Website notes

Paediatrics

* Congenital deformities:
  + Clubfoot: clubfoot is a condition affecting the feet, resulting in an inwardly curved foot. Without treatment, this deformity would result in pain and difficulty walking. Luckily, when treatment is sought early it can be addressed without the need for surgery and managed by a series of plaster casting, or strapping . Should this be unsuccessful, or should bony deformity already be present, surgery may be needed to correct the foot.
  + DDH: developmental dysplasia of the hip is a condition in which the head of the hip joint is no longer in the socket. Depending on contributing factors and age of presentation, this condition can be managed by non surgical or surgical means, in order to try and secure the hip back in the socket.
* Acquired conditions
  + Blounts: Blounts is a condition in which the growth area of the tibia at the knee is not even. This results in the leg developing bowing and a rotational deformity. This condition is almost always managed surgically, from a minor “slowing down” of growth on the overactive side, to more aggressive corrective surgery to straighten the leg again.
  + Bowing of the legs: it is important to remember that a degree of bowing of the legs are normal in toddlers and “knock knees” or outward bowing can be normal in the preschool years. If the amount of bowing exceeds normal limits there are minor/ moderate surgical procedures that can be done to correct these deformities.
  + Perthes: Perthes is a condition of childhood affecting the hip joint in which there is a disruption of the blood supply to the head (ball ) of the hip. This results in collapse and flattening of the head. If caught early and contained, the head has a chance to try heal in a good position and shape. Some cases however may require surgery to help re orientate the bones at the hip joint to allow for better movement and function.
  + Flatfoot: Flatfoot is a condition in which there is a loss of the medial arch of the foot and the inside edge of the foot is on or near the ground. This can be familial and asymptomatic. But occasionally it can cause pain and instability or repeated ankle sprains. When this is the case, there are a variety of surgical and non surgical treatment options to correct this.
  + Cerebral palsy: Cerebral palsy is a condition that occurs as a result of an injury to a part of the brain. This injury could occur in the womb, during birth, after birth or as a result of infection, trauma or tumors. It results in a problem with movement and muscle control. It may cause very abnormal movements, low tone or floppy tone in the muscles or spastic high tone in the muscles. All of these muscular problems can result in a spectrum of concerns from joint contractures to dislocations. Along with a team of paediatricians, occupational and physical therapists and neurologists, orthopaedics can help with some of the muscular and bony problems.
* Infection : Infection in bone can lead to life threatening and long term sequelae. It can cause bone destruction, fracture, growth abnormalities and deformity. It is essential to manage bone infection aggressively to ensure the best outcome.
* Malunions and deformity correction: a malunion occurs when a bone either heals in a poor position or due to an injury near a growth center, the bone grows abnormally. A variety of surgical options are available to correct deformity in the growing skeleton, from osteotomy and plating, to growth modulation and even bone lengthening.

Foot and ankle

* Hallux Valgus (Bunion) Correction : a bunion occurs when the big toe starts drifting across towards the little toe. This causes a painful bump on the inner aspect of the foot and can also result in the small toes starting to tuck in or over the big toe to compensate for loss of space. Mild deformity can be managed with splinting for shoe wear comfort, but this will not correct the condition. Most cases will require surgery to put the bone back into the correct position. This takes away the painful bump and results in a straight, functional toe.
* Lesser Toe Deformity Correction: sometimes the smaller toes can also degenerate and become misshapen. This results in a mallet or hammer toe, which causes painful rubbing, ulceration and callosities. This also makes shoe wear difficult, as the toe keeps catching on the shoe on entry. Lesser to deformities are often corrected with fusion (joining together) of the bones of the affected joint, excision (removing the offending bones) or arthroplasty (replacing the surface of the joint).
* Hallux MP Joint Fusion: In cases of severe bunion or arthritis of the big toe, it may be neccesary to fuse the joint. In this procedure, the bones on either side of the joint are joined together and held with either screws or a plate.
* Turf-toe Repair: turf toe is a condition that can occur gradually over time or suddenly from an acute injury. Swelling, pain and tenderness at the ball of the foot or metatarsophalangeal joint of the big toe are classic symptoms. An athlete may complain of pain when pivoting, pushing off or cutting. Mild injury can usually be managed conservatively, but the more severe injury may require surgery and repair of the torn/ fractures structures beneath the big toe.
* Management of trauma: Trauma and fractures to the foot and ankle are debilitating. Although many can be managed with non operative means, some do require surgery for fixation to get you up and back to your normal daily activities as quickly as possible.
* Hindfoot, Ankle and Midfoot Fusion: In cases of arthritis (wearing down) of the joints and bones of the foot it may be necessary to join or fuse those joints in order to eliminate movement and thus take away the pain generated by these joints. Various types of fusions are available and there are multiple options depending on which joint is affected. These options will be discussed with you in detail and a joint decision will be made to suit your needs.
* Pes Cavus Reconstruction : Cavus foot is a condition in which the inside arch of the foot is very high. This can be on the spectrum of normal or due to an underlying condition such as club foot or neuromuscular disorders. There are specialised orthotics or inserts which can be used to ease walking. There are also surgeries which can be performed to reduce or lower the arch and to correct the asscoiated deformities of the forefoot and heel. The aim is to get a comfortable, neutrally aligned foot.
* Pes Planus (Flatfoot) Reconstruction: Pes planus or” flatfoot” is a condition where the inner arch of the foot has collapsed. Many cases of flatfoot are asymptomatic and can be left alone. Some however, do result in pain on the outer aspect of the ankle and ligament instability with frequent sprains. Flatfoot can be due to a weakened or degenerative tendon on the inner aspect of the ankle, from trauma or simply be the way your foot has developed. Either way, if it is causing discomfort or instability, there is surgery to restore the inner arch and reconstruct the deficient ligaments and tendons on the inner aspect of the foot.
* Arthroscopic Microfracture for Osteochondral Lesions: An osteochondral lesion is when there is trauma to the cartilage surface of the ankle joint. Although bone heals very well, cartilage is not quite as forgiving and may result in pain, and loose fragments within the joint. This lesion can be diagnosed by a scan (such as a MRI) or arthroscopically. Treatment of such a lesion usually involves an arthroscopic debridement (keyhole surgery with a camera in the joint) where any loose fragments are removed and then microfracture, where instruments are used to stimulate the underlying exposed bone to form scar tissue and heal the surface. Following this type of surgery, patients are usually kept off their feet for a while in order to allow healing to take place.
* Lateral Ligament Repair/ Reconstruction (Ankle Instability): ankle instability is usually a result of ligament/tendon failure. It results in pain, impingement, and frequent sprains or twisting of the ankle joint. If neglected, instability can result in abnormal loading of the joint and arthritis. If the ligament tear has occurred recently, there is potential for repair of the torn ligament. Should it be chronic or have occurred over some time, it is usually necessary to reconstruct the ligament. This entails using one of the body’s own tendons as a graft, using donor graft or using synthetic materials to reconstruct and stabilize the affected joint.
* Reconstructive Surgery for Ankle and Hindfoot Deformities: Deformity or mal alignment of the foot can be congenital or acquired (due to trauma or infection) and can be addressed with corrective surgery. This usually includes a cut into the bone or joint, correcting the deformity and fixation in the corrected position with either screws or a plate.
* Repair of Acute Achilles Tendon Ruptures: Using the most modern techniques, it is now possible to repair an acutely torn achilles (heel chord) using minimally invasive surgical techniques. A small 2 cm incision along with a further few 3mm incisions are all that’s needed to repair the damaged tendon.
* Reconstruction of Chronic Achilles Tendon Ruptures: Chronic Achilles tendon rupture is usually defined as the rupture that occurs in 4 to 6 weeks after injury. The symptoms of chronic Achilles tendon rupture include pain, decreased strength, fatigue, and ankle stiffness. Chronic or long standing achilles ruptures are more difficult to manage than that newly torn ones. Surgery usually involves transfer of one of the adjacent tendons to take over the function of the old shortened tendon or lengthening of the shortened Achilles tendon.
* Repair of Insertional and Non-insertional Achilles Tendinitis: Achilles tendinitis is an over use injury of the achilles tendon, the band of tissue that connects the calf muscles at the back of the lower leg to your heel bone. Achilles tendinitis most commonly occurs in runners who have suddenly increased the intensity or duration of the runs. Most cases of Achilles tendinitis can be treated with relatively simple, at home care under your doctors supervision. More serious cases of Achilles tendinitis can lead to tendon tears (ruptures) that may require surgical repair.
* Tarsal Tunnel Release: Tarsal tunnel syndrome usually develops as a result of prior ankle injury. All other causes of tarsal tunnel syndrome may include flat feet, bony outgrowths in the tarsal tunnel, varicose veins, inflammation from arthritis, diabetes and trauma. Symptoms may include burning pain at the sole of the foot that’s worse when standing during activity. Other symptoms include numbness or tingling at the base of the foot. If tarsal Sumner syndrome is left untreated, it can result in permanent and irreversible nerve damage. Treatments can range from conservatives such as anti-inflammatory medication based ice compression and elevation. In severe cases it is recommended to have surgery, which includes the release of the ligament compressing the nerve within the tarsal tunnel. This can be done in an open fashion by arthroscopic surgery.

Rehab:

Following foot and ankle surgery your rehabilitation will be facilitated by our competent team of physiotherapists, occupational therapists and orthotists. The nature of your surgery will determine the degree of weight-bearing allowed post operatively. In cases where no weight can be placed on the limb for a period of time you will be provided with an assistive device and aided by physiotherapy so that you can mobilise safely.

MIS:

There are certain procedures which can be done using minimally invasive surgery. Should this option be available for your condition it will be discussed with you during the consultation.

Arthroscopy:

Arthroscopic surgery involves the insertion of the camera into the ankle joint through a small 5 mm incision. A second incision will be made in order to allow for instrument insertion. Surgery can then be performed through these two portals, within the ankle joint. When operating on the back of the ankle to similar incisions will be made on either side of the Achilles tendon.