

Hip replacement surgery

This booklet provides information and answers to your questions about this surgical procedure.



What is hip replacement surgery?



If you're thinking about having hip replacement surgery you'll probably have lots of questions on your mind. In this booklet we'll explain when hip replacement might be needed and what you can expect from surgery. To help you in making an informed decision we'll also look at the potential complications of hip surgery and suggest where you can find out more.

At the back of this booklet you'll find a brief glossary of medical words – we've underlined these when they're first used in the booklet.

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At a glance

Hip replacement surgery

Over 70,000 hip replacements are carried out each year in England and Wales alone.

Do I need a hip replacement?

You only need a hip replacement if you have pain or loss of movement which is affecting your daily life and activities.

What are the benefits?

The benefits of having surgery include:

- freedom from pain
- improved mobility
- improved quality of life.

What are the disadvantages?

The disadvantages of surgery include:

- some limitations in movement
- risks associated with surgery.

What should I ask my hospital team?

You might want to ask your hospital team the following questions:

- What can I expect from surgery?
- What can I expect if I don't have surgery?
- What are the alternatives?
- What are the risks?

- How long will I be in hospital?
- How will I manage at home while I'm recovering from surgery?
- When will I get back to normal?
- What if I have problems after surgery?

What are the possible complications?

Possible complications include:

- blood clots
- wound haematoma (bleeding)
- dislocation
- infection of the joint
- one leg longer than the other
- nerve damage
- ongoing discomfort
- wear
- loosening.

You should seek medical advice straight away if:

- you have pain and/or swelling in your leg
- you have chest pain or sudden breathlessness.

How long will a new hip joint last?

Hip replacements should last for 20 years in 8 out of 10 patients. In more active patients the joints may wear out more quickly. It's usually possible to have further hip replacements if necessary, although the results may not be quite as good as with your first hip replacement.



Introduction

Over 70,000 people have hip replacement surgery in England and Wales each year and the number is increasing.

Hip replacement is most commonly recommended for severe osteoarthritis, but it's sometimes used for inflammatory conditions such as rheumatoid arthritis or ankylosing spondylitis or for problems with development of the hip during childhood. Hip surgery may also be needed for fractures of the hip, including those resulting from osteoporosis.

Hip replacement is a major operation and all major surgery carries risks. It's important to think about the risks and discuss them with your surgeon before deciding to go ahead. However, complications are uncommon. Hip replacement is generally very successful and brings great benefits for most people who have the operation.

i See Arthritis Research UK booklets

*Ankylosing spondylitis; Osteoarthritis;
Osteoporosis; Rheumatoid arthritis;
What is arthritis?*

Do I need a hip replacement?

You won't necessarily need a hip replacement if you have arthritis of the hip. But it may be worth considering if your hip is severely damaged by arthritis and the pain, disability or stiffness are having serious effects on your daily activities.

Even then, your doctors will always try other measures before suggesting a hip replacement – for example, painkillers, physiotherapy and/or walking aids, or occasionally a steroid injection into the hip joint.

There are no upper or lower age limits for having hip replacement surgery, although the younger you are when you have surgery, the greater the chances that your new joint will eventually wear out. However, it's usually possible to have another hip replacement later on if you need to.

What are the benefits of hip replacement surgery?

Freedom from pain is the main benefit of surgery, along with improved mobility and better quality of life. You'll have some pain from the surgery to begin with but you should start to notice the benefits soon after the operation.

What are the disadvantages of hip replacement surgery?

It's important to remember that an artificial hip isn't as good as a natural hip. It has some limitations – for example, extreme positions such as squatting aren't recommended because of the risk of dislocation.

You may feel nervous, stressed or scared if you've been told you need surgery. Finding out as much as you can about the operation and understanding the process will help you feel less anxious and more in control.

If surgery is suggested, you'll always have the final decision on whether to go ahead.

About 1 in 10 people have some pain around the hip after the operation. This can sometimes be persistent and it's not always possible to explain the cause. However, the vast majority of people who have hip replacements don't have continuing pain.

After the operation, you may find that one leg is slightly longer than the other, but this can be corrected with an appropriate shoe insert (insole).

There are also some risks involved in having major surgery, which we'll look at later in this booklet and which you should discuss with your surgeon before you decide to go ahead with a hip replacement operation.

i See Arthritis Research UK booklet *Feet, footwear and arthritis*.

What is hip replacement surgery and how does it work?

The hip is a ball-and-socket joint, which allows a wide range of movement. Arthritis damages the cartilage-covered surfaces of the joint so the ball moves less smoothly and less freely within the socket.

In a hip replacement or resurfacing operation, the surgeon replaces the damaged surfaces with artificial parts, which may be made of metal, plastic or ceramic materials.

Acetabular component (artificial socket). This is fixed into the pelvis.

Femoral component. This is fixed into the thigh bone (femur).

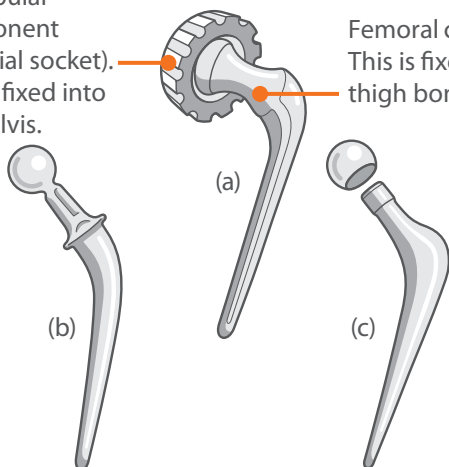


Figure 1
Types of
artificial
hip joints

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.

What are the different types of hip replacement surgery?

There are two main types of hip replacement operation, but a number of different components and surgical techniques may be used.

Total hip replacement

In a total hip replacement, part of the thigh bone (femur) including the ball (head of femur) is removed and a new, smaller artificial ball is securely fixed into 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.

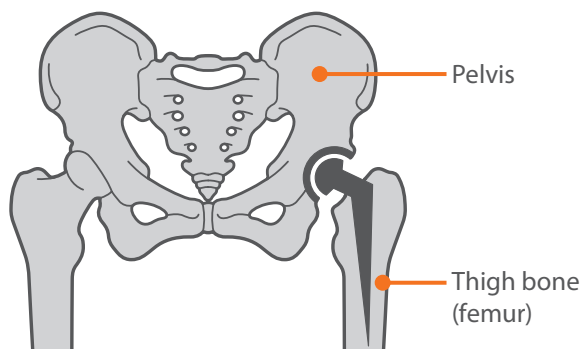
Many artificial joint components are fixed into the bone with acrylic cement.

Increasingly, and especially in more active patients, one part (usually the socket) or both may be inserted without cement. If cement isn't 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's strong and healthy, it'll continue to renew itself over time and provide a long-lasting bond. Where only one part is fixed with cement, it's known as a hybrid hip replacement.

The replacement parts can be plastic (polyethylene), metal or ceramic and are used in different combinations (see Figures 1 and 2):

- Metal-on-plastic (a metal ball with a plastic socket) is the most widely used combination.

Figure 2
Total hip replacement



This diagram shows how an artificial hip joint is fitted.

- Ceramic-on-plastic (a ceramic ball with a plastic socket) or ceramic-on-ceramic (where both parts are ceramic) are often used in younger, more active patients.
- Metal-on-metal (a metal ball with a metal socket) is very occasionally used in younger, more active patients.

Metal-on-metal hip resurfacing

Resurfacing the original socket and the ball of the thigh bone is an alternative form of hip replacement. 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. The socket part of the joint is also resurfaced with a metal component (see Figure 3).

People who have this type of operation have a lower risk of dislocation and may be able to return to a higher level of physical activity compared with those having a conventional hip replacement.

This type of hip surgery is associated with a release of metal particles from the joint replacement materials, which may cause inflammation in the nearby tissues and have unknown effects on your general health. The complication rates and early repeat surgery rates for hip resurfacing procedures in the National Joint Registry for England and Wales are significantly higher than for conventional hip replacements. Complication rates are particularly high in older patients and in women. Metal-on-metal resurfacing isn't suitable for people with low bone density or osteoporosis, where the bones are weakened.

We don't know much about the long-term performance of these joints as the technique hasn't been in use for as long as total hip replacements. However, evidence so far suggests that resurfacing gives the best results in younger men.

How should I prepare for surgery?

Once you've decided to go ahead with the operation, your name will be put on a waiting list and the hospital will contact you, usually in the next 6–8 weeks.

Pre-admission clinic

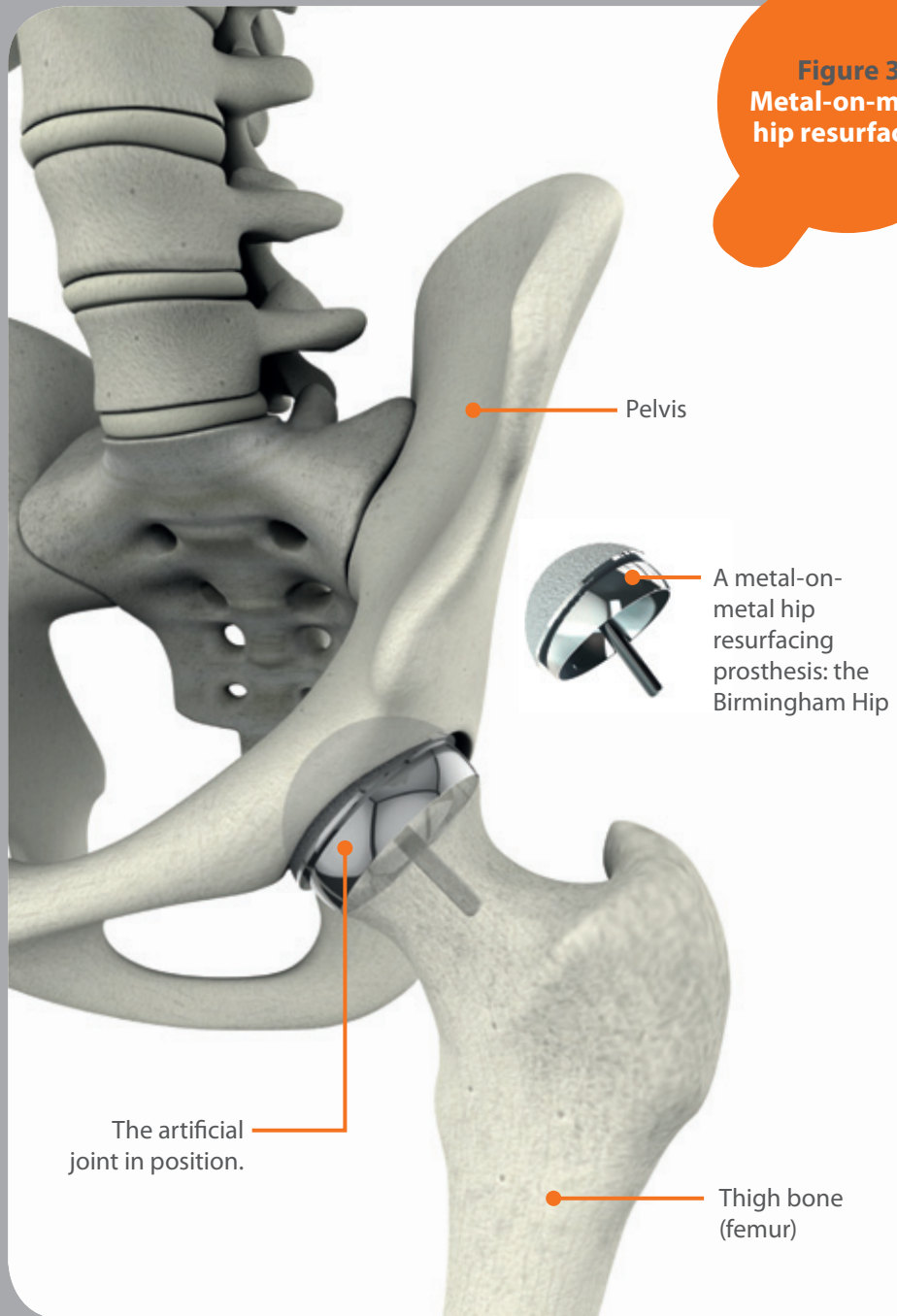
Most hospitals invite you to a pre-admission clinic, usually about 2–3 weeks before the surgery. You'll be examined to make sure you're generally well enough for the anaesthetic and the operation. This may involve the following tests:

- blood tests to check for anaemia and to make sure your kidneys are working properly
- x-rays of the affected body part
- a urine sample to rule out infection
- an electrocardiogram (ECG) tracing to make sure your heart is healthy.

The hospital team will probably tell you at this stage whether the operation will go ahead as planned.

It's also advisable to have a dental check-up and get any problems dealt with well before your operation. There's a risk of infection if bacteria from dental problems get into the bloodstream.

Figure 3
Metal-on-metal
hip resurfacing



A pre-admission clinic visit is the best time to discuss any worries you may have.

! A pre-admission clinic is a chance to discuss any worries you have about the operation, and to find out more about preparing for, and recovering from, surgery.

You should discuss with your surgeon, anaesthetist or nurse at this pre-admission clinic whether you should stop taking any of your medications before you have surgery. If you're on methotrexate you should discuss this with your doctor or surgeon, as some advise you to stop taking this medication before an operation and some don't.

i See Arthritis Research drug leaflet *Methotrexate*.

At this visit you may also see an occupational therapist. They will discuss with you how you'll manage at home in the weeks after your operation, and they'll advise you on aids and appliances that might help. If you're not invited to see an occupational therapist and you're anxious about coping at home after the operation, you should ask about home help and/or useful aids when you go for your pre-op assessment.

Going into hospital

Pre-admission checklist – before you go into hospital, you should think about the following:

- Do you have someone to take you to and from hospital?
- Have you set up your home ready for your return, with everything you need within reach, and any obstacles or trip hazards tidied away?
- Do you have any specialist equipment ready for when you leave hospital?
- Do you need someone to stay with you for a while after your operation?

You'll probably be admitted to hospital early on the day of surgery, though it may be earlier if you haven't attended a pre-admission clinic or if you have another medical condition that needs attention before surgery can go ahead.

You'll be asked to sign a form consenting to surgery, and you may also be asked if you're 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.

Just before your operation you'll be taken (usually in your bed, but you may be walked) from the admission ward to the operating theatre. If necessary, you may be given a sedative medication (a pre-med) while waiting in the admission ward. You'll then be given an anaesthetic.

This may be either an epidural or a spinal anaesthetic, or alternatively a general anaesthetic. If you have the spinal or epidural, you may also be sedated if necessary during the course of the operation.

What will my recovery involve?

After the operation

When you leave the operating theatre you'll probably have an intravenous drip in your arm to give you any fluid and drugs you may need. You may also have either one or two suction drains in your hip – plastic tubes that drain away fluid produced as the body heals.

You'll be taken to a recovery room or high-care unit until you're fully awake and the doctors feel that your general condition is stable. Then you'll be taken back to the ward, often with a pad or pillow strapped between your legs to keep them apart.

You'll be given painkillers to help relieve pain as the effect of the anaesthetic wears off. These may include:

- local anaesthetic
- patient-controlled analgesia (PCA) – a system where you can control your own supply of painkiller going into a vein by pressing a button
- painkilling injections or tablets.

The drip and any drains are usually removed within 24 hours. You'll 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.



Most people will be able to leave hospital within 4–8 days.

If the surgeon feels all these factors are favourable, they may include you in an accelerated rehabilitation programme, also called the enhanced recovery programme (ERP). This programme is becoming more common and aims to get you walking and moving within 12–18 hours and home within 4 days. If you're suitable, the ERP will start when you go for your pre-admission clinic to make sure you're fully prepared for the surgery and understand the programme. After the operation the programme aims to get you moving and eating normally as soon as possible, and when you're discharged from hospital you'll be given supporting therapy and follow-up checks. The programme focuses on making sure that you take an active role in your own recovery process.

Physiotherapy and occupational therapy

A physiotherapist will see you in hospital after the operation to help get you moving and advise you on

exercises to strengthen your muscles.

A physiotherapist or an 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's very important to follow this advice.

You shouldn't bend your hips to more than 90° (e.g. squatting, or sitting in a low chair or couch) and never cross your legs because these positions could dislocate your new hip. An occupational therapist will advise you on the correct height of seating.

Before you leave hospital, an occupational therapist will assess your physical ability and your circumstances at home, and may provide you with equipment such as a raised toilet seat and gadgets to help you dress.

i See Arthritis Research UK booklets

*Meet the rheumatology team;
Occupational therapy and arthritis;
Physiotherapy and arthritis.*

Going home

How soon you can go home depends on how well the wound is healing and whether you'll be able to get about safely.

! Most people will be ready to leave hospital within 4–8 days. If you're on an accelerated rehabilitation programme you may be able to go home in as little as 1–3 days.

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Hip replacement surgery

You'll need to attend the outpatients' department, usually 6–12 weeks after the operation, for a routine check-up to make sure your progress is satisfactory. You may also be offered outpatient physiotherapy if your doctors feel that this will help your recovery.

Once you're at 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 hospital staff straight away.

If you stopped taking methotrexate before the operation, it's very important to remember to start taking it again afterwards to reduce the risk of your arthritis flaring up again. If you're on other anti-rheumatic medications, you need to discuss when to re-start your medication with your rheumatologist.



Looking after your new hip joint

You may not be able to bend your leg towards your stomach as far as you'd like to – it's important not to test your new joint to see how far it'll go. You need to take great care during the first 8–12 weeks after the operation to avoid dislocating the hip. But it's also important to continue with the programme of muscle-strengthening exercises recommended by your physiotherapist.

Getting back to normal

You can expect to drive again after about 6 weeks, as long as you can safely control the vehicle and do an emergency stop. It's important to check with your

insurance company whether you're covered during your recovery, and you need to be confident that you can safely control the vehicle in all circumstances.

Getting in and out of a car can be difficult – you'll need to sit sideways on the seat first and then swing both your legs around together (see Figure 4). Some people put a plastic bag on the car seat to make it easier to swivel round. Your occupational therapist will advise you about other movements that you need to take special care with.

You'll be expected to sleep on your back with a hip abduction wedge (a support to keep your legs stable) between your legs for the first 6 weeks.

Figure 4
Take care
getting
in and out
of the car.



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

You could also return to work at this stage if you have a job that doesn't mean too much moving around. If you have a job that involves a lot of walking, you may need up to 3 months to fully recover before returning to work. If you have a very heavy manual labour job, you may wish to consider changing to lighter duties.

You'll probably need walking sticks for the first 4–6 weeks, but this varies between individuals. Your surgeon or physiotherapist will be able to advise how well you're progressing.

You'll 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 won't be the first to have asked.

! Orthocards™

Any patient in the UK who has had a joint replacement can apply to receive a free Orthocard™. This is a personalised card, the size of a credit card, which will show the details of your implant. An Orthocard™ will alert paramedics in the event of a serious injury and can be shown to staff at security checkpoints (at airports, for example) to make this process easier.

Orthocards™ can be obtained through your rheumatology team, online through the Joint Action website or via post from the British Orthopaedic Association.

**Within a year
of the operation
you should
have resumed
almost all of your
normal activities.**

i See Arthritis Research UK booklets
Everyday living and arthritis; Sex and arthritis; Work and arthritis.

What about sport and exercise?

Regular exercise is very important. Walking and swimming are fine, although some surgeons advise against breaststroke when swimming. Cycling may be difficult until about 12 weeks after the operation, as it'll be hard to get on and off the bike. Sports like golf or bowls that involve bending or twisting at the hip will be difficult for the first 12 weeks but should be fine after that.

We don't recommend running on hard surfaces or sports that involve sudden turns or impacts – for example, squash or tennis. If in doubt, ask your surgeon or physiotherapist for advice. You should always try to avoid extremes of movement at the hip and activities with a high risk of falling, such as skiing.

The following exercises are designed to get you moving again by strengthening your muscles and increasing flexibility.

Specific exercises for hip replacement patients

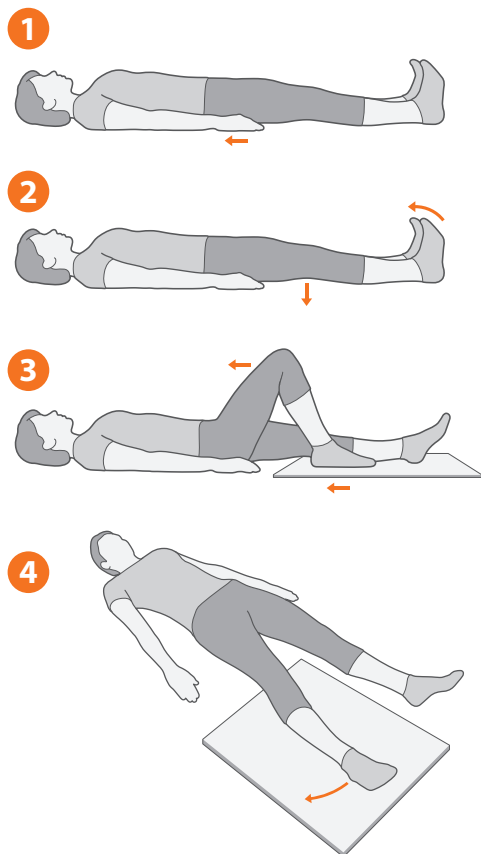
There are two groups of exercises recommended following your hip replacement surgery – those performed lying down (on the floor, an exercise mat or your bed) and those performed standing. There are some general rules to remember while doing any of the following exercises:

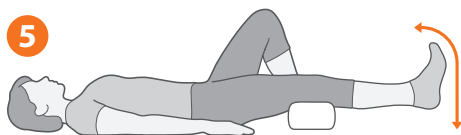
- Don't twist your body as you sit or stand.
- Don't bend your hips past 90 degrees.
- Don't cross your legs or feet.
- Don't roll your knee or toes inwards.

Lying down exercises

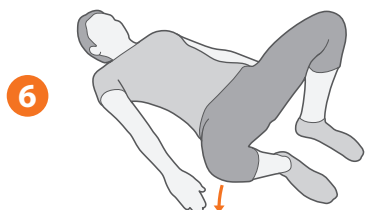
Repeat each exercise 10 times, and try to do them three or four times a day.

- 1. Glut exercise:** Lie on your back. Squeeze your gluteal muscles (glut, or buttock) together, hold for 5 seconds and relax.
- 2. Quad exercise:** Pull your toes and ankles towards you, while keeping your leg straight and pushing your knee firmly against the floor. Hold for 5 seconds and relax.
- 3. Heel slide:** Using a sliding board under your leg, bend your leg and bring your knee towards your chest, keeping your kneecap facing upwards. Slide your heel down again slowly.
- 4. Hip abductions:** Using a sliding board, bring your leg out to the side and then back to the middle, keeping your toes and kneecap facing the ceiling.

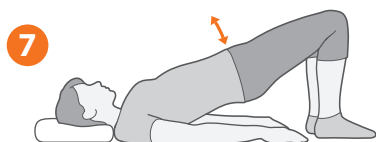




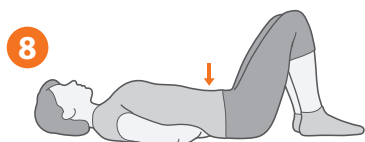
5. Short arc quad exercise: Roll up a towel and place it under your knee. Keep the back of your thigh on the towel and straighten your knee to raise your foot off the floor. Hold for 5 seconds and then lower slowly.



6 External hip rotation: Lie with your knees bent and feet flat on the floor, hip width apart. Let one knee drop towards the floor, then bring it back up. Keep your back flat on the floor throughout.



7. Bridging: Lie on your back with your knees bent and feet flat on the floor. Lift your pelvis and lower back off the bed. Hold the position for 5 seconds and then lower down slowly.



8. Stomach exercise: Lie on your back with your knees bent. Put your hands under the small of your back and pull your belly button down towards the floor. Hold for 20 seconds.



Standing exercises

9. Hip flexion:

Hold onto a work surface and march on the spot to bring your knees up towards your chest alternately. Don't go above 90 degrees.



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12. Heel to buttock exercise:

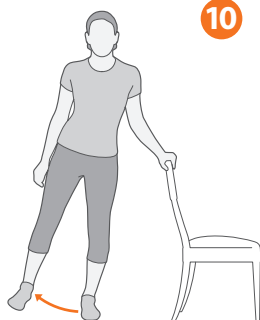
Bend your knee to pull your heel up towards your bottom. Keep your knees in line.



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10. Hip abduction:

Lift your leg sideways and bring it back, keeping your body straight throughout. Hold on to a chair or work surface for support.



10

13. Mini squat:

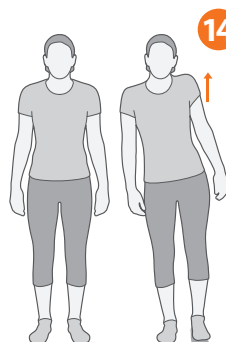
Hold onto a work surface for support. Squat down until your kneecap covers your big toe.



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14. Hip hitch:

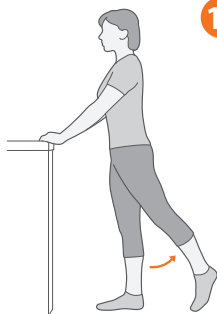
Standing straight, hitch your leg up at the hip so your foot is a couple of inches off the floor. Lower it back down slowly.



14

11. Hip extension:

Move your leg backwards, keeping your knee straight. Don't lean forwards. Hold onto a chair or work surface for support.



11

For more information contact your local physiotherapy department.



What are the potential complications of hip replacement surgery?

Hip replacement is a big operation and all major surgery carries risks. The risk of complications varies according to your general health and your surgeon will discuss the risks with you. It's important to be aware of the possible complications and to report any problems straight away. However, most complications are relatively minor and can be successfully treated. Many thousands of hip replacements are carried out each year without any complications at all.

- ❗ You must seek medical advice straight away if you have pain or swelling in the leg, chest pain or sudden breathlessness following your surgery.

Blood clots

After surgery, some people can suffer from blood clots which form in the deep veins of the leg (deep vein thrombosis, or DVT), causing pain and/or swelling in the leg. There are various ways to reduce the risk of this happening, including special stockings, pumps to exercise the feet and drugs that are given by injection into the skin such as heparin or fondaparinux.



Tablets for the prevention of DVT have recently become available. These are used to extend treatment to reduce the risk of DVT after you go home from hospital. Dabigatran and rivaroxaban are examples, and they're usually taken as a single tablet for up to 5 weeks after you go home from surgery. However, they remain controversial as it's not yet clear if the treatments really do reduce the overall risk of complications after joint replacement.

Pulmonary embolism

In a very small number of cases a blood clot can travel to the lungs, leading to breathlessness and chest pains. In extreme cases a pulmonary embolism can be fatal. However, it's usually possible to treat pulmonary embolism with blood-thinning medicines and oxygen therapy.

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 you'll probably need to do exercises to strengthen the muscles or have a brace to keep the joint still. If the hip keeps dislocating, further surgery or a brace may be needed to stabilise it. Even after you've started walking without support it's important to continue with a programme of muscle-strengthening exercise to help stabilise the hip and improve function.

Infection

To reduce the risk of infection, specially ventilated clean air operating theatres are often used, and most people will be given a short course of antibiotics at the time of the operation. Despite this, a deep infection can occur in about 1 in 100 cases. The infection can be treated but the new hip joint usually has to be removed until the infection clears up. New hip components are then implanted 6–12 weeks later.

Wear

Plastic hip sockets may wear over a period of time. The worn particles of plastic may cause inflammation and this can eat away the bone around the new hip. Ceramic-on-ceramic or metal-on-metal joints tend to wear less and are therefore less likely to cause this problem. New, harder-wearing plastics are also being developed.

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 linked with thinning of the bone around the implant, which makes the bone more prone to fracture. A fracture around the implant usually requires surgical fixing of the fracture and/or revision of the implant.

Bleeding and wound haematoma

A wound haematoma is when blood collects in a wound. It's normal to have a small amount of blood leak from the wound after any surgery. Usually this stops within a couple of days. But occasionally blood may collect under the skin, causing a swelling. This can discharge itself, causing a larger but temporary leakage from the wound usually a week or so after surgery, or it may require a smaller second operation to remove the blood collection. Drugs like aspirin and antibiotics can increase the risk of haematoma after surgery.

How long will the new hip joint last?

Your new hip should allow you virtually normal, pain-free activity for many years. Around 80% of cemented hips should last for 20 years. Younger, more active patients often get cementless hip replacements and these may last longer, although this isn't confirmed in long-term studies. Hybrid hips, in which only one part is cemented, work well in active middle-aged patients when used with ceramic-on-ceramic joints.

Revision surgery

Repeat hip replacements are possible and this revision surgery has made significant advances in recent years. Revision surgery is more complex than the original operation, the time in hospital is longer and the results are slightly less good with each revision. Even so, over 80% of patients report 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 from a donor patient to help replace bone loss. Bone grafts may need protection from movement, and this might mean that you'll be on crutches for longer. However, the eventual result is usually good.

Research and new developments

Minimally invasive surgery

Minimally invasive surgery is a technique that requires a much smaller incision and therefore results in less damage to the soft tissues (muscles, tendons and ligaments). This should mean a shorter recovery period after the operation, although this hasn't been conclusively shown in clinical trials. There's no real benefit of minimally invasive surgery in the longer term compared with traditional hip replacement techniques, and the results may be poorer than with conventional surgery because it's more difficult to position the implants.

At present, minimally invasive surgery is used in only a small proportion of hip replacements because of the problems outlined above. However, it may be more widely used in the future, possibly alongside computer-assisted surgery (also known as image-guided surgery). This uses infrared beacons attached to the patient's body and to the operating tools to generate images of the inside of the joint. This may allow more precise positioning of the hip replacement components.



Glossary

Anaemia – a shortage of haemoglobin (oxygen-carrying pigment) in the blood, which makes it more difficult for the blood to carry oxygen around the body. Anaemia can be caused by some rheumatic diseases such as rheumatoid arthritis or lupus, or by a shortage of iron in the diet. It can also be a side-effect of some drugs used to treat arthritis.

Ankylosing spondylitis – an inflammatory arthritis affecting mainly the joints in the back, which can lead to stiffening of the spine. It can be associated with inflammation in tendons and ligaments.

Cartilage – a layer of tough, slippery tissue that covers the ends of the bones in a joint. It acts as a shock-absorber and allows smooth movement between bones.

Electrocardiogram (ECG) – a test that records the electrical activity of the heart using a machine called an electrocardiograph. The aim of an ECG is to detect unusual heart rhythms and to identify heart problems.

Epidural – an injection given into the space around the spinal cord in the small of your back to anaesthetise the lower half of the body. The full name is epidural blockade.

Ligaments – tough, fibrous bands anchoring the bones on either side of a joint and holding the joint together. In the spine they are attached to the

vertebrae and restrict spinal movements, therefore giving stability to the back.

Occupational therapist – a therapist who helps you to get on with your daily activities (e.g. dressing, eating, bathing) by giving practical advice on aids, appliances and changing your technique to reduce the strain on your joints.

Osteoarthritis – the most common form of arthritis (mainly affecting the joints in the fingers, knees, hips), causing cartilage thinning and bony overgrowths (osteophytes) and resulting in pain, swelling and stiffness.

Osteoporosis – a condition where bones become less dense and more fragile, which means they break or fracture more easily.

Physiotherapist – a trained specialist who helps to keep your joints and muscles moving, helps ease pain and keeps you mobile.

Rheumatoid arthritis – an inflammatory disease affecting the joints, particularly the lining of the joint. It most commonly starts in the smaller joints in a symmetrical pattern – that is, for example, in both hands or both wrists at once.

Spinal anaesthetic – a local anaesthetic injected into the cerebrospinal fluid in the spinal canal to stop the transmission of nerve signals to and from the affected area.

Tendon – a strong, fibrous band or cord that anchors muscle to bone.

Where can I find out more?

If you've found this information useful you might be interested in these other titles from our range:

Conditions

- *Ankylosing spondylitis*
- *Osteoarthritis*
- *Osteoporosis*
- *Rheumatoid arthritis*

Therapies

- *Meet the rheumatology team*
- *Occupational therapy and arthritis*
- *Physiotherapy and arthritis*

Self-help and daily living

- *Everyday living and arthritis*
- *Feet, footwear and arthritis*
- *Sex and arthritis*
- *Work and arthritis*

Drug leaflet

- *Methotrexate*

You can download all of our booklets and leaflets from our website or order them by contacting:

Arthritis Research UK

PO Box 177
Chesterfield
Derbyshire S41 7TQ
Phone: 0300 790 0400
www.arthritisresearchuk.org

Related organisations

The following organisations may be able to provide additional advice and information:

Arthritis Care

18 Stephenson Way
London NW1 2HD
Phone: 020 7380 6500
Helpline: 0808 800 4050
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 DN4 8QN
Phone: 01302 310123
www.dialuk.info

Disabled Living Foundation (DLF)

380–384 Harrow Road
London W9 2HU
Phone: 020 7289 6111
Helpline: 0845 130 9177
www.dlf.org.uk

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

RADAR (Royal Association for Disability & Rehabilitation)

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

Notes

Notes



We're here to help

Arthritis Research UK is the charity leading the fight against arthritis.

We're the UK's fourth largest medical research charity and fund scientific and medical research into all types of arthritis and musculoskeletal conditions.

We're working to take the pain away for sufferers with all forms of arthritis and helping people to remain active. We'll do this by funding high-quality research, providing information and campaigning.

Everything we do is underpinned by research.

We publish over 60 information booklets which help people affected by arthritis to understand more about the condition, its treatment, therapies and how to help themselves.

We also produce a range of separate leaflets on many of the drugs used for arthritis and related conditions. We recommend that you read the relevant leaflet for more detailed information about your medication.

Please also let us know if you'd like to receive our quarterly magazine, Arthritis Today, which keeps you up to date with current research and

education news, highlighting key projects that we're funding and giving insight into the latest treatment and self-help available.

We often feature case studies and have regular columns for questions and answers, as well as readers' hints and tips for managing arthritis.

Tell us what you think of our booklet

Please send your views to:
feedback@arthritisresearchuk.org
or write to us at:
Arthritis Research UK, PO Box 177,
Chesterfield, Derbyshire S41 7TQ.

A team of people contributed to this booklet. The original text was written by Prof. Ian Learmonth, who has expertise in the subject. It was assessed at draft stage by clinical specialist in rheumatology Sarah Houghton. An **Arthritis Research UK** editor revised the text to make it easy to read, and a non-medical panel, including interested societies, checked it for understanding. An **Arthritis Research UK** medical advisor, Mark Wilkinson, is responsible for the content overall.

Get involved

**You can help to take the pain away
from millions of people in the UK by:**

- Volunteering
- Supporting our campaigns
- Taking part in a fundraising event
- Making a donation
- Asking your company to support us
- Buying gifts from our catalogue

To get more **actively involved**, please
call us **0300 790 0400** or e-mail us at
enquiries@arthritisresearchuk.org

Or go to:
www.arthritisresearchuk.org

Providing answers today and tomorrow



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