

Lower Leg Pain: *The Lowdown*

BY GEORGINA HOCKLEY

Most of us are likely to experience some form of lower leg pain in our lives, whether it's in the toes, ankles or knees. Here, DR KEVIN KOO highlights common conditions in these much-used body parts, and gives advice on symptoms, causes and treatments.

Toe Trouble

Despite their small size, toes play an important role in the body! Toe pain can impact your ability to walk and to lead an active, happy life. One of the most common causes of toe pain is bunions.

What are bunions and what causes them?

A bunion is a deformity of the big toe where it drifts or deviates outwards or towards the second toe. A bony bump forms on the base of the big toe and, over time, this bump can become inflamed and painful. The most common causes are tight narrow shoes and a family history of the condition.

What are the bunion symptoms to look out for?

Aside from causing pain, bunions can make it difficult to put on shoes or to find the right shoes at all. "They can also affect mobility and cause calluses on other areas of your foot," explains Dr Koo. Sufferers usually notice a hard, bony swelling and redness around the big toe joint. According to Dr Koo, advanced or severe bunions may result in "a crossing over or overlapping of the second toe and stiffness in the big toe joint."

What are the bunion treatment options?

Unfortunately, bunions do not go away on their own, and tend to worsen over time. Conservative treatments like anti-inflammatory medication, bunion splints and pads, and changing to wide toe footwear can



ease the pain. However, these steps don't correct the deformity or slow its progression.

"Performing early bunion correction via the "keyhole" method leads to improved outcomes, when compared to late intervention with traditional open surgery," says Dr Koo. Advantages of this technique include less post-operative pain and wound complications. Severe bunions require open surgery to remove the bony bump and realign the big toe joint. Therefore, an early assessment for symptomatic bunions is recommended before it reaches this stage.

Ankle Ailments

The ankle is an incredibly fine and interconnected area of the body, and is therefore prone to injury. "It's best when you have a swollen, bruised and persistently painful ankle to see an experienced orthopaedic specialist," says Dr Koo. That way you can regain comfort and mobility more quickly.

What is an ankle sprain and how is it sustained?

Ankle sprains and fractures are among the most prevalent injuries seen in emergency rooms worldwide. More often than not they occur when playing sport or as a result of a fall. "The ligaments supporting the ankle bones become overly stretched or torn," explains Dr Koo. This happens when a sudden rolling or twisting motion of the foot causes the joint to be displaced.

What should someone do if they sprain an ankle?

It's important to take immediate action with RICE (rest, ice, compression, elevation), says Dr Koo. Rest the ankle, apply ice every 20 minutes to decrease pain and swelling, compress the area with a bandage to reduce swelling and elevate the leg slightly.

However, self-treatment alone may not be enough. "Delaying treatment for moderate to serious sprains may result in complications and worsening discomfort," cautions Dr Koo. Over time, this may cause recurring sprains and injuries such as ankle joint instability, chronic tendon inflammation, cartilage damage and even irreversible joint arthritis, he advises.

What's the treatment for a sprained ankle?

"At an initial consultation, I perform a physical examination, and arrange for imaging tests such as an X-ray, CT scan or MRI to determine the details and extent of the injury," says Dr Koo. For mild to moderate injuries, pain medication is given and orthotics may be used to reduce the load on the foot. He also recommends physiotherapy to help strengthen the ankle and restore its mobility.

For those who still can't resume normal activities after physiotherapy, surgery may be necessary. Arthroscopy is a minimally invasive keyhole procedure that involves assessing the ankle joint with a tiny lens, removing inflamed or damaged tissue, and treating cartilage injury. At the same time, torn ligaments can also be repaired.

Today, ligament repair can be done via an innovative breakthrough "keyhole" method called the ArthroBrostrom repair. "This is less painful, has less wound complications and leads to quicker recovery compared to the open traditional method," says Dr Koo.

Needy Knees

As a crucial joint supporting much of our weight, the knee is a commonly injured body part. "Knee problems and pain may be caused by natural wear-and-tear from ageing, overuse, illness or injury due to trauma or sports," says Dr Koo.

What are some common knee condition symptoms?

Pain, swelling, warmth and redness are all good indicators of a knee condition. While symptoms will vary depending on the severity and type of ailment, other signs to look out for include joint stiffness, instability or locking.

What are some of the causes of common knee conditions?

In Singapore, Dr Koo sees many patients who have sustained injuries while playing sport. "A tear in the anterior cruciate ligament (ACL) is common in athletes who participate in high-intensity, contact sports," he says.

Another knee injury he treats is a torn meniscus. This often happens when the knee is subjected to excessive pressure or twisting while the foot is planted on the ground.

Cartilage injuries, on the other hand, can be caused not just by trauma, but also by wear and tear. "The articular cartilage provides a smooth lubricated surface for joints to move and also facilitates proper transmission of loads across these joints," says Dr Koo. This can be degraded over time.

What are the available treatments for knee conditions?

The first thing to do when you hurt your knee is to follow the RICE method. "Regardless of severity, if symptoms are persistent, you should see a specialist," says Dr Koo, who starts the treatment of all these types of conditions conservatively with medications, braces and/or physiotherapy. In cases of persistent pain,

corticosteroid or hyaluronic acid injections may be given.

If the above treatment fails to alleviate the patient's symptoms, then surgery may be performed. This can be in the form of joint-preserving surgery (the arthroscopy "keyhole" method or a realignment osteotomy) or joint-replacement surgery.



About the doctor

Dr Kevin Koo is a Consultant Orthopaedic Surgeon who specialises in foot and ankle surgery, joint replacements, sports and minimally invasive surgery. He's the founder of The Bone & Joint Centre, where he provides personalised treatments and orthopaedic surgeries to all parts of the body. [a](#)



#14-15 Mount Elizabeth Medical Centre, 3 Mount Elizabeth
9898 7781 | [bjc.sg](#)