

Osteoarthritis of the hip joint



Information for guided patient management

Provided by

Practice Plus Group MSK, Buckinghamshire

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Anatomy of the hip

The hip is a ball and socket joint which allows you to move your leg during daily activities such as walking, going up and down stairs and getting in and out of chairs. The hip joint has excellent range of movement and is a very stable joint. The ball part of the joint is called the femoral head and it is at the top end of the thigh bone (femur). The socket part of the joint is formed by a hollow in the pelvis called the acetabulum). The hip joint is supported and moved by the surrounding muscles.

What is osteoarthritis?

Osteoarthritis is a common condition of the joints causing pain and stiffness. It is mainly found in older people but can present in people over the age of 45, younger adults can also be affected. Osteoarthritis is most common in the hips, knees, hands and feet but can affect other joints too. It is not unusual to have osteoarthritis in more than one joint.

A joint is where two or more bones meet. In a healthy joint the surface of the bones in the joint is covered in a smooth tissue called articular cartilage (see Figure 1). This helps the joint to move feely without friction. All joints are surrounded by a tough fibrous sleeve called a capsule. This is lined by synovium which produces synovial fluid that nourishes the cartilage and lubricates the joint. All joints are supported by ligaments.

When a joint develops osteoarthritis, the articular cartilage covering the joint surfaces becomes thinner and rougher (see Figure 2). This can result in the joint not moving as smoothly as it should. When the cartilage becomes worn or damaged the tissues within the joint become more active than normal. This may result in osteophytes where extra bone may form at the edges of the joints. These can sometimes restrict movement and irritate surrounding tissues. The lining around the joint (synovium) can also thicken and produce for fluid than normal and cause joint swelling. Osteoarthritis of the hip is a long term condition, there is no cure. There are treatments available and there are changes you can make to your lifestyle that can help to reduce pain and other symptoms. These are outlined within this leaflet.

What are the symptoms of hip osteoarthritis?

Symptoms of osteoarthritis vary greatly from one person to another and from one joint to another. The main symptoms are pain, stiffness and problems moving the hip joint. Symptoms can flareup and settle back down again. The level of pain does not always reflect the condition of the joint.

Pain - Pain and aching can be felt in the hip joint but there are people who have osteoarthritis that get very little or no pain at all. The pain is commonly felt in the groin but pain can also refer into the front of the thigh and sometimes into the knee joint. The pain can feel worse after weight bearing activity or towards the end of the day. In more severe cases the pain can wake people during the night.

Stiffness - The hip may feel stiff after rest (such as sitting for a while or on first getting up in the morning), but this usually eases quickly as you get moving again. People with hip osteoarthritis often notice that their hip may not move as freely or as far as normal. This can cause problems with bending forwards to reach their feet to put socks on or to cut their toe nails. Joints affected by osteoarthritis can sometimes grate or crack as you move and is called crepitus. This is nothing to be alarmed about and can occur in people who have no other symptoms.

Giving Way -Weight bearing joints such as knees and hips can give way at times and this is because your muscles have weakened. Sometimes people can visually see wasting in the muscles around the affected joint. The good news is that exercises to strengthen the muscles that support the joint can help to prevent this from happening.

What can be done to help the symptoms?

When you see one of our Physiotherapists they will ask questions about the symptoms you are experiencing and the impact these have on your daily life. They will also examine the range of movement and strength at your hips. X-rays are not usually necessary for diagnosing osteoarthritis or deciding on your initial treatment. You can still lead a healthy, active life if you have osteoarthritis. The following lifestyle changes and treatment options aim to improve your symptoms and quality of life.

It is important that if you have been diagnosed with osteoarthritis of you hip that you do all you can to manage the condition. Below are some things that help in the management of osteoarthritis. It is likely that you will need to use a combination of things to get the best results.

Advice and education - Hopefully, this leaflet will help you understand more about osteoarthritis of the hip and what you can do to relive the symptoms. At the back of the leaflet are some other useful sources of information. Please discuss any further questions you have with your Physiotherapist.

Exercise - Joints need to be exercised regularly to keep them healthy. Exercise has been shown to help people with osteoarthritis and can reduce the symptoms. You will need to undertake a combination of aerobic exercise and specific hip exercises.

Aerobic exercise is advised. Swimming, cycling, and walking, are all good options to consider. Water based exercise is particularly helpful as the water reduces the load on your joints.

Pilates and yoga can also be helpful. The type of exercise that suits you will depend on the level of your symptoms and any other health conditions you have. It is important to find an activity that you enjoy as you will be much more likely to keep it up. Doing general exercise can also help to maintain a healthy weight and improve your general health and wellbeing.

It is also recommended that specific hip exercises are undertaken to help both the strength and flexibility around the hip. There are some basic exercises towards the back of this leaflet and our Physiotherapists can give you further guidance and support if required.

Losing weight - Being overweight can make joint pain worse. If you are overweight, you should be given advice and support on losing weight by your GP or Physiotherapist. The best way of losing weight is to follow a healthy, balanced diet. Gradually increasing the amount of physical activity you do can also help with weight loss.

Other suggestions - Pacing your activities can be useful in the overall management of osteoarthritis which means balancing both rest and activity,

It is also useful to consider using a walking aid such as a walking stick to help with your pain and walking. Your physiotherapist can discuss this option with you. They will be able to provide you with a walking stick that is the correct height for you and ensure that you can use it correctly and safely.

It can be helpful to ensure that you wear suitable footwear such as a flat shoe that is supportive and cushioned such as a trainer. Some people also benefit from wearing insoles (orthotics) and your Physiotherapist can advise if this is something you would benefit from.

Medication

Not everyone with osteoarthritis needs medication but if required there are medications available that can help to reduce the pain. These should be discussed with your GP or Pharmacist to decide what is most suitable for each individual. Often the following will initially be considered:

- Non-steroidal anti-inflammatory (NSAID) creams and gels
- Paracetamol
- NSAID drugs
- Steroid injections

Steroid injections are mainly used for painful osteoarthritis of the hip that is not manageable with the previously discussed options. This can be discussed with your Physiotherapist who is able to refer you for a steroid injection within our service. An x-ray will we be arranged prior to the injection if you have not had one previously. The steroid injection in done under ultrasound guidance and a local anaesthetic and steroid will be injected into the affected hip joint. The injection will usually start to improve symptoms over the first few days but can take several weeks to feel the full benefit. The duration of relief can vary from one individual to another. It is advised that a repeat injection into the same hip joint is not undertaken for at least 6 months.

Surgery - Most people with osteoarthritis of the hip do not require joint surgery. If you have tried a number of treatments and you still have a lot of joint pain which is having a significant impact on your daily activities then your Physiotherapist may recommend that a referral to a surgeon is the best option for you. Usually it is a total hip replacement that is undertaken for osteoarthritis of the hip but sometimes other surgery may be considered. Your Physiotherapist will discuss the process fully with you and an x-ray will be required if you have not previously had one. You can also visit our website (see below) where there is further patient information regarding whether you should consider having a total hip replacement.

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Exercises for hip osteoarthritis

As well as these simple exercises it is also important to stay active when you have osteoarthritis. Choose an activity you enjoy to help keep you motivated. Activities such as walking, swimming, cycling, pilates and yoga are all worth considering. The exercises below will help to strengthen the muscles around your hip and help to ease the joint stiffness.

Supported standing hip flexion - In supported standing raise one leg towards your chest, repeat 10 times then repeat with the other leg.

Supported standing hip extension - In supported standing move your leg backwards keeping your knee straight. Clench your bottoms as you do this and hold for 5 seconds. Repeat 10 times with both legs.

Supported standing hip abduction - In supported standing lift you leg out to the side ensuring that the leg does not rotate. Hold for 5 seconds and then return it to the start position. Try to keep your body still whilst the leg moves. Repeat 10 times with both legs.

Supported standing heel to buttock - In supported standing bend you knee and take your heel to your bottom until a gentle stretch is felt. Keep your knees together and you knee pointing towards the floor. Return to the starting position. Repeat 10 times with each leg.

Static quadriceps exercise - Lying on your back on a bed or the floor pull your toes towards you, whilst keeping your leg straight and pushing your knee firmly down onto the bed/floor. You should feel the muscle tighten in the front of your thigh. Hold for 5 seconds then relax. Repeat 10 times with each leg.

Heel Slides - Lie on your back. Bend your leg and slide your heel towards your bottom as far as comfortable. Slide your leg back down straight onto the bed. Repeat 10 times on each leg

External rotation of the hip - Lie on your back with your knees bent and feet flat. Let one knee drown towards the bed and then bring it back up. Repeat 10 times with both legs.

Hip flexion - Lying on your back on a bed or the floor. Take you knee towards your chest holding behind your thigh. Keep the other leg straight out on the bed/floor. Hold the stretch for 5-10 seconds. Repeat 5 times with both legs.

Bridging - Lying on your back with your knees bent and your feet flat on the floor. Lift your pelvis (bottom) and lower back off the bed/floor. Hold the position for 5 seconds the lower down. Repeat 10 times.

Hip abduction - Lie on your good side with your good leg bent to help support you. Straighten the affected leg and slowly raise it up 10-20cms towards the ceiling hold for 5 seconds then slowly lower back down to the other leg. Repeat 10 times and then lie on your other side to exercise the other leg.

Further resources

Buckinghamshire Musculoskeletal Integrated Care Service/MSK Service Click patient information for useful links https://www.buckinghamshire-music.nhs.uk

Chartered Society of Physiotherapy www.csp.org.uk

NHS website
Useful advice on healthy living and health apps
www.nhs.uk

Versus Arthritis
Helpline 08005200520
www.versusarthritis.org

Osteoarthritis of the hip factsheet

https://www.versusarthritis.org/media/22306/osteoarthritis-of-the-hip-factsheet.pdf

Hip Pain Patient Information

https://www.versusarthritis.org/media/1254/hip-pain-information-booklet.pdf

OA Patient Information

https://www.versusarthritis.org/media/12747/osteoarthritis-information-bookletv2.pdf

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Review Nov 2025 Version 1 PPG0471 Nov.23 (0422)