

Knee osteoarthritis

Patient information factsheet

What is knee osteoarthritis?

- Osteoarthritis is the most common kind of arthritis. It usually affects the knee joint the most.
- Everyone's joints get a little damaged as they get older.
- The body tries to repair these joints over time. Sometimes, they can change shape or look different. This is called osteoarthritis.
- A joint is a part of the body where two or more bones meet. In your knee, it's the thigh and shin bones.
- There is also a small bone at the front of the knee called the patella or kneecap.
- Your knee has two special rings called menisci (or meniscus) made of cartilage. Cartilage is a soft, strong tissue that helps your bones move smoothly and stops them from rubbing together.
- These rings of cartilage help spread the weight evenly across your knee. There is also cartilage under your kneecap.
- Osteoarthritis makes the cartilage in your knee get thinner and rougher. This means your knee doesn't move as smoothly as it should, and it can feel painful and stiff.
- Osteoarthritis can happen to anyone at any age, but it is more common in women who are over 50 years old.
- Hurting a joint or having other joint problems, like gout, can make it more likely for people to get osteoarthritis.
- The genes we inherit (get) from our parents can also make it more likely for us to get this condition.
- Being overweight can also cause osteoarthritis because it puts extra pressure on joints that carry your body weight, like your knees.

How will it affect me?

- Your knee will probably feel painful and stiff at times.
- Osteoarthritis might be felt in just one knee, especially if you hurt it before. Or it can happen in both knees.
- The pain may feel worse at the end of the day, or when you move your knee.
- Resting your knee can help make the pain feel better.
- You might have some stiffness in the morning, but this does not usually last more than half an hour.

- The pain can be felt all around your knee, or just in a certain place such as the front and sides.
- It might feel worse after going up or down stairs.
- Sometimes, people have pain that wakes them up in the night.
- The pain might change—some days it will feel better, and some days it might feel worse.
- Sometimes your knee might look swollen. This can be caused by two things:
 - Hard swelling - This happens when the bone around the joint grows outwards. These extra bits of bone are called osteophytes or bone spurs.
 - Soft swelling - This happens when your joint gets red and sore (inflamed) and makes extra fluid. This is sometimes called an effusion or “water on the knee”.
- Sometimes, osteoarthritis in the knee can make the muscles in your thighs get weaker. This can make your leg look thinner.
- When the muscles are weak, your knee might feel wobbly and could give way when you stand or walk.
- Osteoarthritis can sometimes make people feel depressed (sad) or worried.
- It can also make it hard to sleep or get along with others. If you feel like this, tell your Doctor because they can help you.

How to care for (manage) osteoarthritis

- There is no cure for osteoarthritis but there are some things you can do for yourself to help manage it.

Exercise

- “Motion is lotion” - Moving your joints is like giving them lotion! Joints need to move often to stay healthy.
- Exercise helps your knee stay strong so you can do everyday things.
- It is important to find the right balance for you.
- Doing too much can make the pain worse but doing too little can make your knee stiff.
- Exercise helps make the muscles around your knee stronger. It helps you stand up straight and can help you lose weight. All of this helps with osteoarthritis.
- It is important to carry on with exercise even when you feel better. It can support you to move around and keep your knee strong.
- If you stop exercising, your pain might come back.

- You could also lose the strength and movement you worked hard to get.
- Try to do exercise every day or find a fun activity you like and can keep doing.
- There are different kinds of exercise that can help people with knee osteoarthritis. See below for some examples:

Range of movement exercises

- These exercises help keep your joints moving easily.
- They can be as simple as stretching, helping your joint move through different positions and slowly become more flexible over time.

Strengthening exercises

- This kind of exercise helps make the muscles around your knee stronger.
- Strong muscles help protect your knee and keep it steady.
- It can also help with pain and stop your knee from giving way. This can lower your chance of falling over.
- You should try to do strengthening exercises at least two days a week.

Aerobic exercises

- Aerobic exercise is exercise that makes your heart beat faster and makes you breathe harder.
- Doing this kind of exercise often can help you in lots of ways.
- It is good for your overall health and can help lower pain.
- When you are exercising your body releases feel-good chemicals called endorphins. Endorphins are your body's natural happy and pain-fighting helpers.
- It can also help you sleep better.
- There are many different types of aerobic exercise. These include cycling, swimming and walking.
- You should exercise 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.
- You can spread this out over the week. You do not need to do it all in one go.

Weight management

- Being overweight puts more pressure on your joints, mostly on your knees.
- If you are overweight, you are more likely to get osteoarthritis. It might also get worse over time.
- If you are overweight, losing some weight can help your knee hurt less and feel better.
- When you walk, run, or climb stairs, your knees feel a pressure that is two or three times your body weight.
- Losing even a little bit of weight can help your knees feel less pressure.
- There is no special diet that can help fix osteoarthritis.

- If you need to lose weight, you should eat healthy foods (balanced and reduced calorie diet) and exercise regularly.
- Your Doctor can help you with advice about eating and exercising.

Reducing the strain in your knees

- Take breaks during your activities. Do not do all the hard jobs at once.
- Do a little bit, then do something easier. Then go back to the harder jobs.
- Keep moving your knee even if it feels a little uncomfortable. Rest it before it starts to hurt too much.
- Wear shoes with thick soles and enough room for your toes.
- Wearing the right shoes can help protect your knees when you walk and stop your feet from changing shape.
- If you need extra support for your feet or knees when you walk, speak to your Doctor about getting an appointment with a podiatrist.
- A podiatrist is a Doctor who takes care of feet and ankles. They can help you to get insoles made for your shoes.
- You can use a walking stick to help take some weight and pressure off a painful knee.
- Use a handrail for support when going up or down stairs. Go upstairs one step at a time with your good leg first.
- Putting a warm heat pack on a painful knee can help make the pain and stiffness feel better.
- An ice pack can help too. Do not put ice, heat packs, or hot water bottles directly on your skin. Always wrap them in a towel or cloth first.
- Some people find that knee braces help.
- Speak to your Doctor or Physiotherapist first, as they might be able to give you braces or recommend the best one for you.
- You can buy knee braces from sports shops and chemists.

Medication

- Medications can help ease the pain and stiffness caused by osteoarthritis.
- They will not stop or cure the osteoarthritis itself.
- You will feel better if you keep active, reduce the strain on your knees, and take drugs for your condition (as you need them).
- Medication and treatments you can try include:
 - **Painkillers**, such as paracetamol, may help. You can buy these from the pharmacy or in supermarkets. Your Doctor may prescribe you stronger painkillers if needed.

- **Non-steroidal anti-inflammatory drugs (NSAIDs)** such as ibuprofen can help lower pain, swelling, and soreness in your knee. You usually take them for a short time.
- **Steroid injection** directly into the knee joint, which can help reduce swelling and pain.
- If you are taking medicine like paracetamol or ibuprofen, make sure you take it safely and follow the packet instructions or your Doctors advice.
- Make sure your Doctor or nurse knows about all the medications you are taking.
- More information about medication: <https://www.arthritis-uk.org/information-and-support/understanding-arthritis/arthritis-treatments/drugs/painkillers-and-NSAIDs/>
- More information about steroid injections: <https://www.arthritis-uk.org/information-and-support/understanding-arthritis/arthritis-treatments/drugs/steroid-injections/>

Surgery

- For most people with knee osteoarthritis, things like exercise, treatment, and staying at a healthy weight will help with pain and make it easier to do everyday things.
- But if these do not work, you might need surgery to help your knee feel better.
- Your Doctor will suggest surgery only if your knee pain is bad, or if it is hard for you to move or walk.
- The most common type of surgery for osteoarthritis of the knee is a knee replacement.
- Surgery is getting better all the time. Studies show that up to 8 out of 10 knee replacements can last for 25 years. A knee replacement is a surgery where the Doctor takes out the old, worn-out parts of your knee and puts in new parts made of metal and plastic. This helps your knee move better and it will hurt less.
- Like with all surgery, there are some risks. Your surgeon will want to make sure you are as healthy as possible before the operation.

Exercises

Straight leg raises



- Lie on your back with one knee bent and the osteoarthritis leg completely straight.
- Lift your leg off the bed to 45 degrees, keeping it straight. Lower the leg to the starting position and repeat.

Knee extension



- Sit down on a chair with your back straight.
- Fully extend one leg then go down and repeat.

Sit to stand



- Sit on a chair is against a wall to prevent it from moving.
- Fold your arms across your chest.
- With your feet slightly apart, lean forward, so your shoulders are over your feet and stand up fully.
- Slowly return to sitting.

Hip abduction



- Stand straight holding a chair.
- Move your leg towards the outside without lifting your pelvis.
- Return and repeat.

Contact our service

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Contact our Trust

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