

Welcome to the: Orthopaedic Opinion Online Website

The website for the answer to all your Orthopaedic Questions

- **Orthopaedic Opinion Online** is a website designed to provide information to patients who have orthopaedic and musculoskeletal problems and are undergoing treatment.
- **Patient information** is provided in the form of downloadable information sheets.
- **Orthopaedic advice** and second opinions can be provided by our expert internationally renowned Consultant Orthopaedic Surgeons.
- **Online review** of patients' X rays or MRI scans can also be provided and any proposed treatment plans reviewed.
- **Book a clinical consultation** with one of our internationally renowned consultant orthopaedic surgeons in Bristol or London.
- **Orthopaedic reports** can be provided for Injury or Accident Claims and Medical Negligence claims.

This Patient Information Sheet is provided by Orthopaedic Opinion Online

Hip resurfacing for young active people!



Today more and more people are hearing about the benefits of hip resurfacing over conventional hip replacement. This relatively new technology started with the invention of the "Birmingham Hip replacement" approx 12 years ago. Indications are that this is an extremely durable solution for young and active patients that wish to keep full natural

Hip resurfacing is suitable for Women below the age of 60 and Men below the age of 65 where the condition and strength of the bone is suitable. Hip resurfacing is usually associated with a smaller scar, a faster recovery and earlier hospital discharge time than conventional total hip replacements, the patient can return to normal life sooner.

Transferring force the way nature intended

In designing the femoral component, many important factors were considered. Bone

conservation, precise positioning and an optimum fixing technique were of utmost importance. The femoral head replacement entails removing less bone than comparable systems. The unique recesses on the inner side allow for even pressurisation of cement into the cancellous bone, providing additional rotational stability.

Minimal thickness, maximum strength!

Like the natural acetabulum, the cup is slightly less than a hemisphere, offering both a greater range of motion and preservation of bone. A wall thickness of 4 mm throughout all sizes, ensures that more bone is maintained with adequate implant strength. A coating of pure titanium is applied to the outer surface using an advanced vacuum plasma spray technology. This helps incorporation into the patients bone for fixation.



The optimal pore size, porosity and bio-compatibility of the surface allows the biological fixation that is needed for long term stability.

Reduced bearing surface roughness

The high carbon CoCr alloy is produced by a forging rather than casting process. This means that the size of tiny fragments of metallic crystals are up to eight-times smaller compared to cast CoCr prostheses. The resulting lower surface roughness subsequently leads to a lower wear rate when compared with cast CoCr alloys.



Experience and imagination benefit the patient

As with almost any joint replacement system, precise and easy-to-use instruments are the key to the successful restoration of the patient's anatomy and function.

In developing hip Resurfacing, surgeons and engineers not only focused on implant design and material technology. At the core was the development of the surgical

technique that achieved the goals of bone preservation and accurate positioning of the implants. The result is an ingenious method to accurately and precisely position the components in the optimum position.

What's Involved In My Hip Resurfacing?

Your Hip Replacement Surgery

- [Hip Replacement Surgery](#)
- [Before admission to Hospital](#)
- [Anaesthesia](#) for Hip Replacement Surgery
- Postoperative [Pain and its Management](#).
- The Hospital Admission.
- In-patient Recovery.
- Rehabilitation and Physiotherapy.
- Exercises to Prepare for and Following Hip Replacement.
- Moving About Following [Your Total Hip Replacement Surgery](#)
- Frequently Asked Questions - [Hip & Knee Surgery](#)

Hip Replacement Surgery

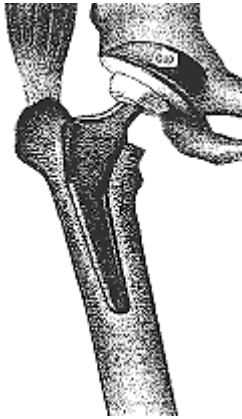
To understand a **resurfacing hip replacement** you should first understand a little about the structure of the hip joint. The hip joint is a ball and socket with the ball component attached to the top of the femur (the long bone of the thigh). The socket is part of the pelvis. The ball rotates in the socket to permit you to move your leg backward, forward, sideways and in a twisting motion.

Below is a picture of a healthy hip. The cartilage covers the ends of the thighbone and pelvis. This allows the ball to glide easily in any direction inside the socket.



In a hip requiring Hip Replacement Surgery, the worn cartilage no longer serves as a cushion. As the damaged bones rub together, they become rough, with a surface like sandpaper. This rubbing results in pain with almost any movement and steadily decreasing mobility.

In a **resurfacing** hip replacement the ball replaces the head of the thighbone. The stem component of the ball, which is made of a metal alloy, is inserted to replace just the head of the femur at the hip joint. The femoral neck is not removed as in a Total Hip replacement. A cup made out of a durable plastic material replaces the worn socket in the hip. The prosthesis is held in place on the femoral side by cement and on the acetabular side by a press fit and subsequent new bone growing into the porous metal surface.



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Before Admission to Hospital

Before hospital admission we would suggest:

- You will receive a confirmation letter, a patient pre-surgery enquiry form, and information written specifically for Hip replacement patients
- A visit your dentist to correct outstanding problems before hip replacement surgery is advisable.
- Arrange for someone to help you around the house for a week or two after coming home from the hospital, to do the shopping and cleaning etc.
- Arrange your home to provide easy access to toilet facilities and bedroom. Perhaps bring the bed down stairs, buy in some ready made meals. Place the TV remote control, radio, telephone, medicine, tissues, reading book, waste basket, and pitcher and glass next to the spot where you will sit in the early days resting while you recover.
- Remove all rugs and mats which might cause you to trip in the early days.
- Place items you use every day at arm level to avoid reaching up or bending down.
- Stock up on kitchen supplies and prepare food in advance, such as frozen casseroles or soups that can be reheated and served easily
- Take to hospital some slippers, trainers or walking shoes, loose comfortable clothing, dressing gown or bath robe, personal toiletries, eye glasses, dentures, reading materials or anything to help you relax such as a personal walkman and music
- Bring phone numbers of people you may want to call
- Bring a small amount of money for telephone calls and items such as a magazine
- Any medication and a list of any medicines that you have been taking

- Bring along any medical reports, MRI's or x-rays that may be in your possession.

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Anaesthesia for Hip Replacement Surgery?

Hip replacement can be undertaken with either a general or epidural (spinal) anaesthetic. Most patients in the UK receive a general anaesthetic although whilst asleep a spinal anaesthetic may also be used. The anaesthetist will discuss the type of anaesthesia used with you prior to surgery. You will first be sedated through an IV in the pre-op area. This relaxes you and minimizes any discomfort of the anaesthetic procedure.

With epidural anaesthesia, a narrow catheter is placed between two bones of your spine. A controlled flow of anaesthetic goes through the narrow catheter, anaesthetising your body from the abdomen down so you will not feel anything during surgery.

If you are undergoing general anaesthesia, you will first be put to sleep by IV medication. A mask or a breathing tube then gives an anaesthetic gas which is monitored by the anaesthetist.

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Postoperative pain and its Management

Normally following your surgery you will experience little or no pain. If following the surgery you are experiencing pain, inform the nurse who will administer analgesia or pain killers. Such tablets are usually required regularly for a week or two.

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The Hospital Admission.

Prior to surgery

You will undergo a number of tests and x-rays, you will receive a clinical examination and have a consultation with the consultant orthopaedic surgeon.

The Night Prior to Surgery

Often in the UK patients may be admitted to hospital where morning surgery is planned. Otherwise admission to hospital is early in the morning of the day of surgery. In this situation you will be asked not to eat or drink anything after midnight.

The Day Of Your Surgery

You will meet a registered theatre nurse who will care for you until you are moved to the operating theatre. If you did not see the anaesthetist on the evening prior to surgery they will visit you on the day of surgery. The anaesthetist will review your history and discuss with you the proposed type of anaesthesia. An IV will be started and sedative medication will be administered, Epidural anaesthesia may be started at this time.

The Hip Replacement Operation

Your surgery generally takes 1½ to 2½ hours. Do not be surprised if the time for your surgery passes by. The theatre schedule is flexible to allow for some procedures to overrun.

After Your Surgery

After surgery is completed you will be moved to the recovery area in "high dependence" or "intensive care" for a short time, if you have any medical history of heart problems you may well be held in intensive care for a little while. This is just a precautionary measure. Whilst you are in intensive care especially trained nurses will closely monitor you.

You will then be transferred to your room where your family will be allowed to be with you.

You will receive several sessions of physiotherapy during your stay in the hospital; this will prepare you to be in good shape for your return home. The physiotherapist will practice getting out of bed, getting up stairs and toileting arrangements before you go home. Once you get home continue to take any prescribed medication and follow the doctor's instructions regarding the medication. Follow the physiotherapist exercises and instructions for your hip. Regularly undertake the exercises which were provided and take regular short walks several times a day.

Wear an apron for carrying things around the house. This leaves hands and arms free for balance or to use crutches

Use a long-handled "reacher" or stick to turn on lights or grab things that are beyond arm's length.

After surgery, clots may form in the veins of the leg as a result of immobility. This could lead to a post-operative complication known as a Deep-Vein Thrombosis, Pulmonary Embolism or Varicose Veins. For this reason you will usually receive a form of low weight heparin to ensure that thrombosis doesn't occur. This will be supported by the use of supportive stockings, inflatable boots (worn whilst in bed), and early walking and mobilisation. Unless you have had a thrombosis or are at high risk these anticoagulant drugs are usually stopped when you leave hospital.

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In-Patient Recovery

You will have:

- A dressing over the hip and mid thigh area,
- A foam wedge pillow between your legs. This is to help keep your new hip in place during early healing.

- You may have a drain from the surgical site. This drainage tube collects any bloody fluid that has accumulated under the skin and muscle. This tube is usually removed the day after surgery.
- A bar or trapeze will be hanging over the bed. Use it to help lift your body when you change positions.
- An intravenous infusion.
- Your blood pressure and temperature taken.
- A urinary catheter or urine bag is often used to monitor the amount and concentration of your urine. This is usually removed 1 or 2 days after surgery.
- You can normally drink fluids and eat soon after your return to the ward.
- It will normally take 3-5 days to become mobile following your Hip Replacement Surgery. You should usually be able to walk independently with sticks at this time. Please remember that each person is different so times will vary, if you are older or in poor physical condition, have other joints affected by arthritis. Or you are not very mobile it may take longer to recover from your surgery.

Please note that after Hip Replacement Surgery you are not permitted to drive for 6 weeks until safe to undertake and emergency stop and control the care well.

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Rehabilitation and Physiotherapy

Your participation in physical therapy is essential to the success of [your surgery](#). The more committed and enthusiastic you are, the quicker your improvement and recovery will be.

A physiotherapist will visit you before surgery and again afterwards on the day after surgery and will start to instruct you on the exercise program. You will receive [physiotherapy](#) each day following the surgery.

These sessions are normally one on one with a physiotherapist.

Exercises to Prepare for and following Hip Replacement

Exercises: To Help You To Prepare For Your Hip Replacement Surgery

To help you to prepare for your hip replacement surgery you may practise the following exercises at home. The purpose of these exercises is to strengthen muscles, which will be useful in your rehabilitation. These exercises should be performed at least twice a day in repetitions of 10 for one month before surgery.

1. Heel Slide (done lying on your back)

Slide your heel along the surface, bending the knee towards your chest

Hold for 3 seconds

Then slide the heel downward, straightening the knee.

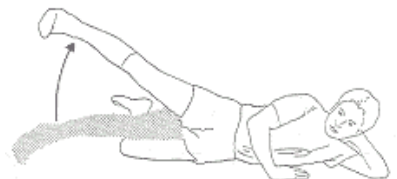


2a. Hip Abduction Begin with your legs together.

Slide a leg out to the side then return the leg to middle.

2b. Hip Abduction (lying on your side) Lift your top leg up towards the ceiling, keeping the knee straight and toes pointed.

Your bottom leg should be kept bent to maintain your balance. Bring your leg back down.



3. Quad Sets

With a rolled towel under your knee, press downwards, tightening the knee and raising the heel approximately 1 inch off the surface.

4. Short Arc Quad Sets

With a bolster under your knee, raise the foot and straighten your knee.

Hold for 3 seconds. Lower your foot slowly



5. Straight Leg Raise

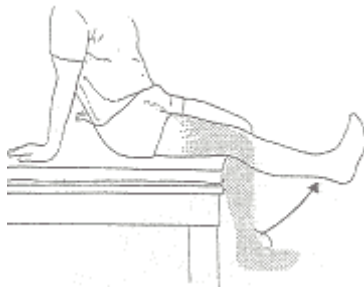
Raise your leg toward the ceiling, keeping the knee straight.

Your opposite knee should be bent, with your foot flat on the surface to protect your back from straining.

6. Ankle Pump

Pump the ankles, pulling your toes up, then point them downward

Continue this up and down movement



7. Knee Extension

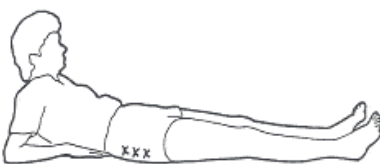
Begin with your feet flat on the floor. Slowly raise your foot straightening the knee. Hold this position for 3 seconds keeping the back of your thigh on the chair. Lower your foot to floor. This exercise can be done with a small rolled towel under your thigh

8. Dorsi/Plantar Flexion

Begin with both feet flat on floor. Raise your toes up keeping your heels on the floor.

Reverse, raising both heels with your toes on the floor.

Continue alternating, raising first the toes and then the heels.



9. Gluteal Sets

Recline on your back, supported by your elbows. Keep both legs straight.

Squeeze your buttocks together as tightly as possible. Hold for five

seconds and relax.

How do I find out more?

To find out more information about pre- and post-operative exercises contact a local physiotherapist.

Moving about following your total hip replacement surgery?

- [How to Climb and Descend Stairs?](#)
- [Bed positioning](#)
- [Bed transfer](#)

- [Chair positioning](#)
- [How to use a walker](#)
- [Sitting](#)

- [Physiotherapy](#)

- [Toilet Transfer](#) Using a Raised Toilet Seat

- [Getting in and out of the Bath](#)
- [Getting in and out of the Shower](#)

- [Getting in and out of your Car](#)

- Dressing
 - [Slacks and Underwear](#)
 - [Socks and Stockings](#)
 - [Shoes](#)

- [Reaching for Objects](#)

- [Safe Positions for Intercourse](#)
- [Unsafe Positions For Intercourse](#)

Frequently Asked Questions - Hip & Knee Surgery

Do I need a referral from my doctor?

It is usually suggested that you bring a doctors referral letter although the doctor can write to your GP for the medical details after the initial consultation.

Would it help if I brought my MRI's, x-rays, etc with me?

If you can obtain them from the hospital at which they were taken, they are useful. However further investigations and x-rays can be undertaken. Any MRI's should also be brought.

Should I inform the doctor if there is anything unusual in my medical history?

Yes although this is covered in the pre-surgery enquiry form, which the doctor will have read it is always helpful to mention any major points again.

Will I have the opportunity to ask questions?

Yes of course, you will find that the surgeon is quite open to questions and will explain everything in detail.

Can my partner attend the consultation?

Yes that they are welcome to attend; the surgeon is quite open and has nothing to hide.

Can I bring a relative or friend?

Yes relatives and friends can come to the hospital. Usually only one would stay whilst you are having surgery and perhaps for the first day of recovery.

Will I need a blood transfusion?

Generally for hip surgery it is possible that blood will be needed. However this is now unusual for knee surgery.

What is the blood screening policy?

European policy on filtration and testing of blood is very strict. The hospital is equipped with its own accredited laboratories.

I wish to fly shortly after my surgery is this safe?

The small risk of thrombosis is greatest whilst in hospital but remains raised for some week afterwards. Flying is usually best avoided for a few weeks following surgery, particularly for longer journeys. Taking aspirin, wearing supportive stockings or anticoagulation tablets may help.

What type of anaesthesia is used?

Where possible patients receive epidural anaesthesia, the anaesthetist will discuss the type of anaesthesia used prior to surgery if you have a preference please state this to the anaesthetists or surgeon.

Could you tell me a little more about the intensive care facilities?

Most hospitals undertaking joint replacement surgery have High dependency units or Intensive Care Facilities.

How long will I stay in Intensive care?

Usually patient are returned to the ward or high dependency after a couple of hours. However if you have any history of heart problems are overweight or have other risk factors we may keep you in intensive care for a longer period, this is a perfectly normal procedure.

What make of prosthesis is used?

A range of tried and tested and CE certified prosthesis may be used. This depends upon the severity of the deformity, type of arthritis,

age of the patient and surgeon and hospital preferences. This should be discussed with your surgeon prior to the procedure.

What is the expected life implants?

These prosthesis are usually very durable and should last 15 years or more depending on the individual circumstances.

I understand that there is cemented as well as cement-less fixation, which is the surgeon likely to use?

In hip and knee replacement we always try to work with cement-less unless the indications are for cemented i.e. the bone structure is weak etc

The reason for not using cement is that the tough alloy used in the construction of the prosthesis is both porous and rough (on the outside) where it meets the bone, this enables the bone to grow and fix itself to the prosthesis. After a short while the bone grows over the prosthesis and the two become firmly fixed together. With cement there is always a possibility of the cement breaking down or working loose. This does not always occur in active. Overweight or elderly patients.

Is the Continuous Passive Motion machine used to exercise after knee surgery?

YES in addition to the morning physiotherapy sessions in the afternoon you may be placed on a CPM machine. This assists early knee motion but is not a replacement for undertaking your own exercises and should not delay you mobilisation and return to walking.

What charges are not included in Private Hospitals?

Phone calls, accommodation for friends or family

I am not very mobile can you assist with wheelchairs?

Wheelchairs are not usually required. Crutches are used initially and will be supplied by the hospital. However before hospital discharge patient often are able to walk using only sticks..

How long is the duration of stay?

Average expected durations of stay are as follows

hip resurfacing - 5 days

hip replacement - 6 days

knee replacement - 5 days

hip or knee revisions - 10 days

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