe to do so. This is not usually until 4-6 weeks after your surgery. You may wish to inform your insurance company before you start driving again.

Sexual activity

Unless you have been advised otherwise you should do what feels right for you. Sexual intercourse may be resumed, when you feel comfortable.

Getting the Best from your New Hip after 6 Weeks

After Six Weeks:

Total hip replacements are usually performed to give patients a better quality of life, and most people are keen to return to normality as soon as possible. The following advice applies after six weeks and you will be able to discuss this and ask questions about your own individual circumstances when you return to see the physiotherapists for your six week post-operative check:

Work

Most people are ready to return to their work six to eight weeks after their operation. People can get back to almost any type of job after a hip replacement. If you have a heavy manual job, consider which tasks you can delegate, or aids you can use to protect your hip as you return to work and in the longer term.

Flying

Air travel should be avoided whenever possible for the first six weeks. Flying can increase your risk of deep vein thrombosis and pulmonary embolus (clots on the legs and lungs). When you do start flying, take the usual precautions recommended by your airline.

Walking

Walk short distances regularly through the day and steadily increase the distance. Walk as far as you like as soon as it is comfortable. For long distance or cross-country walks, a hiking pole or stick may help, especially in the first few months.

Kneeling

If you find kneeling difficult, go down on the operated leg, taking your weight forward through the non-operated leg. To come up from

the kneeling position, take your non-operated leg forward, take your weight through this leg and push up into a standing position.

If you have had both hips operated on, hold a support and use your stronger leg to take most of the weight.

Gardening

Lighter activities, especially working at waist height in the green house or shed can begin as soon as comfortable. Wait at least six weeks before starting heavy work such as digging. A garden kneeling stool is often helpful if squatting is difficult for you.

Dancing

We are happy for you to start dancing as soon as you feel comfortable and safe to do so. Just start slowly and steadily build up as you gain confidence.

Gym/aerobics

You can start using a treadmill, exercise bike and light weights when you feel confident and comfortable to do so. Gradually build up as you regain your fitness.

Swimming

You can swim as soon as your wound is fully healed and you feel confident and comfortable to swim and also get in and out of the pool. Swim using any stroke you wish including the breast stroke.

Cycling

You can use a static bike or normal bike when you feel confident and comfortable to do so. Getting on and off a bike without a cross bar or racing handle bars is likely to be easier initially. Build up your distance gradually, adding in hills as you get fitter.

Golf

From six weeks you can return to the putting green or driving range and then can steadily build up to a full game.

Bowling

You can enjoy bowling as soon as you feel confident and comfortable to do so.

Tennis/badminton/cricket

We would not normally recommend getting back to these sports before about three months. Doubles tennis or badminton puts less stress through your joints and muscles so will be easier to return to.

Squash

This is not recommended as the repeated jarring over a long period may shorten the life of your hip replacement. If you are keen to return to this sport, please discuss it with your surgeon.

Running

Short distances are fine, but long distances risk wearing the joint and may reduce how long it lasts. If you are keen to return to this sport, please discuss it with your surgeon.

Contact sports (rugby, football, contact martial arts)

These are not advised. Although some high profile celebrities have done so, we do not recommend subjecting an artificial hip to these risks. If you are keen to return to this sport, please discuss it with your surgeon.

Skiing

If you are already a good skier, enjoy it, but be sensible. Know your limits, and ski within them. We don't advise taking up skiing for the first time after a hip replacement.

Windsurfing/water-skiing/Surfing

Like skiing, taking up these sports after hip replacement is not recommended. If you are already competent, and anxious to get back, do so, but wear a life jacket and go with someone else.

Sailing

In smaller dinghies, be careful to avoid extremes of bending or twisting.

Exercise prescription plan six weeks after your operation

The following advice applies once you are walking properly. These exercises are particularly helpful to strengthen weak muscles around your hip and reduce a limp. Hold onto a support if necessary for balance and keep your back straight throughout the exercises.



 Standing. Lift your operated leg sideways keeping your knee straight and toes forward.



2. Standing, bend the knee of your operated up towards your chest until it is level with your hip.



3. Stand on the operated leg for up to 30 seconds, lifting the good leg off the floor.

Concentrate on holding the pelvis level.

Use a support if necessary for your balance.

Frequently asked questions

Does the same advice apply if I have had both hips operated on at the same time?

A small percentage of people have both hips replaced at the same time (bilateral simultaneous hip replacements). The operating time is longer but otherwise your operations and recovery should be very similar to people who have had one hip replaced.

Instead of thinking about your operated and unoperated side as you read through this booklet, think of your stronger and weaker leg.

Why is my scar still tender?

Small nerves in the skin and deeper tissues are affected by the surgery and cause the tenderness around your scar. This is often most noticeable when you lie on your operated side in bed. As these tissues heal, the tenderness will improve with time. Gentle massage of the area can help, once the incision is healed. You may also notice a small area of numbness which diminishes with time but may always be present to a small degree.

When should I stop using a stick?

This varies. Some people feel able to stop using their crutches or stick within a few weeks of the operation (unless advised otherwise by their surgeon), others may need to use a walking aid permanently if they have other joint problems.

As a general rule you can stop using a walking aid once you can walk comfortably without it and do not limp. If you do limp, keep using a walking aid as you will walk better and without stressing your hip and other joints. A folding stick or walking pole can be helpful to use at the end of a long walk when your muscles feel tired.

Where can I return my walking aids?

Please hand back crutches, walking frames and sticks to the Hospital

Will I set off the security scanner alarm at the airport?

The metal in your hip replacement can set off the security scanner at the airport. If there are any concerns, let the security team at the airport know that you have had a joint replacement. It is a situation that they are very used to dealing with.

Will I need a review appointment?

We will arrange to see you six to eight weeks after your operation, usually in the clinic run by the Hip Unit Physiotherapists. After this we arrange long term follow up for the majority of our patients in either a standard orthopaedic clinic or through a 'virtual clinic' when an X-ray is arranged locally for you. However, you are welcome to contact us at any time if you have any concerns or questions.

At the PEOC we pride ourselves at providing our patients with the highest standards of care. This continues once you have left the hospital. If you have any problems or queries or worries concerning your recovery then please do not hesitate to contact us.

PEOC Contact telephone list

Pre-operative Assessment unit.	.01392	404049
Dyball Ward	.01392	403528
Robin Ling Ward	.01392	403599
Orthopaedic Admissions Unit	.01392	408402
Occupational Therapy	.01392	403587
Aftercare	.01392	403509
Hip Research Office	.01392	403636
Bone Bank	.01392	403504
Care Direct	0345 15	51 007
Independent Living Centre	.01392	380181
British Red Cross	.01392	353297

The information in this booklet is also available electronically via the following links:

- https:royaldevon.nhs.uk
- www.exeterhipunit.co.uk

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