Plantar fasciitis: case study document By Richard Curasi CPO

History:

A 41-year-old retired Soldier presented with bilateral Plantar fasciitis pain and Achilles tendonitis. She had been experiencing pain for the past 12 months she noticed swelling of the Achilles tendon and experienced pain on simple walking, especially after she was off her feet for a while as in sitting at her desk. The pain and the swelling in her Achilles worsened. He stopped most of her activities due to the pain before her initial visit. She reported having no previous problems with her feet or legs.

Examination:

On examination, her right Achilles tendon was visibly swollen above the calcaneal insertion. The swelling was evident on the medial and lateral aspects of the tendon. On palpation, pain was elicited in the area of swelling and at the calcaneal insertion. The medial aspect of the tendon was more tender. There was hypertonicity and tenderness throughout the soleus and gastrocnemius muscles with the medial side of the lower leg more involved. Active and passive dorsiflexion of the left ankle was slightly restricted and she was unable to toe rise due to pain in the Achilles. The tarsal joints were hypomobile on joint play assessment and the plantar fascia and muscles on the volar aspect of the foot were shortened and hypertonic. Her gait was assessed and she walked with a limp, not being able to fully dorsiflex her left ankle or push off her right foot. She had just come from orthopedics and was diagnosed as having Plantar fasciitis and Achilles tendonitis.

Assessment/Diagnosis:

It is my clinical impression that the patient is suffering from:

- 1. Plantar fasciitis
- 2. Achilles tendonitis
- 3.

Definition

Plantar fasciitis is a painful inflammatory process of the plantar fascia, the connective tissue on the sole (bottom surface) of the foot. It is often caused by overuse of the plantar fascia or arch tendon of the foot. It is a very common condition and can be difficult to treat if not looked after properly.

Longstanding cases of plantar fasciitis often demonstrate more degenerative changes than inflammatory changes, in which case they are termed plantar fasciosis. The suffix "osis" implies a pathology of chronic degeneration without inflammation. Since tendons and ligaments do not contain blood vessels, they do not actually become inflamed. Instead, injury to the tendon is usually the result of an accumulation over time of microscopic tears at the cellular level.

The plantar fascia is a thick fibrous band of connective tissue originating on the bottom surface of the calcaneus (heel bone) and extending along the sole of the foot towards the toes. It has been reported that plantar fasciitis occurs in two million Americans a year and in 10% of the U.S. population over a lifetime.[2] It is commonly associated with long periods of weight bearing. Among non-athletic populations, it is associated with a high body mass index.[3] The pain is

usually felt on the underside of the heel and is often most intense with the first steps of the day. Another symptom is that the sufferer has difficulty bending the foot so that the toes are brought toward the shin (decreased dorsiflexion of the ankle). A symptom commonly recognized among sufferers of plantar fasciitis is an increased probability of knee pains, especially among runners.

Achilles tendon injuries are one of the most common overuse injuries to afflict athletes. The tendon is covered by two thin layers of tissue, the epitenon and the peritenon, which form a space (mesotenon) that provides the blood supply to the tendon. The covering of the tendon is called the paratenon. The tendon and the paratenon can be injured by a direct blow, an acute traumatic stress or through overuse. The etiologic factors can be categorized as: anatomic, systemic diseases, direct trauma, training errors and surface or equipment. Soft tissue therapies for these injuries have traditionally involved different forms of massage and myofascial release techniques as well as acupuncture/pressure. The prognosis for this injury is varied, depending on the severity and chronicity of the problem. The time for recovery in an acute case is normally 6 to 10 weeks.

Treatment modalities/Outcome:

Treatment involved specific application of Trigenics® procedures administered to her lower leg and foot. She was also given gentle stretching exercises to perform.

Immediately after the first treatment the patient reported that her legs felt considerably looser and for the first time, she could walk easily with less pain. This was the first time I used Trigenics® on such a case and cannot recall ever getting such quick results. I had not expected this patient to achieve this level of improvement so rapidly. (It should be noted that my experience of using Trigenics® in the treatment of a variety of other soft tissue injuries has been similarly positive).