

# **Osteoarthritis**

# Your questions answered

## Q. What is osteoarthritis (OA)?

**A.** Osteoarthritis is the most common form of arthritis. It's most likely to develop in people over 45, but it can also occur in younger people.

OA frequently affects weight-bearing joints, such as the <u>knees</u>, <u>hips</u>, <u>feet</u>, and <u>spine</u>. The joints of the <u>hands</u>, including the <u>thumbs</u>, are also commonly affected.

While it was once thought to be an inevitable part of ageing, resulting from a lifetime of 'wear and tear' on joints, we now know it's a complex condition and may occur due to many factors.

The good news is that osteoarthritis can be treated effectively with self-care and medicine.

## Q. What are joints?

A. To understand how osteoarthritis affects your body, it's helpful to know a little about your joints.

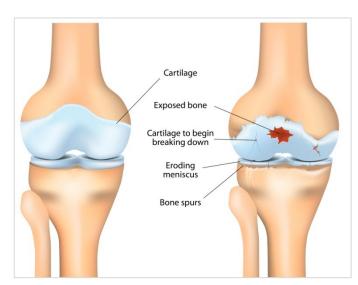
Joints are places where bones meet. Bones, muscles, ligaments and tendons work together so you can twist, bend and move about.

Covering the ends of your bones is a thin layer of tissue called cartilage. It provides a slippery cushion that absorbs shocks, helps your joints move smoothly and prevents bones from rubbing against each other.

Around most of your joints is a tough capsule that holds your bones in place. The inside of the capsule is lined with synovial membrane, which produces synovial fluid. This fluid lubricates and nourishes the cartilage and other structures in the joint.

With OA, the cartilage becomes brittle and breaks down. Some pieces of cartilage may even break away and float around inside the synovial fluid. Because the cartilage no longer has a smooth surface, the joint becomes stiff and painful to move.

Eventually, the cartilage can break down so much that it no longer cushions the two bones. Your body tries to repair this damage by creating extra bone. These are bone spurs (or osteophytes). Bone spurs don't always cause symptoms but can sometimes cause pain and restrict joint movement.



#### Q. What causes osteoarthritis?

**A.** Many things can increase your chances of developing OA, including:

• your age - people over 45 are more at risk



- being overweight or obese
- your genetics the genes you inherit can play a role in developing OA
- other conditions e.g. rheumatoid arthritis and gout, can cause damage to your joints and lead to OA
- gender 3 in 5 people who have OA are women<sup>i</sup>
- repetitive movements associated with your job or occupation (e.g. constant kneeling, squatting, lifting heavy loads)
- significant injury, surgery, damage or overuse of a joint.

#### Q. What are the symptoms of osteoarthritis?

**A.** The signs or symptoms of OA can vary from person to person. Some of the more common symptoms include:

- joint pain and stiffness
- joint swelling (inflammation)
- grinding, rubbing or crunching sensation (crepitus)
- muscle weakness.

These symptoms can sometimes worsen, especially when you feel stressed, upset, overdo things, or don't get enough sleep. This is called a flare or flare-up.

#### Q. How do I know if I have osteoarthritis?

**A.** If you've been experiencing joint pain, it's essential you discuss your symptoms with your doctor. Getting a diagnosis as soon as possible means that treatment can start quickly. This will give you the best possible outcomes.

To diagnose your condition, your doctor will do some exams or tests. They may include:

- Your medical history. Your doctor will ask you about your symptoms, family history and other health issues.
- Physical examination. Your doctor will look for swelling in and around the joint and test your joint's range of movement. They will also feel and listen for grinding, rubbing or creaking in the joint.

Imaging (e.g. x-rays, ultrasound or MRI) and blood tests aren't routinely used to diagnose OA. However, they may sometimes be needed if there's uncertainty around your diagnosis.

#### Q. How is osteoarthritis treated?

**A.** There's no cure for osteoarthritis; however, your symptoms can be effectively managed with exercise, weight management, medicines, and self-care.

#### **Exercise**

<u>Regular exercise</u> can help reduce some of the symptoms (e.g. pain, stiffness) caused by your condition and improve your joint mobility and strength. It will also move synovial fluid through the joint, providing essential nutrients and removing waste.

Exercises that move your joints through their range of movement will also help maintain the flexibility often lost due to OA.

Strengthening the muscles around your joints is also important. The stronger they are, the more weight they can take. This will help support and protect your joints.

An exercise program that promotes muscle strength, joint flexibility, improved balance and coordination, and general fitness will give you the best results. You should also choose exercises that you enjoy doing. This will make it easier to be consistent.



Start exercising slowly and gradually increase the time and intensity of your exercise sessions over weeks and months. A physiotherapist or exercise physiologist can help you work out an exercise program that's right for you.

#### Weight management

Being overweight or obese increases your risk of developing OA and the severity of your condition. The additional weight also increases pressure on your joints, especially your weight-bearing joints (e.g. hips, knees, feet), which is likely to cause further pain and damage.

The amount of overall fat you carry is also significant because fat releases molecules that contribute to low but persistent levels of inflammation across your whole body. This, in turn, increases the level of inflammation in the joints affected by OA.

For these reasons, maintaining a healthy weight is essential if you have OA. Your doctor or dietitian can advise you on safe weight-loss strategies if you need to lose weight.

Weight loss can be a long process for many people. It's challenging, especially when pain affects your ability to be as active as you'd like. But it's good to know that any weight loss can reduce your pain and increase your ability to exercise. So making small, achievable changes to your eating and exercise habits can bring big results. This will take time, commitment, and support.

#### **Medicines**

No <u>medicines</u> can affect the underlying disease process of OA, but combined with self-care and lifestyle changes, medicines may provide temporary pain relief and help you stay active.

The most commonly used medicines for OA are:

- Non-steroidal anti-inflammatory medicines or NSAIDs (e.g. ibuprofen). These medicines are available over-the-counter and with a prescription, depending on their dosage and other ingredients. They come in tablet/capsule form (oral NSAIDs) or as a gel or rub applied directly to the skin (topical). It's important to note that oral NSAIDs are designed to be taken at low doses for short periods. Always talk with your doctor before starting NSAIDs, as they can have side effects.
- Paracetamol. Research has shown that paracetamol provides only low-level pain relief for
  osteoarthritis. However, some people report that it helps reduce their pain so they can be more active.
  For this reason, it's worth discussing a trial of paracetamol with your GP to see if it's appropriate for
  you.
- Corticosteroid (steroid) injections may be helpful for people who haven't found relief from other
  treatments (e.g. exercise, weight loss) or medicines. Corticosteroid injections into a joint can provide
  short-term pain relief; however, the number of injections you can have each year is limited due to
  potential harm.

*Note:* Opioids are powerful pain-relieving medicines that effectively reduce acute pain (or the pain resulting from an injury or surgery). In the past, they were prescribed to treat pain associated with conditions like osteoarthritis; however, there's strong evidence that they have little effect on OA pain. Opioids also have many potentially serious side effects. That's why they're not recommended in the management of OA. Read the Choosing Wisely Australia patient guide '5 Questions to ask about using opioids for back pain or osteoarthritis' for more information about opioids.

#### Q. What else can I do to control my symptoms?

A. There are many other things you can do to reduce the impact of your symptoms.

**Learn about your condition.** Understanding OA and how it affects you means you can make informed decisions about your healthcare and actively manage it.



**Learn ways to manage your pain.** Pain is the most common symptom of osteoarthritis, so it's crucial to learn to manage it effectively. Read our <u>A-Z guide for managing pain</u> for more information.

**Work closely with your healthcare team.** The best way to live well with OA is by working closely with the people in your <u>healthcare team</u> (e.g. GP, physio). Keep them informed about how you're doing and if you've experienced any changes in your symptoms or tried new medicines, complementary therapies, supplements or other treatments.

**Protect your joints.** Supports such as walking aids, specialised cooking utensils, ergonomic computer equipment and long-handled shoehorns can reduce joint strain and make life easier. An occupational therapist can advise you on aids, equipment and home modifications.

**Taping, knee braces and orthotics** may be helpful if you have OA in your knees or feet. A physiotherapist or podiatrist can advise you on whether these strategies could be helpful for you.

**Improve sleep quality.** Not getting enough <u>quality sleep</u> can worsen your symptoms; however, getting a good night's sleep when you have osteoarthritis and chronic pain can be challenging. If you're having problems sleeping, talk with your doctor about ways you can address this.

**Manage stress.** Stress can also aggravate your symptoms, so learning to deal with stress is extremely helpful. Things you can do to manage stress include planning your day and setting priorities, using <u>relaxation techniques</u> such as going for a walk, <u>getting a massage</u> or <u>listening to music</u>, and, where possible, avoiding people and situations that cause you stress.

**Try mindfulness.** Regularly practising <u>mindfulness meditation</u> has been shown to improve mood, relieve stress, improve sleep, improve mental health and reduce pain.

**Eat a healthy, balanced diet.** While there's <u>no specific diet</u> for OA, it's important to have a healthy, balanced diet to maintain general health and prevent weight gain and other medical problems, such as diabetes and heart disease.

#### Q. What about surgery?

**A.** In most cases, <u>surgery</u> isn't required for people with osteoarthritis. However, surgery may be an option if you've tried all non-surgical treatment options without success and you're still experiencing significant pain and loss of function.

The most common surgery for osteoarthritis is a total joint replacement. When considering surgery, you should be informed about what it involves, the rehabilitation process, and its potential benefits and risks.

It's important to note that arthroscopy is not recommended to treat knee OA. Evidence shows it's not effective in improving OA knee pain.

# Q. Where can I get more help?

**A.** Many people and support organisations can help you manage your musculoskeletal condition. They include:

- your doctor
- your rheumatologist
- <u>dietitian</u>
- physiotherapist
- exercise physiologist
- occupational therapist
- podiatrist
- Musculoskeletal Health Australia | muscha.org | B.A.M. Helpline: 1800 263 265



## Q. How can Musculoskeletal Health Australia help?

**A.** Our team is available for you to speak with about osteoarthritis, pain or any other musculoskeletal issues you have. You can contact them Monday to Thursday between 9am-5pm. Phone 1800 263 265 or email <a href="mailto:helpline@muscha.org">helpline@muscha.org</a>. We also have a range of services – including free webinars – you can access on our <a href="mailto:website">website</a>.

#### More to explore

- Osteoarthritis
  PainHEALTH https://painhealth.csse.uwa.edu.au/pain-module/osteoarthritis/
- Osteoarthritis
   American College of Rheumatology <a href="https://www.rheumatology.org/l-Am-A/Patient-Caregiver/Diseases-Conditions/Osteoarthritis">https://www.rheumatology.org/l-Am-A/Patient-Caregiver/Diseases-Conditions/Osteoarthritis</a>
- Osteoarthritis
   Arthritis Foundation <a href="https://www.arthritis.org/diseases/osteoarthritis">https://www.arthritis.org/diseases/osteoarthritis</a>
- Osteoarthritis healthdirect <a href="https://www.healthdirect.gov.au/osteoarthritis">https://www.healthdirect.gov.au/osteoarthritis</a>
- Osteoarthritis
   Versus Arthritis UK https://www.versusarthritis.org/about-arthritis/conditions/osteoarthritis/
- Patient education: Osteoarthritis symptoms and diagnosis (Beyond the Basics)
   UpToDate <a href="https://www.uptodate.com/contents/osteoarthritis-symptoms-and-diagnosis-beyond-the-basics">https://www.uptodate.com/contents/osteoarthritis-symptoms-and-diagnosis-beyond-the-basics</a>
- Patient education: Osteoarthritis treatment (Beyond the Basics)
   UpToDate <a href="https://www.uptodate.com/contents/osteoarthritis-treatment-beyond-the-basics">https://www.uptodate.com/contents/osteoarthritis-treatment-beyond-the-basics</a>

If you found this information useful, help us help others by donating today.

© Musculoskeletal Health Australia *Updated March 2024* 

#### Reference

<sup>1</sup> Osteoarthritis, Australian Institute of Health and Welfare. Accessed 16 August 2022. https://www.aihw.gov.au/reports/chronic-musculoskeletal-conditions/osteoarthritis/contents/what-is-osteoarthritis