

An Information Booklet

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 measures 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 is the likelihood of revision surgery being needed at some time in the future.

It is necessary to consider the risks and benefits before deciding to proceed with surgery. The benefits are obvious – hip replacement abolishes pain, improves mobility and restores quality of life. The risks are less obvious, and it is to assist you in making an informed decision that the complications – which occur infrequently – are addressed at some length in this booklet. You should discuss these risks, and any other questions you may have, with your surgeon before you decide to go ahead. But remember that hip replacement surgery is generally very successful, and brings great long-term benefits for most people who have it.

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

What happens before the operation?

If you and your doctors agree that you are to have the operation, your name will be placed on a waiting list. In the next 6–8 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 two weeks before the surgery). At this clinic you will be examined to make sure that you are well 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 and after the surgery (you may be asked to do some exercises, for example). Some drugs, such as methotrexate, are usually stopped about two weeks before the operation and re-started about two weeks afterwards. This is because some drugs suppress the body’s immune system. Stopping them for a time is intended to boost the immune system to help with healing after the surgery.

At some hospitals, you may be invited to attend a ‘pre-op’ clinic with an occupational therapist who will discuss with you how you will manage at home in the weeks after your operation. This can be an important clinic because it allows potential problems to be resolved beforehand. If you are not invited to see an occupational therapist, and you are concerned about coping at home after the operation, you should enquire about home help and/or useful aids at the time of your pre-op assessment.

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). You will be asked to sign a form consenting to surgery. You may also be asked if you are willing for details of your operation to be entered into the National Joint Registry (NJR) database. The NJR collects data on hip and knee replacements in order to monitor the performance of joint implants. See ‘Useful addresses’ for details of how to contact the NJR for further information.

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 anaesthetic (in which case you will remain awake, but will lose feeling from the waist down). Patients who have the spinal or epidural 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 how the surgeon prefers to carry out 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 ball component.

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. Where only one part is fixed with cement, this is known as a ‘hybrid’ hip replacement. If cement is not used, the surfaces of the implants are roughened or specially treated to encourage bone to grow onto them. Bone is a living substance and, as long as it is strong and healthy, it will continue to renew itself over time and provide a long-lasting bond.

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). A metal or ceramic socket will be thinner than a plastic one, which means that a larger ball can be used. The advantage of this is that a larger ball gives a greater range of movement and reduces the risk of the ball coming out of the socket (dislocation), so the patient can take part in more vigorous sport or exercise.

The harder materials also allow better lubrication of the joint, which means that the components will wear more slowly. Some common types of artificial hip joints are shown in Figure 1.

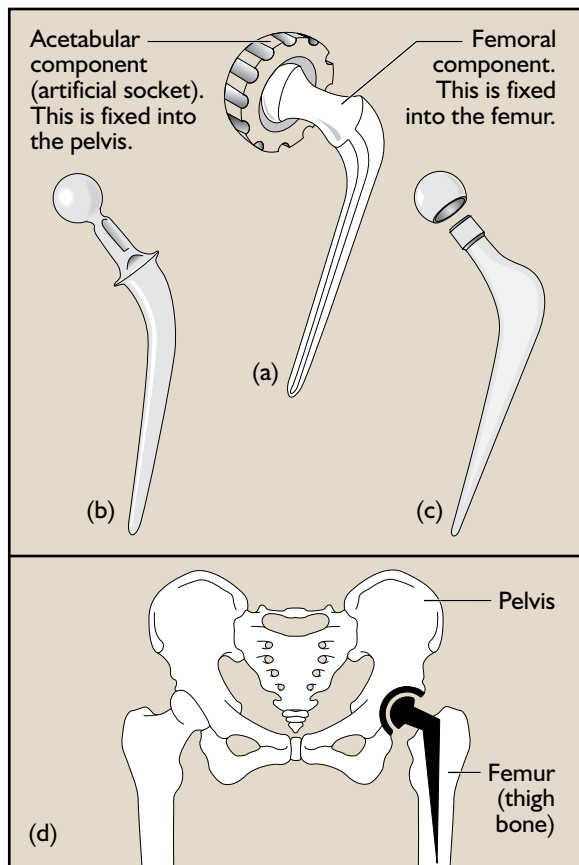


Figure 1. Total hip replacement. Common artificial hip joints (prostheses): (a) the Charnley, (b) the Stanmore, and (c) the Exeter Hips. Only the Charnley femoral component is shown together with its artificial socket. Diagram (d) shows how an artificial hip joint is fitted.

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 head of the thigh bone. An MOM resurfaced hip joint is shown in Figure 2.

People who have this type of operation usually recover more quickly, and the risk of dislocation 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. (These are conditions where the bone is not as thick and strong as it used to be and are particularly common in elderly women.) 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.

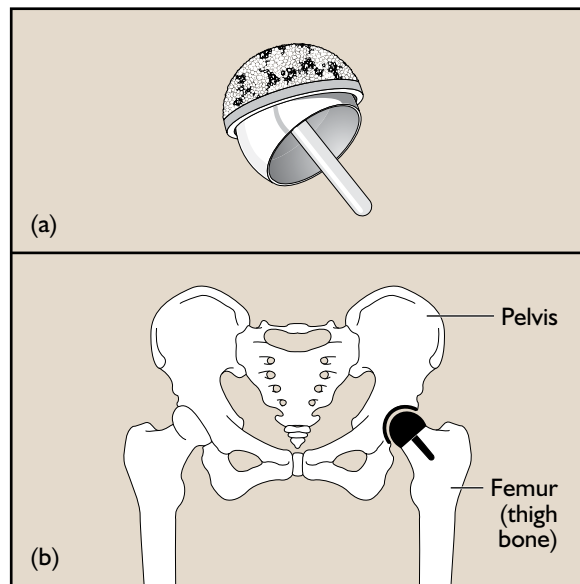


Figure 2. Metal-on-metal hip resurfacing. (a) A metal-on-metal hip resurfacing prosthesis: the Birmingham Hip. (b) The artificial joint in position.

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 fluid and drugs you may need. You will also have two suction drains in your hip. These are plastic tubes which are inserted into the area where the operation was carried out and which drain away fluid produced in that area 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 as the effect of the anaesthetic wears off.

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 health, the strength of your muscles, and the condition of your other joints. If the surgeon feels all these factors are favourable, s/he may include you in an accelerated rehabilitation programme. You would then start walking on the day of the operation and would be discharged within a day or two.

Physiotherapy and occupational therapy

The physiotherapist will see you in hospital after the operation to 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 – how to get in and out of a bed, a chair, the shower etc. It is *very important* to follow these rules. For example, you will be told not to bend the hips to more than 90° (e.g. squatting, or sitting in a low chair or 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 at home when you are about to leave hospital. S/he will provide you with some additional gadgets to help you. These will include a raised toilet seat and equipment to help you dress (see Figure 3).

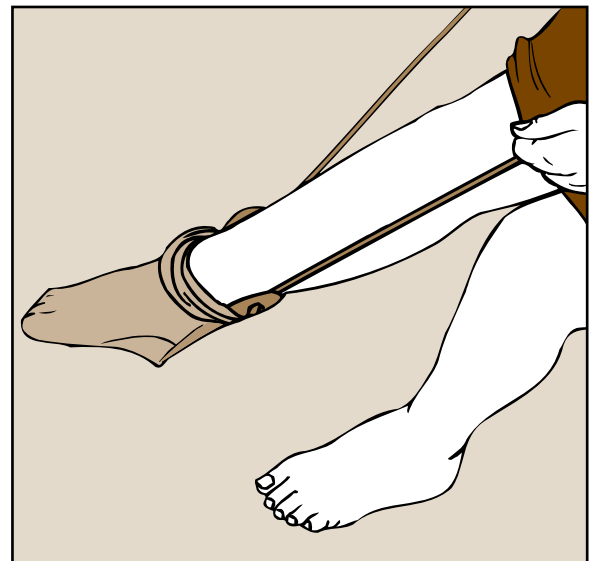


Figure 3. Using a stocking aid

When can I leave hospital?

Most people are able to climb stairs and are ready to leave hospital within 6–10 days. As noted above, those selected for an accelerated rehabilitation programme may be discharged within 1–3 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 (sometimes called 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 towards your stomach 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 about 6 weeks, and you could return to work at 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 will need to sit sideways on the seat first and then swing both your legs around together (see Figure 4).



Figure 4. You should be able to drive again about 6 weeks after your operation. But you will need to take care initially getting in and out of the car – ease into the car seat backwards and swing both legs round together.

Some people place a plastic bag on the car seat to make it easier to swivel round. The occupational therapist will advise you about other movements where you need to take special care.

Walking sticks can generally be discarded within 4–6 weeks. However, this will be determined by your confidence and progress and you should follow the advice of your surgeon and physiotherapist.

You will probably be able to have sex after about 6–8 weeks, although you should avoid extreme positions of the hip. Don't be afraid to ask for advice about suitable positions – you will not be the first to have asked!

You *must* take regular exercise. After all, that is one of the reasons for having the operation. Walking and swimming are fine (but avoid breaststroke when swimming). Riding

a bicycle may be difficult until about 12 weeks after the operation, as it will be hard to get on and off. Golf or bowls are fine after 12 weeks but bending at the hip to play these sports would be difficult before that. 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.

Within a year of your operation you should have resumed virtually all your normal activities. It is wise always to avoid extremes of movement at the hip and activities which are commonly associated with falling – such as skiing. If you are not sure about a specific activity, ask your surgeon, rheumatologist, GP or physiotherapist.

What are the long-term effects of hip replacement?

Your new hip should allow you virtually normal pain-free activity for 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 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 all major surgery carries risks, which can sometimes be fatal. Risks vary according to your general health and you should discuss

the risks and benefits with your surgeon. Although it is important to be aware of the risks, it is also important to keep them in perspective. Many thousands of hip replacements are carried out without complications every year.

Blood clots

After hip replacement some people can suffer from blood clots which form in the deep veins of the leg (deep vein thrombosis, or DVT). There are various ways to reduce the risk of this happening, including special stockings, pumps to exercise the feet, and different drugs. In a small minority of cases 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 rarely sudden death. **If you should develop calf swelling or pain, chest pain, or breathlessness shortly after hip replacement surgery, it is very important that you seek medical advice straight away.**

Dislocation

Sometimes an artificial hip may dislocate. This occurs in less than 1 in 20 cases, and the hip 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 stabilize it.

Infection

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. A new hip prosthesis is then implanted 6–12 weeks later.

Wear

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.

Loosening

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. Loosening is usually associated with thinning of the bone around the implant. This makes the bone more vulnerable to fracture. A fracture around the prosthesis usually requires surgical stabilization and/or revision of the implant.

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 – the operation

takes longer, and the time in hospital is longer. Bone grafts may need protection from movement, and this might mean that you will be on crutches for longer. 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 previously 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.

Minimally invasive surgery (MIS) for total hip replacement requires a much smaller incision and less damage to the soft tissues (muscles, tendons and ligaments). This should mean a shorter recovery period after the operation. There is no benefit of MIS in the longer term, and some people feel the results may not be as good as with traditional hip replacement techniques as it may be more difficult to position the implants. At present MIS is used in only a small proportion of hip replacements. However, it may be more widely used in future, possibly in conjunction with **computer-assisted surgery (CAS)**. Computer systems have been developed which can generate images of the body (using infrared ‘beacons’ attached to the patient’s body and to the operating tools). These images help the surgeon to ‘see’ inside the joint and should allow for very precise positioning of the hip replacement components.

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 see the list of titles at the back of this booklet.

Arthritis Care

18 Stephenson Way
London NW1 2HD
Phone: 020 7380 6500
Helpline (freephone): 0808 800 4050
www.arthritiscare.org.uk

Offers self-help support, a helpline service, and a range of leaflets on arthritis.

Dial UK (Disability Information & Advice Line)

St Catherine's
Tickhill Road
Doncaster 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
www.dlf.org.uk

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

National Joint Registry (NJR)

The NJR Centre, Peoplebuilding 2
Peoplebuilding Estate, Maylands Avenue
Hemel Hempstead HP2 4NW
Helpline: 0845 345 9991
www.njrcentre.org.uk

Collects data on hip and knee replacement operations in order to monitor the performance of joint implants. This information is available to patients and medical professionals.

RADAR (Royal Association for Disability & Rehabilitation)

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

Booklets and leaflets

These free publications are available from **arc**. Please send for our order form (stock code 6204) which gives a summary of the topics covered or write to: **arc** Trading Ltd, James Nicolson Link, Clifton Moor, York YO30 4XX for **up to 3 titles**.

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Lupus (SLE)
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Osteomalacia (Soft Bones)*
Osteoporosis
Paget's Disease of Bone
Polymyalgia Rheumatica (PMR)
Polymyositis and Dermatomyositis
Pseudogout
Psoriatic Arthritis
Raynaud's Phenomenon
Reactive Arthritis
Reflex Sympathetic Dystrophy
Rheumatoid Arthritis
Scleroderma
Sjögren's Syndrome
Vasculitis

* Also available in Bengali, Gujarati, Hindi, Punjabi and Urdu.

DRUG INFORMATION

Drugs and Arthritis (general info.)
Adalimumab
Anakinra
Azathioprine
Ciclosporin
Cyclophosphamide
Etanercept
Gold by Intramuscular Injection
Hyaluronan Injections
Hydroxychloroquine
Infliximab
Leflunomide
Local Steroid Injections
Methotrexate
Mycophenolate
Non-Steroidal Anti-Inflammatory Drugs
Pamidronate
Penicillamine
Rituximab
Steroid Tablets
Sulfasalazine

PARTS OF THE BODY

Back Pain
Feet, Footwear and Arthritis
Joint Hypermobility
Knee Pain in Young Adults
A New Hip Joint
A New Knee Joint
Pain in the Neck
The Painful Shoulder
Shoulder and Elbow Joint Replacement
Tennis Elbow

TREATMENT

Blood Tests and X-Rays for Arthritis
Complementary Therapies
Hand and Wrist Surgery
Hydrotherapy and Arthritis
Occupational Therapy and Arthritis
Pain and Arthritis
Physiotherapy and Arthritis
The Rheumatology Nurse Specialist
Taking Part in Research

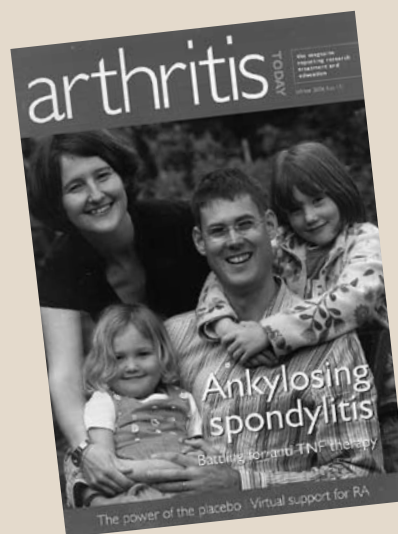
LIFESTYLE

Are You Sitting Comfortably?
Caring for a Person with Arthritis
Diet and Arthritis
Driving and Arthritis
Fatigue and Arthritis
Gardening and Arthritis
Keep Moving
Looking After Your Joints
Pregnancy and Arthritis
Sexuality and Arthritis
Sports and Exercise Injuries
Stairlifts and Homelifts
Work and Arthritis
Work-Related Rheumatic Complaints
Your Home and Arthritis

JUVENILE ARTHRITIS

Arthritis – a Guide for Teenagers
Da Kimzta Has a Joint Injection (for children)
Growing Pains (for children)
Tim Has Arthritis (for children)
When a Young Person Has Arthritis
When Your Child Has Arthritis

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.



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