



Polyclinics
SingHealth

Knee Osteoarthritis



*Disclaimer: Please note that the instructions shown are strictly for general information only.
If you have any queries, kindly check with your healthcare provider.*



SCAN ME



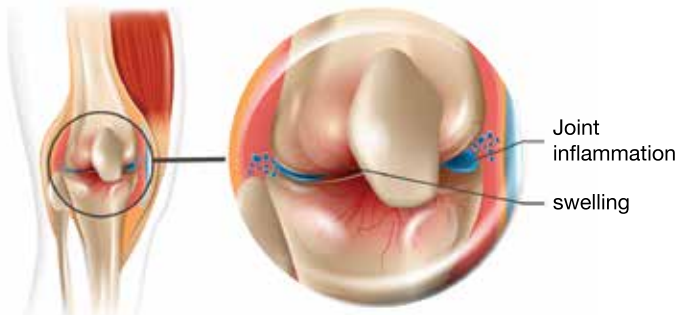
What is knee osteoarthritis?

The layer of knee cartilage undergoes normal wears as you age. The tissue within the joint can become more easily irritated with over-activity, leading to the development of knee osteoarthritis (OA knee), which means inflammation of the knee joint. The swelling in the tissue can cause knee pain.

Hence, it is important to maintain a healthy weight and strengthen the knee muscles to support your knee in your daily activities and lessen the inflammation.

About 1 in 10 Singaporeans has knee osteoarthritis. *

*Cite: Noviani M, Thumboo J, Lee C, et al. SAT0463 The Prevalence of Knee Osteoarthritis Estimated by Validated Screening Questionnaire in The General Population of Singapore. *Annals of Rheumatic Diseases* 2016; 75: 838.



Wear and Repair

Contrary to popular belief, OA knee does not necessarily deteriorate.

Your knee may have a slow but efficient repair process that compensates for the initial injury, resulting in a structurally altered but symptom-free joint.

In some people, because of either persistent trauma or compromised repair, the process cannot compensate for the injury. This results in eventual presentation of OA knee.

B What are the signs & symptoms of knee osteoarthritis?

- Knee pain and swelling that develop gradually and worsen with prolonged walking or standing
- Morning stiffness that usually lasts less than 30 minutes
- Loss of range of motion of the knee
- Crepitation – a sensation of grinding and clicking in the knee



C What are the common causes of knee osteoarthritis?

- Age is a major contributing factor, OA knee is uncommon in people under 40 years old
- Previous knee injuries e.g. ligament damage or fracture
- Being overweight or obese
- Weak and tight leg muscles

D How long does it take to recover?

Your knee pain can flare up when you move too much or too little. This acute pain will usually settle within 2 weeks of treatment.

With proper rehabilitation, many people with OA knee can be relatively symptom-free and live a quality life.

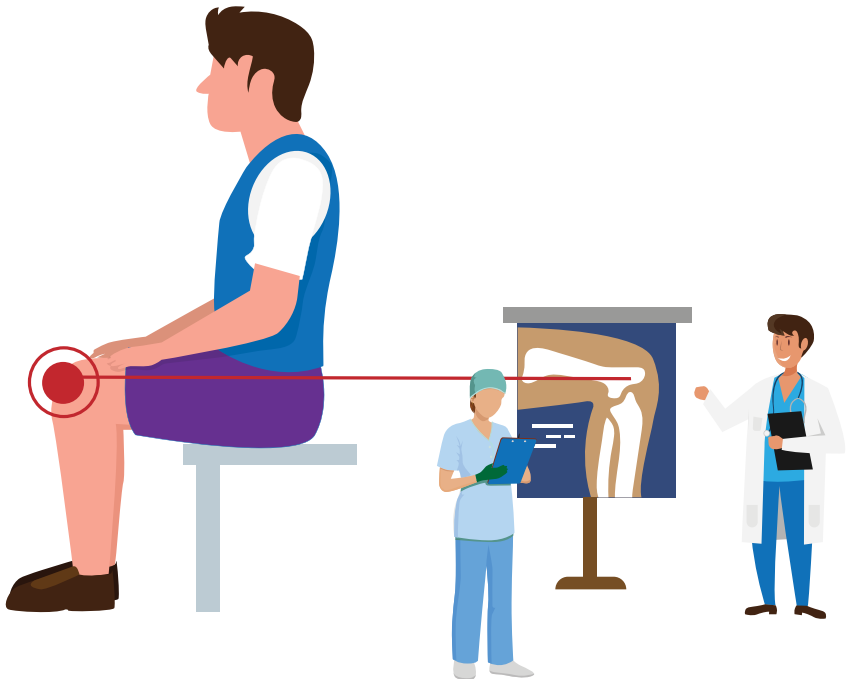
E You should seek medical attention early if you have...

- A fall or trauma
- Prolonged morning knee stiffness
- A hot swollen knee joint
- Rapid worsening of knee pain
- Knee pain accompanied with fever

F Do you need an X-ray?






OA knee can be diagnosed clinically without an X-ray.

Your healthcare provider will evaluate your condition and may order an X-ray to look for other causes or if surgery is being considered.





What are the treatment options?

Lifestyle changes	Physiotherapy	Medications
		
<ul style="list-style-type: none">• If you are overweight, manage your body weight to reduce the weight borne by your knees• Exercise to strengthen and condition your leg muscles	<ul style="list-style-type: none">• Appropriate exercise programme can improve your pain and regain your normal function• Therapeutic modalities (e.g. transcutaneous electrical nerve stimulation (TENS) or Cryotherapy	<ul style="list-style-type: none">• For mild to moderate pain: take paracetamol or non-steroidal anti-inflammatory drugs (NSAIDs)• For moderate to intense pain: require prescription painkillers from your doctor
Injections	Specialist referral	
		
<ul style="list-style-type: none">• Corticosteroid or viscosupplementation injections may be recommended	<ul style="list-style-type: none">• Your doctor will only refer you to see a specialist when necessary for further investigation and treatment such as surgery i.e. total knee replacement (TKR)	



Knee pain and exercise

If you experience knee pain during exercise:

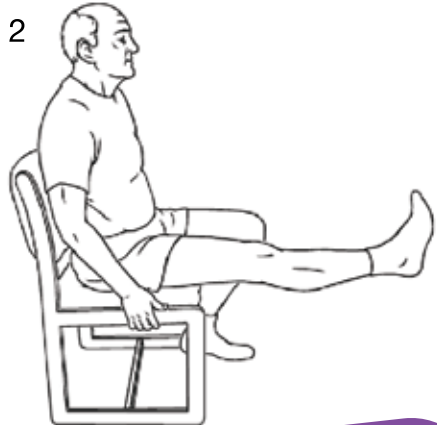
- Mild discomfort for up to 2 hours after exercise may be normal
- Reduce duration and exercise intensity if pain exceeds 2 hours
- Use cold packs for 10 minutes after exercising
- Discuss with your doctor if anti-inflammatory or pain medications are helpful to take 30 minutes prior to exercise

Simple home exercises:

1



2



3



You may perform these exercises 2-3 times a day:

1. Knee bending exercise using towel:
Hold 30 seconds, 3 repetitions
2. Knee extension exercise:
Hold 10 seconds, 10 repetitions
3. Sit-to-stand exercise:
Perform 10 repetitions.

[illegible]

[illegible]