Case Study 3

Anne is a 70 yo lady with right posterior heel pain and a history of insertional calcific tendinopathy. She had previous treatment to the heel with ultrasound guided cortisone which had no effect and shockwave therapy which after 6 weeks had a 90 % reduction in her pain. She presented 7 months later reporting her pain had returned in the same area.

On observation see had swelling of her right posterior heel (Figure 1), a reduced stride length and limited dorsiflexion with push-off phase in her gait cycle.

Figure 1 - Swollen right Achilles tendon

An ultrasound revealed a swollen right Achilles tendon with areas of partial tears and calcific tendinopathy at the insertion (Figure 2). Colour doppler also demonstrated increased vascularity in the tendon indicating the chronicity of the pathology (Figure 3).

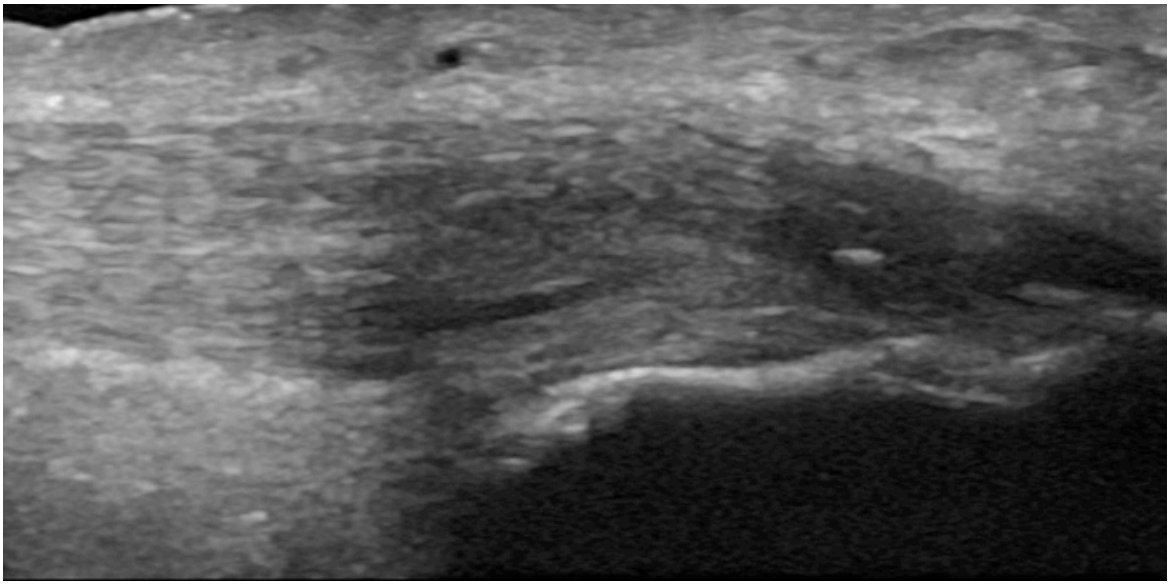

Figure 2 - Image of the right Achilles with calcific tendinosis

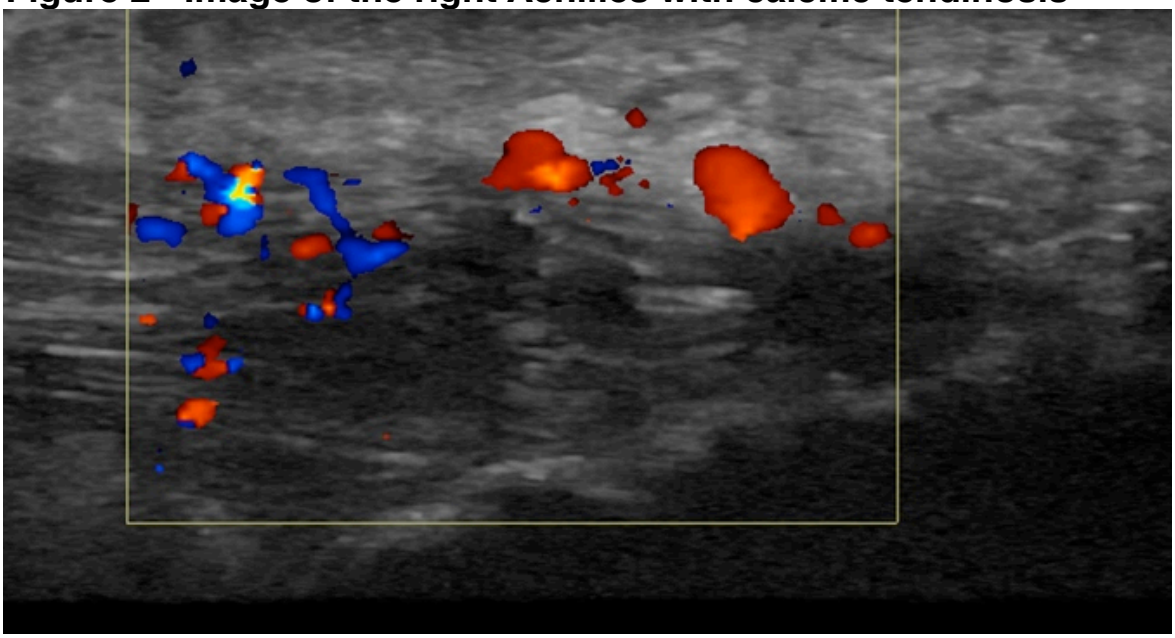

Figure 3 - Colour doppler of the Achilles tendon showing neovascularisation

Further evaluation of Anne's lower limb showed marked reduction in her medial gastrocnemius muscle bulk and fatty infiltration suggesting a lack of activation of the muscle during the gait cycle (Figure 4).

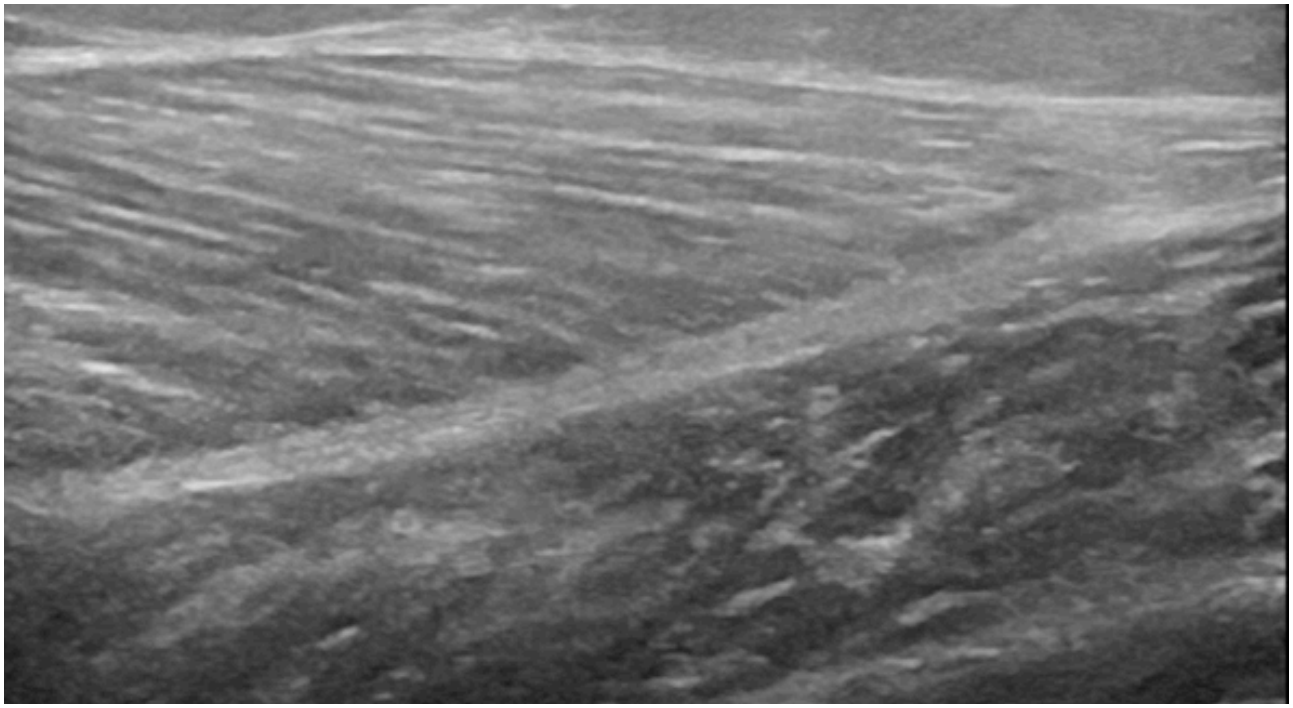

Figure 4 - Ultrasound image showing the fatty infiltration to the medial gastrocnemius muscle

Physiotherapy treatments involved dry needling the calf and heel to reduce pain as well as soft tissue techniques to decrease myofascial tone in the calf. Advice was given as to appropriate foot wear and a heel raise was added into her right shoe. A home exercise program of double leg (for 6 weeks) and then single leg (for 10 weeks) isometric heel raises on the flat ground was given. Anne reported a 80% reduction in her pain scores and had increased her walking tolerance to 2 km.