

An Information Booklet

A NEW HIP JOINT



Committed to curing arthritis

A NEW HIP JOINT

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Do I need a hip replacement?

You may need a hip replacement operation (sometimes called a total hip replacement, or THR) if your hip joint is badly damaged by arthritis. This sort of damage is mostly caused by osteoarthritis but it can also be due to other types of arthritis, such as rheumatoid arthritis. An alternative type of surgery is hip resurfacing, which retains more of the original bone. Hip replacement or resurfacing surgery is *not* needed by everyone with arthritis of the hip joint – it is only recommended when the pain and disability are having really serious effects on your daily activities. Your doctors will always try other treatments before they consider surgery (e.g. painkilling tablets, a walking stick, physiotherapy). There are also less major types of surgery which will be considered, such as ‘cleaning out’ the joint through a surgical tube (an arthroscope). And remember that you, the patient, will always have the final decision on whether to go ahead if hip surgery is being offered. If the pain and disability justify surgery, there is no age limit – either young or old. However, the younger the patient the greater the likelihood of revision surgery being needed at some time in the future.

What can I expect from hip surgery?

Pain should no longer be a problem – that is the major benefit of surgery. You will usually notice the benefit almost immediately after the operation, although you will of course have pain from the surgery to start with. You should also be less disabled and have greater mobility and a better quality of life. But it is important to remember that an artificial hip is not as good as a natural hip. It does have some limitations, which are summarised later in

this booklet (see ‘Physiotherapy and occupational therapy’ and ‘After the first few weeks’).

What happens before the operation?

If your doctors agree that you should have the operation, your name will be placed on a waiting list. In the next 6–12 months (depending on the length of the waiting list) your hospital will write to you. Most hospitals invite you to a pre-admission clinic (usually about 2 weeks before the surgery). At this clinic you will be examined to make sure that you are fit enough for the anaesthetic and the operation, and you will be told if the operation is definitely going ahead. You will be able to discuss the possible complications, and you will probably also be given the date of the operation. You may also receive further advice about what you need to do before or after the surgery (you may be asked to do some exercises, for example).

When do I need to go into hospital?

You will usually be admitted to hospital the day before the operation. It may be earlier if you have not attended a pre-admission clinic or if you have some other medical condition that needs attention (such as a heart or lung problem).

What happens on the day of the operation?

You will probably be given a tablet or an injection to sedate you (a ‘pre-med’). In the operating theatre you will be given an anaesthetic by the anaesthetist. This

may be a general anaesthetic (in which case you will be asleep) or a spinal or epidural injection (which makes you lose feeling from the waist down). Many patients nowadays have the spinal or epidural, and are sedated if necessary during the course of the operation. Once inside the operating theatre you will be placed either on your back or on your side, depending on the way the surgeon does the operation.

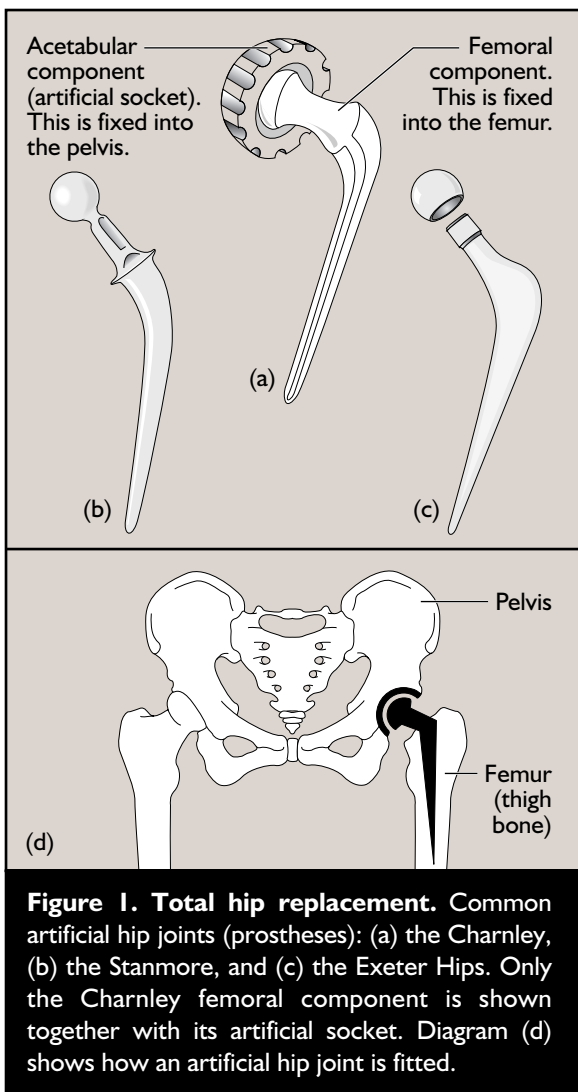
What is the new joint?

Total hip replacement (THR)

In a total hip replacement, part of the thigh bone (femur) including the ball (head) is removed and a new, smaller artificial ball is securely fixed to the rest of the thigh bone. The surface of the existing socket in the pelvis (the acetabulum) is roughened to accept a new artificial socket that will join up (articulate) with the new ball.

Most artificial joints (prostheses) are fixed into the bone with acrylic cement. However, in more active patients one part (usually the socket) or both parts may be inserted without cement. If cement is not used, the surface of the implants is roughened or specially treated to encourage bone to grow onto them. Where only one part is fixed with cement, this is known as a 'hybrid' hip replacement. Where neither part is fixed with cement this is called a cementless hip replacement.

The replacement parts can be plastic (polyethylene), metal or ceramic. The most widely used combination is a metal ball with a plastic socket (metal-on-plastic). Younger, more active patients may be given joints with a ceramic ball and a plastic socket (ceramic-on-plastic), or joints where both parts are made of the harder materials, which wear less (metal-on-metal or ceramic-on-ceramic). Some common types of artificial hip joints are shown in Figure 1.



Metal-on-metal (MOM) resurfacing

Resurfacing the original socket and the ball of the thigh bone with metal components is a more ‘conservative’ form of hip replacement, which involves the removal of less bone than the usual hip replacement operation. Instead of removing the head of the thigh bone and replacing it with an artificial ball, a hollow metal cap is

fitted over the bone. An MOM resurfaced hip joint is shown in Figure 2.

People who have this type of operation are able to recover more quickly, and the risk of dislocation (when the ball comes out of the socket) is lower, allowing the patient to take part in more vigorous sports (e.g. skiing). MOM resurfacing is not suitable for people with low bone density or osteoporosis. Little is known about how well these joints last in the longer term as they have not been in use for as many years as the THR joints.

What happens after the operation?

When you leave the operating theatre you will usually have an intravenous drip in your arm (to give you any

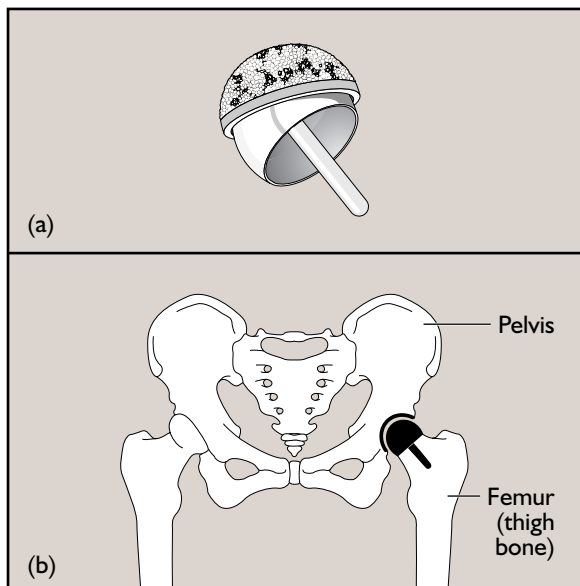


Figure 2. Metal-on-metal hip resurfacing. (a) A metal-on-metal hip resurfacing prosthesis: the Birmingham Hip. (b) The artificial joint in position.

fluid and drugs you may need) and two suction drains in your hip (to remove fluid as the body heals).

You will be taken to a recovery room or high-care unit and kept there until you are fully awake and the doctors feel that your general condition is stable. Then you will be taken back to the ward, often with a pad or pillow strapped between your legs to keep them apart. You will be given painkillers (often started before you leave the operating theatre) to help relieve pain after the operation.

The drip and the drains are usually removed within 24–48 hours. You will then be able to start walking, first with a frame and soon with elbow crutches or sticks. How quickly you get back to normal depends on many factors – including your age, your general well-being, the strength of your muscles, and the condition of your other joints.

Physiotherapy and occupational therapy

The physiotherapist will help to get you moving freely and advise you on exercises to strengthen your muscles. Both the physiotherapist and occupational therapist will tell you the ‘dos and don’ts’ after hip surgery. It is *very important* to follow these rules. For example, you will be told to avoid too much bending at the hips (e.g. squatting, or sitting in a low chair or on a couch) and never to cross your legs, because these positions could dislocate your new hip. The occupational therapist will advise you on the correct height of seating and suggest whether you need any help at home.

The occupational therapist will also help you to be independent in your daily activities. S/he will assess how physically capable you are and assess your circumstances

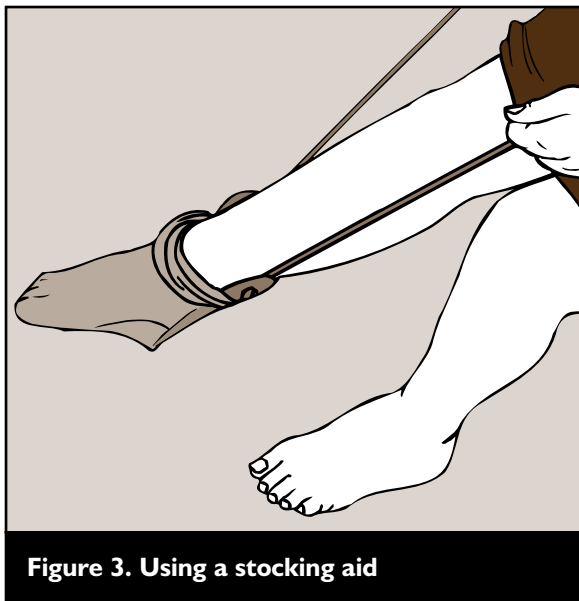


Figure 3. Using a stocking aid

at home when you are about to leave hospital. S/he may provide you with some additional gadgets to help you. These might include a raised toilet seat and implements to help you dress (see Figure 3).

When can I leave hospital?

Most people are able to climb stairs and are ready to leave hospital within 6–10 days. When you leave the hospital you will be given an appointment to attend the outpatients department, usually between 6 and 12 weeks after the operation. This is for a routine check-up which will make sure you are progressing satisfactorily. You may also be offered outpatient physiotherapy if this will help to improve your recovery.

Once you are home the district nurse will change your bandages and take out any stitches (sutures). If you have any problems with your wound healing then you should tell the professional staff at the hospital straight away.

What happens in the first few weeks after the operation?

Most people are relieved that the pain from the arthritis has gone. You may find that you cannot bend your leg upwards as far as you would like – it is important *not* to test your new joint to see how far it will go. You need to take great care during the first 8–12 weeks after the operation, to avoid dislocating the hip.

After the first few weeks

You can expect to drive again after 4–6 weeks, and you could return to work at about this stage, but only if you have a job which does not mean too much moving around. Getting in and out of a car can be difficult – you may need to sit sideways on the seat first and then swing your legs around (see Figure 4). The occupational therapist will tell you how to do this and other tasks safely.



Figure 4. Ease into the car seat backwards.

You *must* take regular exercise. After all, that is one of the reasons for having the operation. Walking, swimming and riding a bicycle are fine (but avoid breaststroke when swimming). You can also play golf or bowls or walk the dog. You should avoid running on hard surfaces and activities such as playing squash or competitive tennis, as all of these involve sudden impact which can overload your new hip ('impact loading'). You should use your new hip – exercise is good for your mind and your body. If you are not sure about a specific activity, ask your surgeon, rheumatologist or physiotherapist. You should continue to avoid any extreme position of the hip indefinitely. Normal sexual activity can be started again at 6–8 weeks, although the warning about avoiding extreme positions of the hip applies.

What are the long-term effects of hip replacement?

Your new hip should allow you virtually normal pain-free activity for a great many years. There are many different types of replacement joint nowadays. While some do better than others, many other factors affect the outcome. Over 80% of cemented hips should last for 20 years or more. Younger, more active patients often get cementless hip replacements (see 'What is the new joint?'), and these should last longer. The so-called 'hybrid' hips, in which only one part is cemented, have given good results in active middle-aged patients.

Can there be any complications?

Hip replacement is major surgery and can be fatal. Risks vary according to your general health and you should discuss the risks and benefits with your surgeon.

After hip replacement some people suffer from clots which form in the deep veins of the leg. There are various ways to reduce this, including special stockings, pumps to exercise the feet, and different drugs.

There is a more serious complication where some of these clots, particularly those in the thigh veins, can detach and become stuck in the lungs (pulmonary embolism). This is very serious – it may cause sudden breathlessness or collapse, and even sudden death. Fortunately, this complication is rare.

The artificial hip may dislocate. This occurs in less than 1 in 20 cases, and it needs to be put back in place under anaesthetic. In most cases this will make the hip stable, although patients may need to spend some time doing exercises to strengthen their muscles or keeping the joint still in some form of brace. If the hip keeps dislocating further surgery may be needed to stabilise it.

To reduce the risk of infection, specially ventilated ‘clean air’ operating theatres are often used, and patients are almost always given a short course of antibiotics at the time of the operation. Despite this, a deep infection can occur (but only in around 1 in 200 cases). This is a serious complication. The artificial hip usually has to be removed until the infection clears up. The hip is then re-implanted 6–12 weeks later.

Plastic artificial sockets may wear over time. The worn particles of plastic (wear debris) cause inflammation and this can wear away the bone next to the new hip. The types of joint mentioned earlier which tend to be used with younger patients (ceramic-on-ceramic and metal-on-metal) wear less easily and so are less likely to cause this problem.

The most common cause of ‘failure’ of hip replacements is when the artificial hip loosens. This can happen at any time but is most common after 10–15 years. It usually causes pain and your hip may become unstable.

Replacing an artificial hip with another one (revision surgery)

This type of surgery has made significant advances in recent years. Failed hips can be revised (replaced), with over 80% of patients reporting success for 10 years and more. Some revisions may need a bone graft (where a piece of bone is taken from another part of the body or the thigh bone to help make the repair). The hip can be revised almost as often as necessary, although the results are slightly less good each time. The revision surgery is more difficult than the first operation. It takes longer, and the time in hospital is longer. Bone grafts may need protection from movement, and this might mean a longer time on crutches is needed during the period of rehabilitation. However, the eventual result is usually good.

What developments are there?

New plastics are being developed which can give the joint longer wear and better strength and mobility. As mentioned, different types of joints are being used for younger patients, including metal-on-metal, ceramic-on-ceramic, and ceramic-on-plastic. Improvements are also being made in resurfacing and in the new cementless implants which offer important advantages, especially to younger, more active patients.

Glossary

Acetabulum – the socket of the hip bone (pelvis), into which the head of the femur fits.

Anaesthetic – a drug which removes sensation.

Ceramic-on-ceramic – a replacement hip joint in which both parts, or both surfaces, are ceramic.

Ceramic-on-plastic – a replacement hip joint in which one part or surface is ceramic (usually the ball or head) and one part or surface is plastic (usually the socket).

Dislocate – to come out of position. In a hip joint this means that the ball part of the joint comes out of the socket.

Epidural – this term is often used to describe an injection given around the area of the spinal nerves to anaesthetise the lower half of the body. The full name is epidural blockade.

Femur – the thigh bone.

Metal-on-metal – a replacement hip joint in which both parts, or both surfaces, are metal.

Metal-on-metal resurfacing – an operation which involves removing less bone than the total hip replacement operation. As the name suggests, both artificial parts are made of metal.

Prosthesis (plural ‘**prostheses**’) – an artificial body part. An artificial hip joint is one example.

Useful addresses

Arthritis Research Campaign (arc)

PO Box 177, Chesterfield

Derbyshire S41 7TQ

Phone: 0870 850 5000

www.arc.org.uk

As well as funding research, we produce a range of free information booklets and leaflets. Please contact the address above for a list of titles.

Arthritis Care

18 Stephenson Way

London NW1 2HD

Phone: 020 7380 6500

Helplines: 020 7380 6555 (10am–4pm Mon–Fri)

or freephone: 0808 800 4050 (12pm–4pm Mon–Fri)

www.arthritiscare.org.uk

Offers self-help support, a helpline service (on both numbers above), and a range of leaflets on arthritis.

Dial UK (Disability Information & Advice Line)

St Catherine's
Tickhill Road
Doncaster, S Yorks DN4 8QN
Phone: 01302 310123
www.dialuk.org.uk

The helpline will put you in touch with a local office for information in your area.

Disabled Living Foundation (DLF)

380-384 Harrow Road
London W9 2HU
Phone: 020 7289 6111
Helpline: 0845 130 9177 (10am–1pm, Mon–Fri)
www.dlf.org.uk

Offers advice and information on equipment to help you in daily activities.

National Joint Registry (NJR)

NJR Centre
329 Harwell
Didcot, Oxon OX11 0QJ
Phone: 01235 433433
www.njrcentre.org.uk

The National Joint Registry collects data on hip and knee replacement operations in order to monitor the performance of joint implants. At the hospital you may be asked for consent to enter your details into the NJR database. Further information about the NJR can be obtained from the above address.

RADAR (Royal Association for Disability & Rehabilitation)

12 City Forum
250 City Road
London EC1V 8AF
Phone: 020 7250 3222
www.radar.org.uk

Arthritis Research Campaign



The Arthritis Research Campaign (**arc**) is the only major UK charity funding research in universities, hospitals and medical schools to investigate the cause and cure of arthritis and other rheumatic diseases. We also produce a comprehensive range of over 80 free information booklets and leaflets covering different types of arthritis and offering practical advice to help in everyday life.

arc receives no government or NHS grants and relies entirely on its own fundraising efforts and the generosity of the public to support its research and education programmes.

Arthritis Today is the quarterly magazine of **arc**. This will keep you informed of the latest treatments and self-help techniques, with articles on research, human interest stories and fundraising news. If you would like to find out how you can receive this magazine regularly, please write to: Arthritis Research Campaign, Ref AT, PO Box 177, Chesterfield S41 7TQ.

A team of people contributed to this booklet. The original text was written by a surgeon with expertise in the subject. It was assessed at draft stage by doctors, allied health professionals, an education specialist and people with arthritis. A non-medical editor rewrote the text to make it easy to understand and an **arc** medical editor is responsible for the content overall.



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