# **Plantar Fasciopathy Information Sheet**

### Foot pain - brief background and who does it effect?

- Higher rates in people of older age. Approximately 1 in every 3 people over 65 (1,2)
- Does not just impact the elderly
- A condition that can affect how we function in daily tasks, for example; going to the shops, walking, getting in and out of chairs or just simply remaining on your feet for periods of time.
- Increases the risk of falls and balance issues in the elderly (1)
- Foot and heel pain can be generated for a number of different conditions ranging from musculoskeletal injuries to neurological conditions. Some of these conditions include; Rheumatoid Arthritis, sprained ankles and Plantar Fasciopathy. (1)

### Plantar Fasciopathy – what is it?

- Also known as Plantar Fascitis
- Consider to be a common condition of the foot and heel accounting for approximately 20% of reported foot/heel conditions (3)
- Plantar Fasciopathy is tissue damage and hypersensitisation of the fascia tissue running under the heel and beneath the foot.



Rasenberg N, et al. (2016) stated "Plantar fasciopathy is characterized by pain over the anteromedial aspect of the inferior heel and the pain tends to increase after periods of inactivity or during weight bearing activities". (4) Simply put, Pain localised to the bottom of the foot with aggravation with too little or too much activity.

• A common feature of Plantar Fasciopathy is a slow and prolonged recovery with exacerbation or injury reoccurrence common. (5)

## **Risk Factors**

- Sedentary Lifestyle and Inactivity
- Obesity
- Poor control of muscles supporting the arch of the foot (intrinsic muscles)
- Poor Force attenuation (lack of strength)
- Poor Biomechanics (interactions of joints, muscles and external forces)

- Flat foot
- Inadequate or poor foot wear.
- Over-repetition / overloading
- Reduced healing-capacity of the body
- Tight Muscles

### Different Treatment Types -

- Strengthening and stability exercises
- Mobility and stretching
- Manual Physical Therapy
- Othrotics
- Medications
- Shockwave therapy (4)

### Orthotics - are they effective?

- Can be great at alleviating pain and improving function
- Very limited evidence supporting the use to resolve issues such as Plantar Fasciopathy (1,2,7,8)
- Overall, orthotics can be a great mechanism for pain management and enabling function. Always consider the advice from your GP and health practitioner

### Exercise Treatment

- Strengthening exercises are effective! Focus on strengthening intrinsic muscles (muscles that support the arch of the foot) and extrinsic muscles around the foot/ankle (these include calf muscles) (6-13)
- Research suggests that Strengthening exercises performed in a progressive manner over a period of 2 months shows improvement of pain and function of the foot/ankle. (6,11-13)
- Strengthening exercises that include targeting upper joints, such as at the hips, is also beneficial for the ankle/foot (12)
- Stretching is very effective for reducing pain and increasing function of the ankle/foot. This can include stretching muscles and the fascia itself (12)
- A combination of strengthening and stretching exercises appears to be the best approach. Orthotic use augments to positive effects (11-13)
- Exercise needs to be prescribed based on pain and function

#### An Exercise Program

If we put this information into practice...

- Calf Raises
- Toe Curling with towel
- Sit to stand or squat
- Standing calf stretch
- Fascia Stretch w/ towel or frozen bottle
- Single leg balance w/ intrinsic activation

#### **Summary**

- Manage Risk Factors
- Utilise an individualised exercise program
- Orthotics can be very useful!
- There are many different treatment types
- Always consider the advice of the GP and health practitioners

\*References can be found on the presentation version of this information\*





