

## Diagnosis and Treatment P2- Achilles Tendinopathy Case Study

Alice, 55-year-old woman presented with a 9-month history of right-sided medial mid portion Achilles tendon pain following the completion of her first marathon last September. Alice reported that her Marathon training program went well, however she struggled to find time to complete some of her longer runs. She did not experience any Achilles pain during training, however days after the race, once the initial soreness had settled, she noticed that her Achilles was still painful. Prior to her Achilles pain, Alice enjoyed running several times per week and has completed several half marathons over the past 5 years. She has been unable to exercise since having her Achilles pain and had gained about 10kg; she was unhappy about both her inability to exercise and weight gain. She lived at home with her husband in a two-storey house with 13 stairs. Alice enjoys her employment as a medical receptionist, and her usual workday primarily involves sitting, however she also gets up and down frequently to photocopy and file.

### Pain Presentation

Alice's pain was confined to the mid portion of Achilles tendon, 6cm above the Calcaneus. There tendon thickening noted both over the Achilles tendon and slightly medial to it; there was no spreading of her pain and she was able to localise it with two fingers centrally and on the medial side of the tendon. She reported no sensation changes (no pins and needles or numbness). Alice also reported that several years ago she had seen a podiatrist due to pain over the first metatarsophalangeal joint and medial ankle when she commuted in her work shoes. The podiatrist had diagnosed her as having a pronated foot type and given her some orthotics which helped relieve the symptoms

### Behaviour of Symptoms

Alice described her pain as 'severe' after running for 3km at a slow pace. Her pain was worse, when she tried her usual 5km trail route which consisted of several hills and some uneven terrain; whereby she needed to call her husband to pick her up. After running 3km the pain was unbearable, she rated it 8/10 on the VAS scale and it would usually take until the following day for the pain to settle back down to a manageable 5/10. She also reported that both her stairs at home and walking to work were becoming more of a problem; this flared the medial Achilles pain and she reported that she had started avoiding using stairs and now drives to work which she felt had contributed to her weight gain.

Alice's morning pain and stiffness was moderate; she reported limping to the bathroom but by the time she had finished her shower, her Achilles had loosened up. Her Achilles was particularly sore if she had attempted a short run the night before, and it would take approximately 30 minutes for the pain to settle. Rest eased her pain temporarily, however it reoccurred once she returned to activity. During the past 9 months she had tried extended periods of rest and reduced activities (longest period was 7 weeks) but also took NSAIDs so she was unsure if it was the rest or medication that was helpful.

### **Client Perspective**

Alice reported fear of pain that was now limiting her activity. Alice described her tendon as being weak and going to snap. Her husband was a doctor and she had had multiple ultrasounds on her tendon, with the tendon reported as degenerative, abnormally thickened and having neovascularisation. She admitted to not knowing what all this meant but thought that it 'sounded bad' and these terms concerned her.

*Q1. List the key features of Achilles tendinopathy reported in this case study and is there any other potential diagnoses that you would consider testing?*

*Q2. What would you consider Alice's client reported load tolerance to be and how would this inform your physical assessment? (3 points)*

*Q3. Please discuss any 'contributing factors' (both intrinsic and extrinsic) to the development of Alice's problem and to her ongoing pain and disability? (3 points)*

*Q4. What is your interpretation of Alice's 'perspectives on her experience' (E.g her understanding of her condition, fears, stress, coping, etc.)? How would you address these in your management? (10 points)*

*Q5. Perform diagnostic tests to confirm your diagnosis of Achilles/ Plantaris tendinopathy and any other tests that you would want to perform to exclude other potential sources of Alice's pain?*

- Palpation
- Arc Sign
- Royal London Test

*Q6. Discuss and perform within your group a progression of load tolerance tests that you would use to quantify Alice's objective load tolerance? (6 points)*

Isometric, concentric, eccentric phase?

*Q7. Perform diagnostic tests to confirm a diagnosis of proximal hamstring tendinopathy and any other tests that you would want to perform to exclude other potential causes of posterior thigh pain?*

- Puranen- Orava test
- Bent knee stretch test
- Modified bent knee stretch test
- Active hamstring test at both 30- and 90-degrees knee flexion
- Long stride heel strike test
- Palpation- Ischial tuberosity

*Q8. Discuss and perform within your group a progression of load tolerance tests that you would use to quantify the load tolerance of a client with PHT? (6 points)*

Isometric, concentric, eccentric phase?