Osteoarthritis of the hip

What is osteoarthritis of the hip?

Osteoarthritis is the most common form of arthritis, and the hip is the second most commonly affected joint.

Everyone’s joints go through a normal cycle of wear and repair during their lifetime. As your joints repair themselves, their shape and structure can change. If this happens in one or more of your joints, it’s known as osteoarthritis.

A joint is a part of the body where two or more bones meet. Your hip joint consists of a ball at the top of the thigh bone, which fits into a socket in your pelvis.

The ends of both bones in a joint are covered by a smooth slippery surface, known as cartilage. This is the soft but tough tissue that allows the bones to move against each other without friction.

Osteoarthritis causes the cartilage in your hip joint to become thinner and the surfaces of the joint to become rougher. This can cause swelling, pain and stiffness, but not everyone will have these symptoms.

The exact cause of osteoarthritis is often not known, as there can be quite a few reasons why a person develops the condition. These include the genes inherited from your parents.

Figure 1. The main parts of the hip joint

Pelvis
Acetabulum (socket)
Femoral head (ball)
Femur (thigh bone)

Osteoarthritis usually starts in people over the age of 45 and is more common in women than men.

Research has shown that injuries, and jobs that involve heavy lifting or long periods of standing up, are associated with an increased risk of developing hip osteoarthritis.

Being overweight can also be a factor, as it increases the load on your joints.

For more information on this condition and how it’s diagnosed, see the Versus Arthritis booklet: Osteoarthritis

You can view all our information online at: www.versusarthritis.org
How will it affect me?

While many people won’t have symptoms, those who do can have a wide range of experiences. Being diagnosed with osteoarthritis doesn’t mean your condition will get worse, as there are things you can do to improve your symptoms.

In hip osteoarthritis, the pain comes on gradually over a period of months or years. However, it could also be triggered by a recent injury. You might find symptoms come and go and that the pain is worse at the end of the day.

The painful areas are usually the lower back, buttocks and groin. Some people also feel discomfort from the top of their thigh down to the knee. Sometimes it can even be felt all the way down to the ankle. This can be known as referred or radiating pain. If your hip is badly affected, walking, standing up or bending down can suddenly become much more difficult. Your hip might also ‘lock’ for a few moments.

If you have advanced hip osteoarthritis, the muscles around the hip can become smaller and weaker due to not using them. This then puts even more strain on the joint. The best thing you can do at home for hip osteoarthritis is exercise, as it will strengthen the muscles that support your hip joint.

Sometimes the effects of osteoarthritis can make people feel depressed or anxious. It can also affect your sleep pattern and even your relationships. It’s worth speaking to your doctor about these problems.

Managing osteoarthritis of the hip

There’s no cure for osteoarthritis, but there are things you can do for yourself that can make a difference to how the condition affects you. There are also some treatments available that could significantly reduce your pain and improve your mobility. It’s likely that you’ll need to use a combination of different things to get the best results.

Exercise

Joints need to be exercised regularly to keep them healthy. It’s very important to keep moving if you have hip osteoarthritis. Whatever your fitness level, exercise should form a core part of your treatment.

Exercise can strengthen the muscles around your hip, improve your posture and help you to lose weight, all of which can help your pain and other symptoms.

It’s important to carry on with your exercises, even if you start to feel better. Stopping or reducing the amount of exercise you do could cause your symptoms to come back again. Try to start off slowly and gradually increase how much you do. Exercising little and often is a good place to start.

See if you can talk to a physiotherapist or speak to your doctor about being referred to one. A physiotherapist can give you specific advice and exercise tips that are tailored to your needs. They might even be able to start you on a personalised exercise plan, but you'll need to build this into your daily routine to get the most benefit from it.

Your physiotherapist may recommend exercise in a hydrotherapy pool. It can help get muscles and joints working better and, because the water is warmer than in a normal swimming pool, it can be very soothing and relaxing. Hydrotherapy is sometimes called aquatic therapy.

Exercises that reduce the load on your joints, such as swimming and cycling, are recommended for treating hip osteoarthritis. Water-based exercises are particularly good for treating hip osteoarthritis, as the water takes the weight of your body and reduces the strain on your hips.

Ultimately, the best form of exercise for osteoarthritis is something you enjoy and will keep doing. Try different things and see what works best for you. This could be a class, or something you do on your own.

You should try to do a combination of strengthening, aerobic and range of movement exercises.

Strengthening exercises

This type of exercise is important, as it strengthens the muscles that control your hip, and helps to stabilise and protect the joint. Try to do strengthening exercises at least two days a week.

A good way to strengthen your leg muscles is to work them against resistance. You could do this by walking laps in a shallow swimming pool.
Range of movement exercises
These are good for posture and helping to keep your joints flexible. These exercises can be something as simple as stretching. Make sure your joint moves through a range of positions that comfortably stretch it slightly further each time.

Aerobic exercise
This is any exercise that increases your pulse rate and makes you a bit short of breath. Regular aerobic exercise should help you sleep better, is good for your general health and wellbeing, and can reduce pain by stimulating the release of endorphins, which are hormones that help with pain relief.

Different types of aerobic exercise include cycling, swimming and walking. Try to work hard enough to get out of breath, but still be able to have a conversation.

You should try to do 2 hours and 30 minutes of aerobic exercise each week, but you can spread this out over the week, instead of all in one go.

Weight management
Being overweight increases the strain on your joints, especially your hips and knees. This makes it more likely that you’ll develop osteoarthritis and that your condition will get worse over time. Losing weight if you’re overweight could reduce your pain and other symptoms.

There’s no special diet that will help with specific diet that’s recommended for people with osteoarthritis. However, if you need to lose some weight, you should try to follow a balanced, reduced-calorie diet, combined with regular exercise.

Your doctor should be able to give you advice on diets and exercise that will help.

The NHS has a great weight loss plan that you can follow and help you lose weight in a healthy way at: www.nhs.uk/live-well/healthy-weight/start-the-nhs-weight-loss-plan

The Association of UK Dieticians also has an informative leaflet on diet and OA. Find out more at: www.bda.uk.com/resource/osteoarthritis-diet.html

Reducing the strain on your hip
Apart from keeping an eye on your weight, there are a number of other ways you can reduce the strain on your hips.

- Pace your activities and don’t tackle all your physical jobs at once. Break the harder activities up into chunks and do something more gentle in between. Keep using your hip even if it’s slightly uncomfortable and rest it before it becomes too painful.
- Wear shoes with thick soles and enough room for your toes. Good shoes should reduce the shock through your hips by absorbing some of the impact when walking. Try to avoid wearing high heels.
- If you need extra support for your feet or knees when you walk, speak to your physiotherapist, occupational therapist or doctor about getting insoles made for your shoes.
- Use a walking stick if needed to reduce the weight and stress on a painful hip. Hold it in the hand on the opposite side of the body to your affected joint. Try to avoid carrying items on the same side as the affected hip.
- Use the handrail for support when going up or down stairs. Go up stairs one at a time with your good leg first, but go downstairs with your bad leg first.
- Think about making changes to your home, car or workplace to reduce unnecessary strain. An occupational therapist can advise you on special equipment, such as sock aids to help when bending, that will make things you do every day easier.
- When sitting, chairs should be firm and high enough so that your hip is slightly higher than the knee. Wedge-shaped cushions or a folded towel could be useful to correct the slope of a car seat. Try to avoid crossing your legs.

Coping with low mood and sleep problems
You might find that osteoarthritis makes you feel depressed or anxious. Speak to your doctor if you’re feeling low. They may be able to recommend psychological therapies to help you, such as cognitive behavioural therapy (CBT).
and a few stress-relieving techniques. If your sleep is disturbed because of hip osteoarthritis, this could make your pain feel worse. However, there are things you can do for yourself that might help, such as:

- Keep a sleep diary to work out if there are any patterns to your sleep problems.
- Sleep at regular times to get your body into a routine.
- Try to wind down before bed by having a warm bath or reading a book.
- For a more comfortable sleeping position, use a pillow between your legs if lying sideways, or use a pillow under your knees if lying on your back.

If you're still having problems, speak to your doctor or an occupational therapist. They can give you some tips and techniques. They may also refer you to a pain management clinic, where you can be shown how to live a more active life.

Drugs

Drugs can be used to help ease the pain and stiffness caused by osteoarthritis. You’ll have the best results if you keep active, reduce the strain on your hips, and take drugs for your condition as you need them.

Some of the drugs and treatments you can try include:

- **Painkillers**: simple over-the-counter painkillers such as paracetamol may help, but your doctor may prescribe you stronger painkillers if needed.
- **Non-steroidal anti-inflammatory drugs (NSAIDs)**: a short course of NSAIDs, such as ibuprofen, can help reduce pain, inflammation and swelling. However, NSAIDs aren’t suitable for everybody, so make sure you speak to a pharmacist before taking them.
- **Capsaicin cream**: a pain-relieving cream made from the pepper plant, which is available on prescription.
- **Steroid injections**: an injection into the soft tissue on the side of the hip, which can help reduce some of the pain. Usually you’ll only be able to have three of these a year.

If you’re taking any of the over the counter medications mentioned above, make sure you’re taking them as directed by your doctor or the patient information leaflet. Don’t forget to let your doctor know about all the medications you’re taking.

Other pain relief

If the methods of pain relief above don’t help you, you might want to try some of the following:

- **Manual Therapy**: consists of several techniques and stretches performed by physiotherapists. Manual therapy can be an effective treatment to increase the quality and range of movement of the hip.
- **Transcutaneous electrical nerve stimulation (TENS)**: a small machine that sends tiny electric shocks, through pads placed on your skin, to relieve pain. TENS machines aren’t suitable for everyone, so talk to your doctor before using one.
- **Heat therapy**: ice packs and heat packs, such as a hot water bottle or a bag of frozen peas, can relieve some of the pain and stiffness in your hip. But be careful not to put ice or heat packs directly on your skin as they could cause burns. Make sure to wrap them in a damp tea towel or cloth.
- **Hyaluronic acid injections**: hyaluronic acid occurs naturally in the body and helps to lubricate joints. These injections aren’t available on the NHS as they’ve not been proven to be an effective treatment for osteoarthritis.
Supplements: there’s a wide range available, including fish oils, turmeric, glucosamine and chondroitin. There’s very little evidence on how well they work, but some people do feel benefits from them.

Acupuncture: is a technique where very fine needles are inserted at specific points in your skin. While there is no evidence that acupuncture is an effective treatment for hip osteoarthritis, some people find that it helps them.

You need to be wary of some of these treatments, but what works for you can be completely different to what works for someone else. If you think some of these treatments could be right for you just have a quick chat with your doctor first.

For more information on the treatments above, see Versus Arthritis booklet: Osteoarthritis
You can view all our information online at: www.versusarthritis.org

Surgery

Exercise, treatments and keeping to a healthy weight usually improve the symptoms of hip osteoarthritis. But if these treatments haven’t worked for you, you may benefit from having hip surgery.

Surgery might be suggested if you have symptoms that have a substantial impact on your quality of life, such as severe pain or reduced mobility. Total hip replacement surgery is one of the most commonly conducted and successful operations in the world. The operation can give a lot of pain relief and improve movement in your hip. Surgical techniques are improving all the time and most hip replacements now last for at least 15 years.

Hip resurfacing is an alternative type of surgery where, rather than replacing the entire hip, only the damaged surfaces are replaced. However, resurfacing is less popular than hip replacements, as there are worries over how the new metal surfaces could cause damage to the soft tissues that surround the hip. Your surgeon will be able to tell you which option is best for you.

Before having surgery, you’ll be involved in a shared decision-making process. This involves discussing the best options for treating your hip and covers the risks and benefits of surgery. The process is usually carried out by a surgeon or an advanced physiotherapist practitioner. They can give you the best advice and information, so you can make the decision that’s right for you.

For more information on surgery, see the Versus Arthritis booklet: Hip replacement surgery
For more information visit our website: www.versusarthritis.org/about-arthritis/treatments/surgery/hip-replacement-surgery

Exercises for osteoarthritis of the hip

This section contains some simple exercises that are designed to stretch, strengthen and stabilise your hips. Many of these exercises can be adapted to be done in water, which can help take the pressure off your joint. Start by exercising gradually and build up over time. Carry on exercising even if your symptoms ease, as this can stop them coming back.

Stretching exercises should be done every day, while strengthening exercises should be done two or three times a week, and aerobic exercises two to five times a week. If you have any questions about exercising, ask your doctor or physiotherapist before you start. It might help to go through these exercises with a physiotherapist at first, or they might be able to give you a personalised exercise plan.

If you’ve had a hip replacement, it’s important to talk to your hospital about the exercises in this leaflet. Make sure to follow their advice before attempting to do them yourself.
Stretching exercises
Try to do these exercises every day, as stretching exercises can be particularly good for hip osteoarthritis. For these, it’s good to push until you start to feel the pain, but don’t push through the pain, as it could make your symptoms worse.

Heel slide
Lie on your back. Bend your leg and slide your knee towards you as far as is comfortable. Slide your heel down again slowly.

Knee lift
Lie on your back. Pull each knee to your chest in turn, keeping the other leg straight. Take the movement up to the point you feel a stretch, hold for around 10 seconds and relax. Repeat 5 to 10 times. If this is difficult, try sliding your heel along the floor towards your bottom to begin with, and when this feels comfortable, try lifting your knee.

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

Strengthening exercises
To try and build up the strength of your muscles, try to do these exercises two to three times a week.

Hip flexion
Position yourself next to a wall that you can use for support. Stand on one leg and bring the other one up to a right angle, then hold for up to 30 seconds. If you feel safe, challenge your balance by taking your hand off the wall. Instead of using your arm for support, you can also do this exercise by leaning against a wall and sliding your leg upwards along it.
Strengthening exercises

**Hip extension**
Move your leg backwards, keeping your knee straight. Clench your buttck tightly and hold for five seconds. Don’t lean forwards. Hold onto a chair or work surface for support.

**Hip abduction**
Lift your leg sideways, being careful not to rotate the leg outwards. Hold for five seconds and bring it back slowly, keeping your body straight throughout. Hold onto a chair or work surface for support. You can also do this exercise lying sideways.

**Heel to buttock exercise**
Bend your knee to pull your heel up towards your bottom. Keep your knees in line and your kneecap pointing towards the floor.

**Mini squat**
Squat down until your knee cap covers your big toe, this should be at about 45 degrees. Hold this position for a count of five, if you can. Use a work surface or a chair for support if you need to.

**Short arc quadriceps 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 10 seconds, then lower slowly. Your physiotherapist might suggest holding this position for longer, sometimes for up to 45 seconds.
Strengthening exercises

**Quadriceps exercise**
Pull your toes and ankles towards you, while keeping your leg straight and pushing your knee firmly against the floor. You should feel the tightness in the front of your leg. Hold for five seconds and relax. This exercise can be done from a sitting position as well, if you find this more comfortable.

**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.

**Leg raise**
Lie face down. Tighten your stomach and buttocks muscles to lift one leg slightly off the floor, while keeping your hips flat on the ground. Hold this position for 5 to 10 seconds and repeat 3 times.

**Sit/stand**
Sit on a chair and cross your arms, so that you don’t use them for support. Then repeatedly sit and stand, making sure your movements are slow and controlled. Repeat five times. You can make this exercise easier or more difficult by changing the height of the chair. You could do this by adding a cushion to the seat.

**Straight-leg raise (sitting)**
Sit back in your chair, with a straight back. Straighten and raise one of your legs. Hold for a slow count to 10, then slowly lower your leg. Repeat 10 times with each leg.
Thank you!

A team of people helped us create this factsheet. We would like to thank Mrs Susan Chrisene, Dr Natasha Usher, Miss Mary McAllister and Mr Ian Fortune Roberts for helping us review this factsheet.

We would also like to give a special thank you to the people who shared their opinions and thoughts on the factsheet. Your contributions make sure the information we provide is relevant and suitable for everyone.