

My Knee Hurts... Could it be Osteoarthritis?

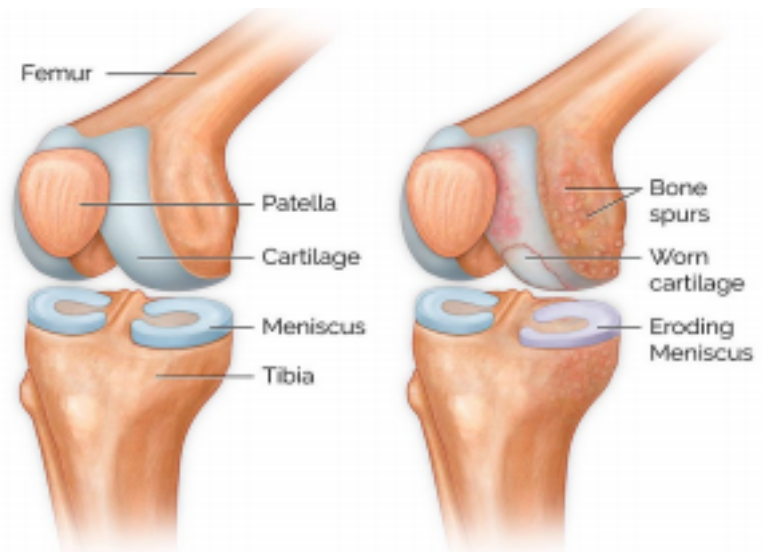
As a physiotherapist working for a few years now, I've seen quite a variety of injuries. When someone comes into the clinic with knee pain, some of the most common questions I get asked are:

- Why does my knee hurt with a change in weather?
- Why is coming down the stairs in the morning so hard on my knee?
- Why does my knee feel full and painful after I go on a long walk?

Typically, whenever someone asks me these questions, the first thought that pops into my mind is "this person might have osteoarthritis (OA) in their knee joint!".

What is Knee OA?

What exactly is knee OA? This is a question all of my patients ask me. They've been told they have it, but they don't know what it is. Osteoarthritis is simply inflammation related to bones and joints, and in the context of today's topic it is related to the knee joint. The knee joint is made up of 3 bones (the femur, tibia, and patella) which all interconnect with each other. Between each bone there is a protective cushion called "cartilage" which allows for the knee to move smoothly and without pain.

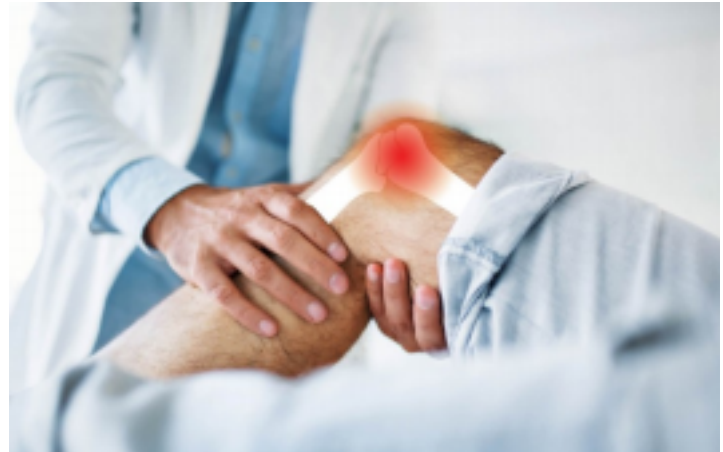


What happens with knee OA is the protective cartilage between the bones begins to get worn down. This allows for the bones to start rubbing on each other, causing inflammation. Overtime, the repetitive rubbing can lead to permanent changes in the bone, essentially causing "rusty" knees!

Who Gets Knee OA?

Anyone can develop knee OA throughout their lifetime. However, there are some common characteristics I have seen while treating patients with this condition. Patients with knee OA typically:

- Are over the age of 50
- Had a previous knee injury in their youth
- Have had a history of participating in some sort of repetitive and impactful activity, such as long-distance running, cross country skiing, and even movers due to the frequent bending and lifting of heavy furniture
- Are overweight



Although these are common features, there are times some patients who do not fit into these categories. This doesn't mean the cause of pain isn't knee OA, some people might have the condition simply due to genetics!

What Does Knee OA Look and Feel Like?

Oftentimes, when someone comes to the clinic with knee OA, these are some of their common complaints:

- An achey sensation deep in the joint
- Pain after a period of no activity (e.g. upon waking up in the morning)
- Pain after a period of increased activity (e.g. after taking a long walk or going for a jog)
- Cracking when bending
- Swelling
- Loss of range in the joint, making it difficult to put on socks or tie shoes

What are the Treatment Options Available?

The three main treatment options I have seen patients utilize in my practice are:

- 1) Corticosteroid injections
- 2) Physiotherapy (duh!)
- 3) Surgery

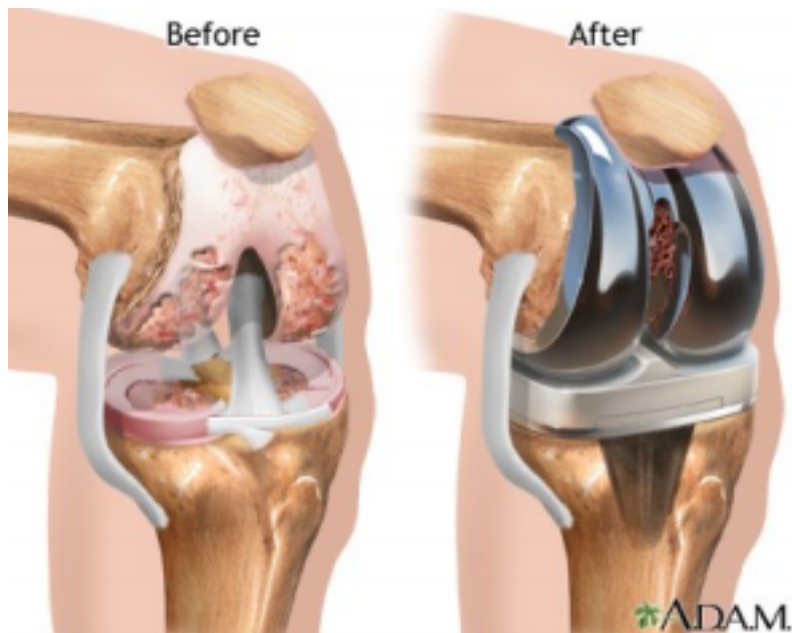
When a patient sees their family practitioner for this issue, the first course of action is typically injecting the joint with a corticosteroid. These injections have anti-inflammatory properties that help reduce inflammation and pain. I find some patients have great benefits from this method of treatment. The downfall: the effects typically do not last forever.



I might be biased, but physiotherapy may be the best intervention for this issue, especially since there is no definitive cure for knee OA. Physiotherapy utilizes a variety of methods to help tackle this issue, from exercises to manual therapy to modalities. It is the least invasive of the three options, however may not work for everyone.



Surgery is the most invasive option of the three. To help with knee OA, surgeons remove the joint completely and replace it with an artificial joint. The problem with this option is the artificial joint does not last forever and will typically require replacement in the future.



What Does Physiotherapy Treatment Include?

When I see patients with this issue, I tackle it from all angles. That way, if there is a method your body responds to, we can utilize it more to help your body recover faster! Some of the treatment techniques I use are:

- 1) Manual therapy — massaging muscles and mobilizing joints to improve mobility and reduce tension
- 2) Exercise — including stretching and strengthening, to further reduce tension and improve muscle strength
- 3) Modalities — including electrical stimulation, ultrasound, and laser therapy, to reduce inflammation and help with pain

Tips and Tricks To Help with Your Pain

1) Heat

Using heat can be a great way to control your pain. I find it to be most useful after a period of inactivity, such as when you wake up in the morning or after sitting for a few hours. When you

don't move your body, it stiffens up, which can cause pain with walking or even doing simple house chores. Wrapping a heat pack in a towel and placing it on your knee for 10 minutes prior to being active or completing exercises can help prevent this pain from occurring.

2) Ice

I prescribe patients to use ice after they've been active and their knee is feeling achey and swollen. The ice helps to "cool" the tissue down, making it feel less inflamed. Similar to heat, it is important to wrap an ice pack in a towel prior to placing it on your knee for 10 minutes.

3) Controlled Activity/Rest

Oftentimes people have a flare up of this pain because they are either too active or not active enough. It is important to find a healthy balance between your activity level and your knee arthritis. A good rule of thumb is, if you're not used to doing a specific activity (such as walking), try doing it for 10 minutes. After a few days, if your knee is able to tolerate 10 minutes of this activity, you can increase the duration to 15 minutes. If you find the 15 minutes does not cause a flare up, progress to 20 minutes. If it does, revert back to 10 minutes. You can walk in bouts of 10 minutes several times a day if you wish to walk more. This concept can be applied to any activity you want to participate in!

Common Exercises for Knee OA

With this condition, certain muscles around the hip and knee become weaker, while others become tighter. In physiotherapy, our goal is to strengthen the weak muscles and loosen the tight muscles to help offload the joint, which will reduce your overall pain! Here are 2 of the most basic stretching and strengthening exercises I prescribe to patients when they come and see me. Keep in mind, these are general exercises that may not be the right fit for you. If you try them and find your knee pain is getting worse, stop!

1) Quadriceps stretch

Standing on the non-painful leg, bend your painful knee back and try to hold your heel to your bum. You will feel a pull in the front of the thigh muscle. Hold this for 15-30 seconds (depending on your tolerance), and complete 3-4 times. If you have balance problems, do not do this exercise in this position! You can instead do this exercise laying on your belly, or even on your back with your leg dangling off your bed.



2) Quad over roll

Laying on your back, place a roll under your knee. Next, straighten your knee over the roll, squeezing the muscle on top of your thigh. Hold this for 3 seconds before releasing. Complete 10 times.



What Next?

If you think you have knee OA, or you've been diagnosed by your doctor, the next best step is to come to physiotherapy! Together we will work on your strength and mobility, reduce your pain, and get you back to the activities you love doing most. Email us a informpt12@gmail.com for more information!