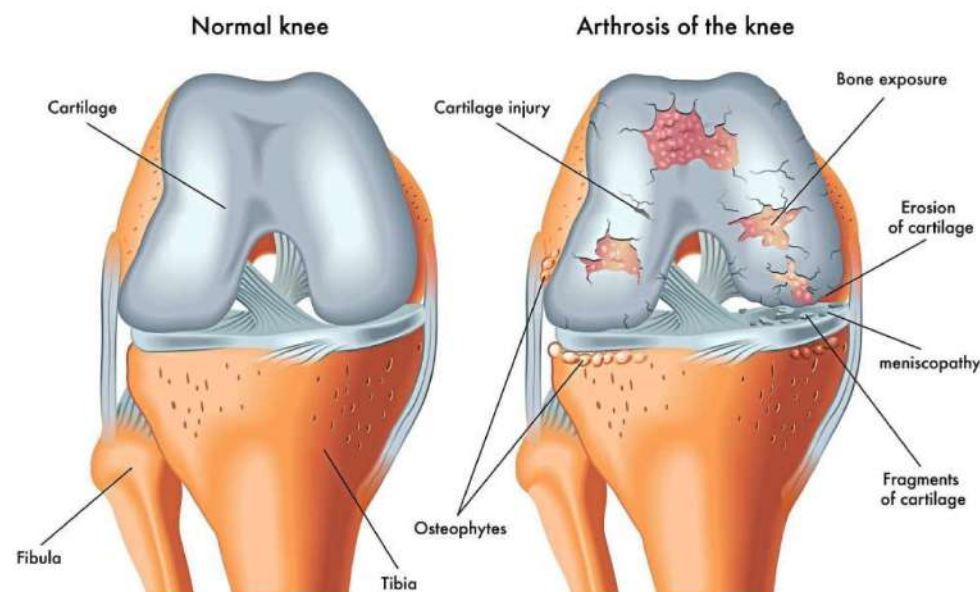


When joints WEAR OUT

Osteoarthritis is a common condition affecting our joints that is more likely to occur as we age.



Osteoarthritis occurs when articular cartilage wears out, resulting in the growth of bone spurs (osteophytes) and fragmented cartilage in the joint space, which can cause discomfort or pain upon movement. — 123rf.com

> FROM PAGE 1 Seniors will get it

The frequency of osteoarthritis is as high as 50% among those over 60 years of age, and nearly all those over 80 years old suffer from this condition.

Younger patients may develop osteoarthritis due to joint or bone injuries, or congenital spinal deformations, such as scoliosis.

Overweight, occupations that increase the burden on the joints, and excessive and inappropriate exercise, are all significant risk factors for osteoarthritis.

A small number of patients suffer from degenerative arthritis – of which osteoarthritis is one type – because of genetic mutations that cause cartilage problems or abnormal joint development.

Degenerative arthritis can damage all joints of the body, with the most commonly affected ones being those responsible for bearing the weight of our body, i.e. the knees, spine and hip joints.

Joints that are more active, such as the fingers and big toes, are also at risk of degenerative arthritis.

Signs and symptoms

The signs and symptoms of degenerative arthritis tend to develop slowly and get worse over time.

They include:

- > **Swelling** – at the affected joint (or joints).
- > **Pain** – during or after movement at the joint.
- > **Soreness** – when the affected joint is pressed.
- > **Stiffness** – after getting up in the morning or after a period of inactivity.
- > **Loss of flexibility** – movement becomes poor and the joints cannot be fully extended; the most classic complaint is “I cannot squat down and stand up”.
- > **Rubbing sounds** – abnormal noises in the joint during movement.
- > **Bone spurs** – can put pressure on the nerves when in the spine, and cause pain and numbness.
- > **Interference with daily tasks** – joint pain and stiffness can weaken the body and cause difficulty in movement; some people may have to stop working or go on medical leave.
- > **Disability** – can be as high as 53%, and is the number one killer of the elderly!

The typical symptoms of degenerative arthritis are early joint pain, stiffness and discomfort, which is sometimes accompanied by joint swelling.

Gradually, there will be pain on sitting and getting up.

After walking hundreds of metres, the symptoms will gradually improve.

If the walking distance is too long or when going up and downstairs, the pain will appear again.

As the disease worsens, patients may have pain when walking on flat ground, difficulty squatting and getting up, and even joint deformation (mostly “bowed leg” or “O-shaped” deformity), as well as other symptoms.

Treatment

There is no single test that can diagnose degenerative arthritis.

Several methods are used to diagnose osteoarthritis, including medical history, physical tests, X-rays and other tests such as blood tests or joint fluid tests.

Doctors often combine multiple treatment methods to cater to the patient’s lifestyle and health needs.

These treatment options for osteoarthritis include:

- > Rest when the joints are swollen and painful.

This includes avoiding walking, kneeling, squatting, going up and down stairs for a long time to avoid aggravating the pain, and avoiding wearing high heels for a long time for women.

- > Physical therapy to reduce swelling and pain.

> Analgesic drugs, non-steroidal anti-inflammatory drugs (NSAID) and medications that nourish cartilage, such as hyaluronic acid, undenatured type II collagen, *Boswellia serrata* gum extract, and glucosamine plus chondroitin.

Ointment can also be applied topically.

Sufficient calcium supplementation should also be ensured.

If the joint is very painful due to osteoarthritis, the doctor will sometimes consider injecting steroids, hyaluronic acid or platelet growth factor directly into the joint cavity.

- > Rehabilitation training after pain and swelling are reduced.

Appropriate exercises such as swimming, walking, tai chi or yoga can be done.

It is important not to stop exercising because of fear of the pain – this will actually make the condition worse.

Proper exercise can increase muscle strength and stabilise joints, and is an important measure to prevent arthritis.

- > Losing weight for obese and overweight people.

Weight loss can reduce the burden on the joints, reduce symptoms and delay the development of the disease.

- > Using a walking frame or stick of appropriate height to help transfer the body weight to the frame or stick if the osteoarthritis becomes very advanced.

A physiotherapist can help the patient choose the appropriate frame or stick.

A knee brace can be used to reduce the burden on the knees.

- > Joint replacement surgery if the patient has been on a lot of painkillers for a long time, and cannot live well or walk because of osteoarthritis.

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As osteoarthritis progresses, even walking on flat ground will cause pain.

By Dr TAY HUI SIAN

DO you feel that your fingers are stiff after you wake up in the morning?

Are you unable to squat down or stand up easily and smoothly?

Do you feel your joints creaking when going up and down the stairs?

Our joints are a very important part of our musculoskeletal system – so let us understand how they work.

The material covering the surface of our joints is called cartilage.

Cartilage’s elastic nature can slow down the vibrations and impact on the joints when our limbs move.

It functions as a built-in shock absorber in our body.

Type II collagen is the main structure in cartilage, accounting for approximately 60% of articular cartilage (i.e. the cartilage that surrounds the joints).

There is a small amount of synovial fluid between the cartilage.

This synovial fluid has a lubricating effect.

It can protect the articular cartilage, reduce friction when the joints move, and make the joints move more smoothly.

Hyaluronic acid is the main component of synovial fluid.

‘Wear and tear’

Osteoarthritis is the most common type of arthritis, affecting thousands of people.

It is commonly referred to as “wear and tear” of the joints, or degenerative joint disease.

Think about it: our car tyres wear out after we have driven the car on them for a long time.

Similarly, our joints wear out with time as we move around every day.

Therefore, people over the age of 60 are likely to have some degree of osteoarthritis.

It is caused by the wear and tear of the protective cartilage at the ends of bones, and is often accompanied by bone hyperplasia (overgrowth).

Unfortunately, cartilage will not grow back or heal from the wear and tear.

Once the cartilage is worn out, the hard bones will start rubbing against each other whenever the joint moves.

This will not only cause the hard bones to eventually become roughened, but the destruction of the cartilage will also stimulate the hard bones to grow bone spurs. Such spurs and fragmented cartilage in the joint cavity will cause the joint to feel uncomfortable.

With ageing, the synovial fluid in the joint also decreases, resulting in a lessening of the protective effect within the joints.

Although the onset of arthritis occurs in only one joint at a time, it can gradually affect other joints.