

## Achilles Tendon Reconstruction

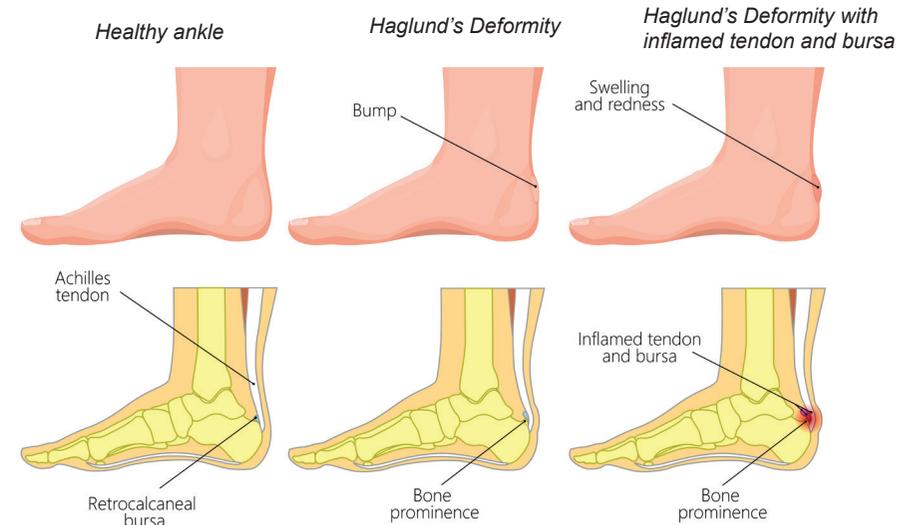
The Achilles tendon is the strongest tendon in the ankle. It is formed by the calf muscles and inserts into the heel bone (calcaneus). It allows the foot to push off the ground during normal gait. Inflammation can occur within the tendon causing pain and a limp. This generally can occur at 2 levels, either where the tendon inserts into the calcaneus or above the level of the insertion.

Inflammation which occurs above the level of insertion (non-insertional tendinopathy) is usually due to degenerative changes that occur within the tendon. This usually occurs after the 5th decade of life. Small tears develop within the tendon and due to poor blood supply, these tears do not heal. Pain occurs as a result.

The treatment for non-insertional tendinopathy is rarely surgical. Activity modification to avoid aggravating activities and shoe wear modification can help with the pain. A physiotherapist or a podiatrist can usually help with an insert to put into the shoe, to raise the heel. This will help take some tension off the tendon. Directed physiotherapy and eccentric exercises to strengthen and stretch the muscles of the calf are indicated also. Fenestration of the tendon under ultrasound guidance can sometimes be helpful also.

Insertional tendinopathy is usually associated with an extra piece of bone on the back of the calcaneus, just above where the tendon inserts. This is known as a Haglund's deformity or 'pump bump'. This usually presents earlier in life than non-insertional tendinopathy. The deformity rubs against the tendon and the shoe, causing inflammation in the tendon as well as in the soft tissues between the tendon and the bump, known as retrocalcaneal bursitis.

The initial management should also be non-operative. Once again, this includes activity and footwear modification consisting of a heel rise and a low back bar as well as physiotherapy for eccentric calf exercises. If a proper trial of non-operative management fails, then surgery can be considered.



### Surgery: Excision of Haglund's Deformity and Achilles Tendon Reconstruction

The operation involves detaching the Achilles tendon, debriding (removing unhealthy tissue) the tendon, excising the Haglund's deformity and then reattaching the tendon. This is done under a general anaesthetic in the operating theatre, augmented with a local anaesthetic block. The operation is done through an incision made on the back of the heel, slightly off the midline. The tendon is reattached to bone using very strong suture anchors. Synthetic tape is used to augment the reconstruction, to reduce the risk of the tendon pulling off.

### Rehabilitation and recovery

A half cast is applied at the end of the operation. This is changed to a boot at 2 weeks. Weight bearing in the boot commences at 2 weeks. The boot stays on for 4 – 6 weeks. Physiotherapy is required for at least 3 months. A blood thinning injection, known as clexane needs to be self-administered for the first 2 weeks while non-weight bearing to reduce the risks of blood clots.

Although the operation will be done with the utmost care, complications may occur. These include numbness, blood clots, infection and failure of the tendon to heal which may be a cause of ongoing pain. Sometimes, the bump can reoccur. Dr Lau will closely monitor the ankle for any issues over a period of months so that any potential problems can be identified and treated promptly.