



Pharmaceutical
Society of Australia



Osteoarthritis

Osteoarthritis (OA) is a disease that damages the cartilage in joints. Fingers and load-bearing joints (knees, feet, hips and spine) are the joints most often affected. It is the most common type of arthritis and develops with increasing age in more than half of the adult population.

Normal joints

Joints, where two moving bones come together, are designed to protect bone ends from wearing away and to act as shock absorbers. A joint is made up of:

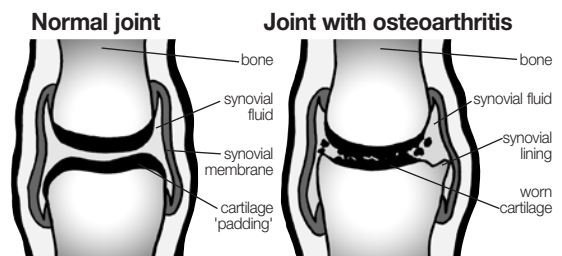
- **Cartilage** – a hard, slippery, protective coating on the end of each bone
- **Joint capsule** – a tough covering that holds all the bones and other joint parts together
- **Synovium** – a thin membrane lining inside the joint capsule
- **Synovial fluid** – a fluid that lubricates the joint
- **Muscles, ligaments, and tendons** – that keep the bones stable and allow the joint to bend and move.

Osteoarthritis

In a joint affected by OA, the cartilage that protects the ends of the bones deteriorates and wears away. Bits of bone or cartilage can break off and float inside the joint space and lumps of bone (spurs) may grow on the joint edge. As the damage progresses, the joint loses its smooth movement, the space between the bones narrows and the bones may eventually rub against each other. The joint may lose its normal shape and become larger and inflamed.

Signs and symptoms

OA usually develops slowly and often the first sign is joint pain during or after physical activity. As the disease progresses joint pain may occur with minimal movement or during rest. Symptoms include:



- Joint pain and tenderness
- Joint stiffness
- Limited movement of the joint
- Crunching or grating sensation in joint
- Bony lumps around the joint
- Joint swelling (occasionally).

The symptoms and severity of OA vary from person to person. Severe OA can make it difficult to perform the activities needed for daily living, leading to fatigue, anxiety and depression.

Managing osteoarthritis

Osteoarthritis cannot be cured, but can be well managed. Treatment plans include ways to reduce pain, maintain joint and muscle function and manage the tasks of daily living. Joint care, lifestyle changes and mechanical aids are vital to successful management. Medicines can give additional relief. Joint surgery (e.g., a joint replacement) may be needed when symptoms are disabling.

Self care

Learn how to protect and care for your joints and to manage the symptoms of osteoarthritis.

Pain relief

- Heat therapy (e.g., hot packs, a heated pool) can relieve joint pain and stiffness.
- Cold therapy (e.g., cold packs) can relieve joint pain and swelling.

Ask a doctor or physiotherapist about how and when to use heat and cold therapy.

Rest and joint care

- Learn to recognise when your body needs to rest.
- Learn and practice relaxation techniques – regular relaxation can improve symptoms.
- Maintain good posture to limit stress on joints and muscles.
- Wear appropriate footwear. Insoles or cushioned shoes can help redistribute weight and reduce joint stress.
- Walking sticks, braces and splints can protect and support joints.
- Mechanical devices and other aids can help with daily living and household tasks (e.g., hand rails, tap turners, reaching aids).

Ask an occupational therapist or 'Independent Living Centres Australia' about splints, aids and devices.

Exercise

- Regular exercise can improve mood, reduce joint pain and stiffness, increase flexibility, and strengthen muscles, bones and ligaments.
- Warm water exercise can be especially helpful as the warmth and buoyancy of the water makes movement easier.

Ask a physiotherapist or doctor about exercising with osteoarthritis.

Weight control

- Keep to a healthy weight to limit stress on weight-bearing joints. Exercise regularly and have a healthy diet, including plenty of fruit, vegetables and wholegrains. Limit foods high in fat, sugar or salt.

Joint awareness

Strain or injury to a joint (e.g., sports, occupational) can lead to osteoarthritis in that joint. Proper treatment of injuries and appropriate joint protection during physical activity can help to limit or avoid osteoarthritis later in life.

Your **Self Care** Pharmacist

Medicines

- **Pain relievers** – Paracetamol can relieve OA pain without causing serious side effects. For optimal pain relief, paracetamol needs to be taken *regularly three or four times a day*. Sometimes stronger pain relievers (e.g., codeine, tramadol, oxycodone) are also needed.
- **Non-Steroidal Anti-Inflammatory Drugs (NSAIDs)** (e.g., aspirin, ibuprofen, diclofenac, naproxen) – can relieve joint pain, swelling and stiffness. Oral NSAIDs (tablets, capsules, mixtures) and topical NSAIDs (creams and gels) are available. Oral NSAIDs can cause serious side effects, so are best used only if regular paracetamol gives inadequate pain relief. Cox-2 inhibitors (e.g., celecoxib, meloxicam) are oral NSAIDs that may cause less gastrointestinal side effects.
- **Cox-2 inhibitor NSAIDs** (e.g., celecoxib, meloxicam) – types of oral NSAIDs that may cause less gastrointestinal side effects.
- **Corticosteroids** – are anti-inflammatory medicines that can be injected into a joint to relieve pain and inflammation.
- **Hylans** – can be injected into a joint to increase the lubricant and shock absorbing properties of the synovial fluid.
- **Complementary medicines** (e.g., glucosamine, chondroitin) – may help relieve symptoms of OA, but the scientific evidence for their effectiveness is not conclusive.

A doctor or pharmacist can advise on the best medicines for you.

Related fact cards

- *Pain Relievers*
- *Relaxation Techniques*
- *Preventing Falls*
- *Rheumatoid Arthritis*

For more information

Arthritis Australia – phone 1800 011 041 or website www.arthritisaustralia.com.au

HEALTH/Insite – website www.healthinsite.gov.au

Independent Living Centres Australia – phone 1300 885 886 or website www.ilcaustralia.org

Consumer Medicine Information (CMI) leaflets – your pharmacist can advise on availability.

NPS Medicines Line – phone 1300 888 763 Monday to Friday, 9am to 6pm EST.

The Poisons Information Centre – in case of poisoning phone 131 126 from anywhere in Australia.

Pharmacists are medicines experts. Ask a pharmacist for advice when choosing a medicine.