

Osteoarthritis

Introduction

Osteoarthritis is a condition that affects the joints. It is the most common type of arthritis.

Symptoms of osteoarthritis

The symptoms of osteoarthritis vary greatly from person to person, and between different affected joints.

For example, a joint may be severely damaged without causing symptoms, or symptoms may be severe without affecting the movement of a joint.

Three key characteristics of osteoarthritis are:

mild inflammation of the tissues in and around the joints

damage to cartilage, the strong, smooth surface that lines the bones and allows joints to move easily and without friction

bony growths that develop around the edge of the joints

This can lead to pain, stiffness and difficulty doing certain activities.

Osteoarthritis mostly occurs in the knees, hips, spine and small joints of the hands and base of the big toe. However, almost any joint can be affected.

Who develops osteoarthritis?

Osteoarthritis usually develops in people over 50 years of age and is more common in women than in men. It is commonly thought that osteoarthritis is an inevitable part of getting older, but this is not quite true. While in very old people the changes of osteoarthritis are visible on X-rays, they don't always have related pain or problems with joint function.

Younger people can also be affected by osteoarthritis, often as a result of an injury or another joint condition.

Managing osteoarthritis

There is no cure for osteoarthritis, but the symptoms can be eased with several different treatments. Mild symptoms can often be managed with exercise or by wearing suitable footwear. However, in more advanced cases of osteoarthritis, other treatments may be necessary.

Treatment options may include:

non-drug treatments, such as physiotherapy and weight loss

medications, such as painkillers

surgery in a small number of cases, such as a knee or hip replacement

Living with osteoarthritis

As osteoarthritis is a long-term condition, it is important you get the right support to help you cope with any issues such as reduced mobility and advice on any necessary financial support.

As well as support from your healthcare team, it is important to look after your own health and wellbeing. This includes taking your medicine regularly and living a healthy lifestyle where possible.

Some people may also find it helpful to talk to their DOCTOR or others who are living with the same condition as there may be questions or worries you want to share.

Symptoms of osteoarthritis

The main symptoms of osteoarthritis include pain and stiffness in your joints. You may have difficulty moving the affected joints or doing certain activities.

However, in some cases of osteoarthritis, you may not have any symptoms at all, as the pain can come in episodes. Often, you will only experience symptoms in one joint or a few joints at any one time. Your symptoms may also develop slowly.

Other symptoms you or your doctor may notice include:

joint tenderness

increased pain and stiffness when you have not moved your joints for a while

joints appearing slightly larger or more 'knobbly' than usual

a grating or crackling sound or sensation in your joints

limited range of movement in your joints

weakness and muscle wasting (loss of muscle bulk)

You are most likely to develop osteoarthritis in the joints of your knees, hips, spine or hands.

Symptoms of osteoarthritis in the knees

If you have osteoarthritis in your knees, it is likely both your knees will be affected over time, unless it has occurred as the result of an injury or another condition affecting only one knee.

Your knees may be most painful when you walk, particularly when walking uphill or going up stairs. Sometimes, your knees may 'give way' beneath you or make it difficult to straighten your legs. You may also hear a soft, grating sound when you move the affected joint.

Symptoms of osteoarthritis in the hips

Osteoarthritis in your hips often causes difficulty moving your hip joints. You may find it difficult to put your shoes and socks on or to get in and out of a car.

If you have osteoarthritis in your hips, you will usually have pain in the groin or outside the hip, which is worse when you move the hip. However, sometimes your brain will identify pain in your knee and not in your hip, because of the 'wiring' that transmits the pain signals.

In most cases, pain will be at its worst when you walk, although it can also affect you when you are resting. If you have bad pain at night, your doctor may refer you to an orthopaedic surgeon, in case a joint replacement operation is needed.

Symptoms of osteoarthritis of the spine

The areas of the spine most likely to be affected are the neck and the lower back as these are the most mobile parts of the spine.

If the neck is affected you may be less able to move the neck joints which may affect your ability to turn your head. There may also be pain if the neck and head are held in the same position for long periods or held in an awkward position. There can also be associated muscle spasm in the neck, and pain from the neck can sometimes be felt in the shoulders and arms.

If the lower back is affected, there may be pain when doing a lot of bending or lifting. Stiffness often occurs when resting after exercise or bending. Pain from the low back may sometimes also be felt in the hips and legs.

Symptoms of osteoarthritis in the hands

Osteoarthritis often affects three main areas of your hand: the base of your thumb, the joints closest to your fingertips and the middle joints of your fingers.

Your fingers may become stiff, painful and swollen and you may develop bumps on your finger joints. However, over time the pain in your fingers may decrease and eventually disappear altogether, although the bumps and swelling may remain.

Your fingers may bend sideways slightly at your affected joints or you may develop painful cysts (fluid-filled lumps) on the backs of your fingers.

In some cases, you may also develop a bump at the base of your thumb where it joins your wrist. This can be painful and you may find it difficult to perform some manual tasks, such as writing, opening jars or turning keys.

Causes of osteoarthritis

Osteoarthritis occurs when there is damage in and around the joints which the body cannot repair. The exact causes are not known but there are several factors thought to increase your risk of developing the condition.

As part of normal life, your joints are exposed to a constant low level of damage. In most cases, your body will repair the damage itself. Usually, the repair process will pass unnoticed and you will not experience any symptoms.

The types of damage that can lead to osteoarthritis includes:

ligament or tendon problems

inflammation in the joint itself or within the bone

damage to the protective surface that allows your joints to move smoothly (cartilage)

Your joints may become knobby where your bones begin to protrude, forming bony lumps called osteophytes. As your bones thicken and broaden, your joints will become stiff, painful and difficult to move. There may also be a build-up of fluid in your joints because of the inflammation, which can cause them to swell up.

Contributory factors

It is not known why the breakdown in the repair process that leads to osteoarthritis occurs. However, several factors are thought to contribute to the development of osteoarthritis. These are outlined below.

Joint injury - Osteoarthritis can develop in a joint damaged by an injury or operation. Overusing your joint when it has not had enough time to heal after an injury or operation can also contribute to osteoarthritis in later life.

Other conditions (secondary arthritis) - Sometimes, osteoarthritis can occur in joints severely damaged by a previous or existing condition, such as rheumatoid arthritis or gout. It is possible for secondary osteoarthritis to develop many years after the initial damage to your joint.

Age - The risk of osteoarthritis increases as you get older due to weaker muscles or joints that may have become worn out.

Family history - In some cases, osteoarthritis may run in families. Genetic studies have not identified a single gene responsible, so it seems likely that many genes make small contributions. This means it is unlikely that a genetic test for osteoarthritis will become available in the near future.

Being obese - Research into the causes of osteoarthritis has shown that being obese puts excess strain on your joints, particularly those that bear most of your weight, such as your knees and hips. As a result, osteoarthritis can often be worse in obese people.

Diagnosing osteoarthritis

See your DOCTOR if you think you have osteoarthritis. There is no definitive test to diagnose the condition, so your doctor will ask about your symptoms and examine your joints and muscles.

Your DOCTOR may suspect osteoarthritis if you:

are over 50 years of age

have persistent joint pain, which gets worse the more you use your joints

have no stiffness in your joints in the morning, or stiffness that lasts no longer than half an hour

If your symptoms are slightly different from those listed above, your DOCTOR may think you have another form of arthritis. For example, if you have joint stiffness in

the morning that lasts longer than an hour, you may have a more inflammatory form of arthritis.

Further tests

Further tests, such as X-rays or blood tests, may be used to rule out other possible causes of your symptoms, such as rheumatoid arthritis or a fractured bone.

However, they are not always required to confirm a diagnosis of osteoarthritis.

Treating osteoarthritis

Treatment for osteoarthritis aims to relieve pain, reduce disability and provide support to help you live as active a life as possible.

What is good osteoarthritis care?

These are designed to help people of all ages with osteoarthritis lead independent lives and to be as healthy as possible. They recommend everyone should have access to:

information, support and knowledge to improve bone and muscle health and enable them to manage their own condition

the right services that enable early diagnosis and treatment

ongoing and responsive treatment and support

The National Institute for Health and Clinical Excellence (NICE) has also produced guidance for the management of osteoarthritis.

Treatment overview

Osteoarthritis cannot be cured, but treatment can ease your symptoms and prevent them from affecting your everyday life. The main treatments do not involve medication and consist of:

access to the right information (this website and the other organisations we link to are a good start)

exercise to improve your fitness and strengthen your muscles

weight loss, if you are overweight

If your osteoarthritis is mild or moderate, you may not need any other treatment. Your DOCTOR can give you advice about managing your symptoms by making changes to your lifestyle. These may be enough to keep the condition under control.

Lifestyle changes

Osteoarthritis can be managed by improving your general health. Your doctor may recommend ways you can help yourself, such as taking regular exercise and losing weight.

Exercise

Exercise is the most important treatment for people with osteoarthritis, whatever your age or level of fitness. Your physical activity should include a combination of exercises to strengthen your muscles and exercises to improve your general fitness.

If osteoarthritis causes you pain and stiffness, you may think exercise will make your symptoms worse. But usually, regular exercise that keeps you active and mobile and builds up muscle, thereby strengthening the joints, will improve symptoms. Exercise is also good for relieving stress, losing weight and improving your posture, all of which will ease symptoms.

Your DOCTOR, or possibly a physiotherapist, will discuss the benefits you can expect from your exercise programme and can give you an exercise plan to follow at home. It is important to follow this plan because there is a small risk that the wrong sort of exercise may damage your joints.

Losing weight

Being overweight or obese makes osteoarthritis worse. Extra weight puts more strain on damaged joints, which have a reduced ability to repair themselves. Joints in the lower limbs, which carry your weight, are under particular stress if you are overweight or obese.

To find out if you are overweight or obese, use the Healthy weight calculator.

If you are overweight, try to lose weight by doing more physical activity and eating a healthier diet. Discuss any new exercise plan with your DOCTOR or physiotherapist before you start. They can help plan a suitable exercise programme for you. Your DOCTOR and practice nurse can also advise about how to lose weight slowly and safely

Preventing osteoarthritis

It is not possible to prevent osteoarthritis altogether. However, you may be able to minimise your risk of developing it by avoiding injury and staying as healthy as possible.

Look after your joints

Do some regular exercise, but try not to put too much stress on your joints, particularly your hips, knees and the joints in your hands.

Avoid exercise that puts strain on your joints and forces them to bear an excessive load, such as running and weight training. Instead, do exercises such as swimming and cycling, where your joints are better supported and the load is more controlled.

Try to maintain good posture at all times, and avoid staying in the same position for too long. If you work at a desk, make sure your chair is at the correct height, and take regular breaks to move around.

Read more information about health and fitness including tips on simple exercises you can do at home.

Keep your muscles strong

Your muscles help support your joints, so having strong muscles will help your joints stay strong too.

Try to exercise for at least 150 minutes (2 hours and 30 minutes) of moderate-intensity aerobic activity (i.e. cycling or fast walking) every week to build up your muscle strength.

Exercise should be fun, so do what you enjoy, but try not to overload the joints.

Lose weight if you are overweight or obese

Being overweight or obese can make your osteoarthritis worse. To find out whether or not you are overweight or obese, use the Healthy weight calculator.

Living with osteoarthritis

With the right support, you can lead a healthy, active life with osteoarthritis. Osteoarthritis doesn't have to get worse and it doesn't always lead to disability.

Self-care

Self-care is an integral part of daily life. It means you take responsibility for your own health and wellbeing with support from those involved in your care. Self-care includes things you do each day to stay fit, maintain good physical and mental health, prevent illness or accidents, and effectively deal with minor ailments and long-term conditions.

People living with long-term conditions can benefit enormously if they receive support for self-care. They can live longer, have less pain, anxiety, depression and fatigue, have a better quality of life and are more active and independent.

Living healthily

A good diet and regular exercise will help keep muscles strong and control your weight, which is good for osteoarthritis and also has other health benefits. Read more information about:

eating a healthy diet

health and fitness

losing weight

Take your medication

It is important to take your medication as prescribed, even if you start to feel better. Continuous medication can help prevent pain sometimes, although if your medications have been prescribed 'as required', you may not need to take them in

between painful episodes. If you have any questions or concerns about the medication you're taking or side effects, talk to your healthcare team.

It may also be useful to read the information leaflet that comes with the medication, which will tell you about possible interactions with other drugs or supplements. Check with your healthcare team if you plan to take any over-the-counter remedies, such as painkillers, or any nutritional supplements as these can sometimes interfere with your medication.

Regular reviews

Because osteoarthritis is a long-term condition, you'll be in regular contact with your healthcare team. A good relationship with the team means that you can easily discuss your symptoms or concerns. The more the team knows, the more it can help you.

Keeping well

Everyone with a long-term condition, such as osteoarthritis, is encouraged to get a yearly flu jab each autumn to protect against flu (influenza). It's also recommended they get a pneumococcal vaccination. This is a one-off injection that protects against a serious chest infection called pneumococcal pneumonia.

Complications

Reduced mobility

If you have osteoarthritis, you may sometimes find it difficult to move around. This can increase the risk of accidents and injuries such as trips and falls.

Foot pain

Osteoarthritis of the feet most commonly affects the base of the big toe. It can cause pain when you walk and lead to a bunion (a bony outgrowth) at the affected joint. The type of shoes you wear can influence this, so avoid shoes with a raised heel. A leg brace may ease the symptoms.

Septic arthritis

If you have had joint replacement surgery (arthroplasty), your replacement joint could become infected. This is a severe complication and requires emergency treatment in hospital.