



Numerous foot and ankle conditions afflict the young and the old in the general population. This article is to help patients understand some of these common conditions, their symptoms and the treatment options.

## 1. Bunions



Right side has been operated in a patient with bilateral deformity

A bunion is essentially a deformity of the big toe. Patients with bunions have a toe which points outwards, as well as a bump on the inner side of the foot. Pain usually ensues as the bunion gets more prominent and callouses are formed. Bunions are a common condition frequently seen in women. Some studies have shown that patients who have bunions conditions in the family are more likely to develop bunions as compared to patients who do not have bunions in their families. In some instances, it is also worsened by constrictive shoewear, for example high heels. People who develop bunions normally have a combination of factors making them susceptible to the condition.

If left untreated, it can lead to painful swelling, cracked skin, overlapping lesser toes and eventually painful arthritis (wear & tear) and stiffness at the joint. Sometimes, a patient's walking pattern may also be affected as the load on the foot is shifted to the outer side.

Most bunions can be managed non surgically with silicone toe spacers, night splints, footwear modification, toe stretching or some custom insoles to offload the painful joint. In some cases, surgery may be necessary if the bunion becomes painful, causes walking difficulty or restricts footwear. Surgery is usually done as a day procedure which involves realignment of big toe joint in order to relieve symptoms, correct deformity and restore function. For most patients, they can walk the day after surgery and full recovery usually takes about 8 – 12 weeks.

## 2. Ankle Sprains & Ankle Instability



Picture showing a inversion sprain and a tear of the outer ankle ligamnet

Ankle sprains are common sports injuries which can also occur from everyday activities after an awkward fall. The ankle most commonly twists unnaturally inwards, injuring or straining ligaments in the ankle. Patients are presented with acute ankle swelling, pain on walking and limitation of ankle movement. Some patients may hear or feel a "pop" sound at the point of injury.

The immediate home management of ankle sprains is R.I.C.E (Rest, Ice, Compression, Elevation). The swelling and pain from ankle sprains usually settle within 3 to 5 days.



## Common Foot & Ankle Conditions

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Rest: Avoid activities that cause pain, swelling or discomfort. Ice: Use an ice pack immediately for 15 to 20 minutes and repeat every two to three hours while you're awake. If you have vascular disease, diabetes or decreased sensation, talk with your doctor before applying ice.

Compression: To help stop swelling, compress the ankle with an elastic bandage until the swelling stops. Don't hinder circulation by wrapping too tightly. Begin wrapping at the end of the foot farthest from your heart.

Elevation: To reduce swelling, elevate your ankle above the level of your heart, especially at night. Gravity helps reduce swelling by draining excess fluid.

However, signs that the ankle injury may be more than just a simple ankle sprain are; excessive pain, bruising and persistent swelling that does not settle within 2-3 days. In such a scenerio it is safer to consult a medical practioner & perform further investigations like an X-ray, or a scan to exclude a bone injury, cartilage injury or ligament tears of the ankle. Initial treatment for the more serious ankle sprains includes structured physiotherapy or a period of immobilization.

The persistence of pain in a sprained ankle could be from scar tissue impingement (blockage) from the torn ligaments, bone bruising or a ankle cartilage injury. Sometimes the torn or injured ligaments become weak and the patient may experience instability (looseness) of the anke. Such patients may report that the ankle gives way easily, and that there is chronic pain or swelling even on simple activities.

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Patients not responsive to physiotherapy and bracing may require surgery. Some of the surgical procedures include arthroscopic debridement (keyhole surgery to shave the scar tissue), ligament repair or cartilage resurfacing. Most of these surgeries are done as a day surgery with keyhole techniques and after an initial period of rehabilitation. Depending on the type of surgery perfformed, the patient can usually resume normal sports mobility within 2-3 months.

## 3. Flat Feet



Bilteral flatfeet in a adolescent girl showing loss of arch. The right foot is worse than the left.

Age group is an important consideration in the approach to flat feet. Painless flexible flat feet (mobile flat feet) is most common amongst the school-going group. Reason being, in this group, the ligaments are looser and more stretchable. As such, they may experience some dull aching pain over the foot or heel cord during sports or running. Such patients benefit the most from Achilles stretching exercises, customised orthotics and footwear modification.



Bilteral flatfeet in a adolescent girl showing loss of arch. The right foot is worse than the left.

If the pain is not improved or if the deformity is excessive, it may be best to seek a medical opinion. In some rare cases, adolescents with a painful flatfoot may have an underlying condition such as tarsal coalition (fused bone) or an unstable os navicular (unfused bone since birth) and warrant further investigation. Occasionally they may need surgical intervention.

In the slightly older age group, the most common cause of adult flat foot deformity is a tendon dysfunction. This tendon sometimes gets damaged from overuse or degeneration. Patients have pain and swelling on the inner aspect of the foot. There is a gradual loss of the arch, weakness and inability to stand on tip toes.

In the early stages, physiotherapy and customised orthotics may help. Patients who present late may have degenerative arthritis and have difficulty with walking. Surgical treatment may be necessary in these cases. Surgery involves corrective procedures to realign the foot and repair the tendon. Recovery from corrective flatfoot surgery usually takes about 6 - 8 weeks.