

What is Osteoarthritis?

Osteoarthritis or degenerative joint disease is the most common form of arthritis. Initially it affects the joint cartilage, causing pain in the joints. The pain and stiffness in the joint can ultimately restrict movement. The pain tends to get worse towards the end of the day and with activity.

The primary cause of osteoarthritis is increased age and “wear and tear” of the joints. However, there is increasing research evidence that osteoarthritis may be more than just “wear and tear”.

Osteoarthritis can also arise as a side effect of other problems that put abnormal stress on the joints, such as obesity (from the joints having to carry that extra weight), abnormally shaped hips and knees (added stress is placed on these joints when a person moves), a previous fracture or injury involving the joint, or in the case of some sportsmen, repeated stress to the joint.

Who gets affected?

Osteoarthritis affects both men and women with women having a higher rate of osteoarthritis.

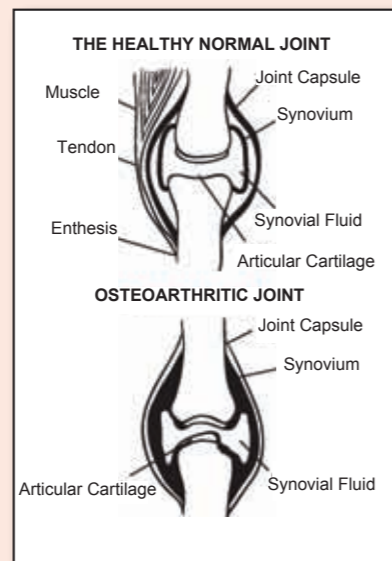
Osteoarthritis rates increase sharply after the age of 50.

What are the risk factors for Osteoarthritis?

Osteoarthritis is linked to age, obesity, sports injuries, hereditary (especially osteoarthritis of the hands) and may be associated with other forms of arthritis like rheumatoid arthritis and gout.

Can Osteoarthritis develop in all joints?

Almost any joint can be affected. However, Osteoarthritis commonly develops in the knees, hips, spine, and hands.



What are the symptoms of Osteoarthritis?

The first symptom of Osteoarthritis is a recurring pain in the affected joint(s) or muscles around the joint after a period of prolonged or strenuous use, such as after a long walk or exercise. The pain increases with continued use of the joint, but usually subsides after sufficient rest.

Mild stiffness usually sets in when the joints have been rested (“gelling”). Therefore, if you’ve been sitting still for some time, your hips and knees may feel stiff upon standing again.

In advanced Osteoarthritis where much of the cartilage or “protective lining” around the joints has disintegrated, it may cause an increased secretion of joint fluid, which tends to accumulate around the joint area leading to mild swelling of the joint.

What happens to the joints in Osteoarthritis?

Our joints are normally covered with cartilage so that they can glide over each other smoothly. In Osteoarthritis, the joint cartilage steadily softens and disintegrates over time.

With the loss of this protective material, the exposed bones of the joint begin to grind against each other more easily and wear each other out, creating a painful sensation when weight is put on them, such as during walking or standing up.

As the condition progresses, cysts, bony lumps and excess fluid may develop in the affected joint, giving rise to a swollen joint.

How is Osteoarthritis diagnosed?

If a patient exhibits the symptoms of Osteoarthritis, the doctor can confirm the diagnosis by doing a physical examination and X-rays.

The degenerative effects of Osteoarthritis on the bones of the joint will show up clearly on the X-ray.

Sometimes, additional tests and procedures may be needed:

Magnetic resonance imaging (MRI) - may be used to get a better picture of the condition of the joint.

Joint aspiration - may be carried out to obtain a sample of the fluid in the joint.

Arthroscopy - a procedure in which the interior of the joint is visualised by using a special instrument.

What is the treatment for Osteoarthritis?

There is currently no cure for osteoarthritis. However, there is evidence that OA is not just due to ‘wear and tear’. Hence, sustained and increasing research is necessary. Treatment of osteoarthritis centres on alleviating its symptoms, regaining lost muscle strength and surgery.

a. Medication

Most medications treat only the symptoms of Osteoarthritis. Paracetamol (Panadol) can be prescribed for low level pain, while stronger drugs like non-steroidal anti-inflammatory drugs (NSAID) and COX-2 inhibitors may be necessary for more severe pain. The effect of glucosamine and chondroitin is variable. Speak to your doctor first before you try these supplements.

If movement becomes significantly affected, steroids or hyaluronic acid preparation may be injected directly into the joint. The effect is usually temporary and cannot be used in the long term as they can cause adverse side effects.

b. Physiotherapy

Physiotherapy is needed to build up the strength in the surrounding muscles so that they can hold up the joint better, lessening the stress and strain that is exerted on the joint.

Exercises such as walking (with an aid, if necessary), swimming or cycling are recommended for most forms of arthritis.

c. Surgery

In advanced cases, surgery may be required to remove bone fragments, realign the joints, or even replace the joint with an artificial part.

Are Osteoarthritis and Rheumatoid Arthritis similar?

Both are arthritic conditions, but the causes are different. Rheumatoid Arthritis arises out of the body’s immune system attacking its own tissues, while primary Osteoarthritis is caused by wear and tear of the joints.

What are the complications of Osteoarthritis?

The condition can be debilitating and sufferers may be at some risk of depression. Severe Osteoarthritis can result in joint deformity.

Can Osteoarthritis be prevented?

One cannot prevent ageing. One can however reduce the risk of developing Osteoarthritis by maintaining a healthy weight, engaging in moderate exercise and eating a healthy and nutritious diet. Early diagnosis and treatment can prevent further joint damage and deformity.

Information modified from National Arthritis Foundation, Singapore



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Osteoarthritis



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