Achilles Tendonosis

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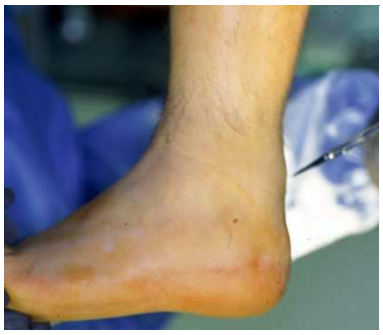
The Achilles tendon is the thickest and strongest tendon in the body. It is responsible for the power of push off and landing and may be able to transmit force of up to 7 times body weight. Achilles tendonosis commonly involves degenerative changes, sometimes associated with a micro tear and may occasionally be accompanied by inflammation and oedema in the para-tendonous structures.



Causes are biomechanical and metabolic. Tightness in the calf increases the strain on the tendon, reduces the range of dorsiflexion in the ankle and increases the amount and duration of pronation. This affects the ability of the foot to become rigid lever at push off which affects rotation of the tibia at the knee and function of the hip. Hence, the strength and control of the hip needs also, to be determined and addressed. Other biomechanical factors include ankle and foot stiffness limiting movement, weakness in forefoot stabilisers and lateral leg muscles. Recurrent ankle sprains seem to be associated with a high incidence of Achilles tendonosis. Unfavourable biomechanical changes from previous injuries affect the entire limb, therefore a holistic and comprehensive rehabilitation will be prescribed specific to the individual. Examination needs to clarify the cause as well as prioritise the focus of treatment. Your Back in Business Physiotherapist will assess the Achilles as well as your gait and clarify the contributions of the muscles and joints at the ankle-foot, knee, hip and lumbar spine to the efficiency of the entire kinetic chain. Observations need to be confirmed through palpation of joints and soft tissue structures as well as examination of muscle strength, endurance and co-ordination.

Management

When designing a treatment regime functional, metabolic and biomechanical factors need to be considered. The biological time constraints of healing suggest anywhere from 6 weeks to 6 months for recovery to take place. Treatment may include joint mobilisations, icing, soft tissue techniques, needling, heel lifts, shoe/orthotic consideration and taping and will require an understanding of your biomechanics and the stages of healing. Your Back in Business Physiotherapist will tailor your rehabilitation specifically for your needs. Exercise may include eccentric strengthening (see pic), stretching and a progressive, low load endurance lumbo-pelvic-hip-abdominal stabilisation regime.