

Conditions of the Foot

Callus

A common cause of thickened skin on the bottom of the foot is a misaligned, elongated or thickened metatarsal (bone in the foot). A surgical repair often involves making a "V" shaped cut into the metatarsal to lift the bone into place, thus relieving pressure.

Degenerative Disease



A limited range of motion with stiffness, swelling and pain can be caused by arthritis or trauma to the big toe joint. This is referred to as "hallux limitus" or "hallux rigidus". The joint can be repaired and remodelled, often returning motion and comfort to the joint.

Heel Spurs



A **heel spur** is a bony outgrowth at the base of the heel bone near the plantar fascia. A spur may cause pain on the bottom of the heel when you stand. As with plantar fasciitis, the pain may decrease after standing or walking a short time. The pain you feel is not from the spur itself. Your heel hurts because the spur pinches a nerve or presses against the plantar bursa. If the bursa becomes inflamed (bursitis), it may squeeze the plantar fascia.

Initial treatment usually involves treating the underlying biomechanical causes by means of **orthotic devices**. If pain persists, mechanical therapy, or anti-inflammatories may be used. If these methods are

not successful, Shockwave Therapy can be used. You can find out more about Shockwave Therapy in our Treatments section (or click [here](#))

As a last resort, **surgery** can also be performed. Under local anesthesia a section of the plantar fascia is cut to release the pull created at the heel spur.

Bunions

A Bunion is an enlargement of the bone at the big toe joint. An inherited misalignment or weakness in the foot or leg can lead to this condition. It can be aggravated by tight shoes causing swelling, pain and skin irritation. There are varying degrees of severity of bunions with several types of surgical repairs available.

The angle between the first two metatarsals can be moderately (A) or greatly (B) increased as the bunion deformity progresses. (See Images)



Image A

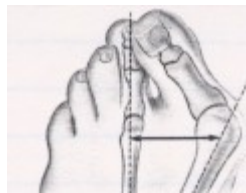


Image B

Surgical repair involves any combination of procedures to reduce the high angle and strengthen the toe. The protruding bump is also removed in cases where the side of the metatarsal has become enlarged.

Nail Problems

Nail problems are common to those of all ages. If left untreated, nail problems could result in serious discomfort and therefore, should be treated immediately by your podiatrist. Below are descriptions of common nail problems:

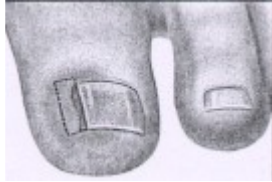
1. **Partially Ingrown Toenail**



A nail is ingrown when one or both corners or sides of the nail grow into the skin of the toe. Irritation, redness, an uncomfortable sensation or warmth, swelling, pain, and infection can result from a partially

ingrown toenail.

Treatment: Partial Matricectomy.

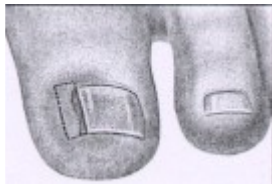


A wedge of the nail is removed. This simple procedure is brief. The nail portion can be surgically removed with a scalpel or by chemical treatment.

Follow up care:

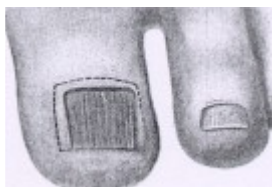
Expect minimal bleeding initially, and, with the chemical treatment, drainage. If chemicals were used, you will be instructed on soaking your toe.

2. Completely Ingrown Toenail.



In severe cases, the whole nail grows into the skin on all sides, sometimes because the nail is curved from an injury or fungus infection. You may suffer pain and be unable to bear weight. Ingrown toenails can also affect your foot's appearance.

Treatment: Total Matricectomy or Bilateral Partial Matricectomy.



The entire nail and growth plate are removed either surgically or chemically. The body then produces a "false nail"-tough skin that mimics a real nail.

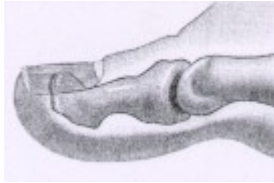
Bilateral Partial Matricectomy is when only the sides are removed with the middle section of nail continuing to grow.

Follow up care:

The area may bleed for a few days. Care is much the same as for partially ingrown toenails. The false

nail usually grows in a few months after surgery.

3. **Bone Spur Under the Nail**



An overgrowth of bone under the toenail can press up into the tissue underneath the growth plate, deforming the nail above. This condition is painful, especially when you're wearing shoes. Many people also find that weight-bearing is difficult.

Treatment: Subungual Exostosis.



The bone spur can be smoothed down with a tiny rasp. The rasp (which resembles a dental burr) is inserted through a small incision in the toe. This procedure is often performed along with partial or total matricectomy.

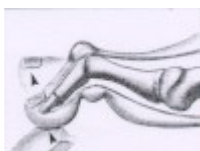
Follow-up Care:

Your incision is bandaged, and you can bear weight immediately. Often, you can wear your own shoes after surgery.

Hammertoes

An inherited muscle imbalance or abnormal bone length can make one or more small toes buckle under, causing their joints to contract. This in turn causes the tendons to shorten. **Corns** (build-up of dead skin cells where shoes press and rub) often form on top of the contracted joints, and may become irritated and infected. Various ways to correct them surgically are shown below:

1. **Flexible Hammertoes:**



When hammertoes are flexible, you can straighten the buckled joint with your hand. Flexible hammertoes may progress to rigid hammertoes over time. Corns, irritation, and pain are common symptoms and function is often limited as well. A recurring Callus is often located on the end of the toe, which can also lead to ulceration.

Treatment: Tenotomy Capsulotomy.



To release the buckling, the top and bottom tendons and the joint capsules may be cut.

Follow-up Care:

You can bear weight immediately, but may need a small bandage, a splint, and a surgical shoe, for one to three weeks after surgery.

2. Rigid Hammertoes:



A rigid hammertoe is fixed; you can no longer straighten the buckled joint with your hand. Corns, irritation, pain, and loss of function may be more severe for rigid hammertoes than for flexible ones.

Treatment: Arthroplasty.



A portion of the joint is surgically removed and the toe is straightened. The "gap" fills in with fibrous tissue.

Follow-up Care:

You can bear weight immediately, but may need to wear a wooden shoe for a few weeks as the toe heals.

3. Curled Fifth Toe: (Digiti Quinti Varus)



The little toe may curl inward underneath its neighbour, so that the nail faces outward. With this inherited problem, the fat pad on the bottom of the toe (normally used for walking) loses contact with the ground. Corns and pain may result.

Treatment: Derotation Arthroplasty.



A wedge of skin and bone is removed to uncurl ("de-rotate") the toe.

Follow-up Care:

Care may involve follow-up visits and wearing a bandage, a splint, and sometimes a surgical shoe for several weeks following surgery.

4. Bone Spur:



A bone spur, or overgrowth of bone, may occur alone or with a hammertoe. Bone spurs have a variety of causes. Usually, they result in pain, interfere with the use of your foot, and detract from its appearance.

Treatment: Minimal Incision Surgery.



In this technique, a small incision is made and a small rasp (similar to a dental burr) is inserted to smooth the bone.

Follow-up Care:

A follow-up visit is necessary to remove any stitches, and to check the results of your surgery.