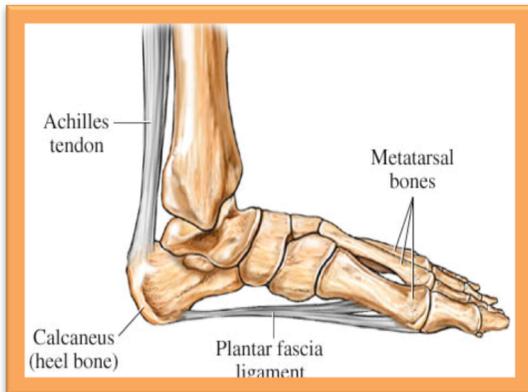




WHAT IS PLANTAR FASCIITIS?

Plantar Fasciitis is an overuse condition of the thick fibrous band of connective tissue (plantar fascia) underneath the foot at its attachment to the calcaneus (heel bone). Plantar fasciitis is one of the most common causes of heel pain and often results from full plantarflexion of the ankle (pointed foot) combined with dorsiflexion of the metatarsophalangeal joints (where the foot joins the toes), which is why a high prevalence is reported in runners.



WHAT ROLE DOES THE PLANTAR FASCIA HAVE?

The plantar fascia's primary role is to support the bottom of the foot and resist the flattening of the arch, as it's spreads from the calcaneus to the ball of the foot.

The plantar fascia has a crucial role during gait and running. With faulty biomechanics increased stress to the plantar fascia occurs resulting in micro tearing, inflammation, scar formation and inappropriate healing.

DIAGNOSIS:

An extensive subjective history will guide the physiotherapist in the right direction with common reports involving footwear changes, increases in training loads and pain during the first steps out of bed. Objective findings may include pain on palpation of the plantar fascia, tightness through the calf muscle, stiffness in the ankle joint and altered windless mechanism. Gait patterns will be observed looking for high or flattened arches and other biomechanics abnormalities. X-ray may show the presence of a heel spur and MRI/US can be used for further diagnosis including tears in the plantar fascia.

CONTRIBUTING FACTORS:

- Over pronation of the feet (flattening during weight bearing);
- Weakness of ankle and foot supporting muscles;
- Increase in activities e.g. longer runs;
- Tightness through the calf muscles;
- Poor foot mechanics;
- Inappropriate foot wear;



SIGNS AND SYMPTOMS:

- Reported pain in the heel;
- Pain during the first steps out of bed in the morning or after prolonged rest;
- The pain can improve with exercise;
- Feeling of a 'stone bruise';
- Pain after exercising
- Tightness through calf and heel;
- Gradual increase in pain with no exact mechanism.

PHYSIOTHERAPY TREATMENT OPTIONS:

- Gait/running analysis and corrective strategies;
- Calf massage techniques;
- Dry needling;
- Footwear review and advice;
- Foot manipulation and mobilisation;
- Diet and weight loss advice;
- Orthotic prescription;
- Taping and heel inserts;
- Electrotherapy;
- Ice therapy.
- Strengthening and stretching programs;

ASSOCIATED RISK FACTORS:

- Obesity;
- Diabetes Mellitus;
- Over the age of thirty;
- Pregnancy;
- Job's requiring long standing periods;
- Active sportspersons;
- Inflammatory conditions such as rheumatoid arthritis.

FURTHER TREATMENT OPTIONS:

The physiotherapist may refer to a sports medicine doctor or specialist for further diagnostic scans and possible injection of cortisone or other substances.

