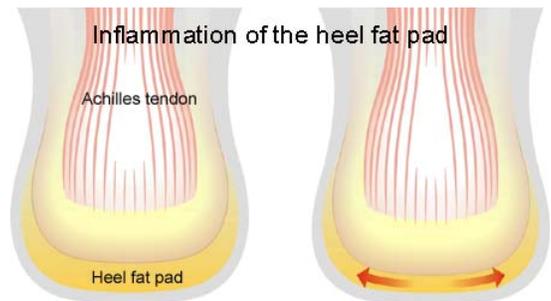


HEEL PAIN & FAT PAD SYNDROME

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Heel Fat Pad Syndrome (**HFPS**) refers to damage or disruption of the fatty pad that sits under our heel bone (calcaneus). This structure is approximately one inch thick and is made up of fatty tissue enclosed by ligamentous chambers. The purpose of this structure is to absorb shock and cushion the heel bone. If the fat pad is displaced or thins, then its ability to protect the heel bone from impact is decreased, which can result in heel pain.

HFPS is commonly misdiagnosed as plantar fasciitis. Plantar fasciitis symptoms tend to be located towards the inner front portion of the heel and can extend into the arch of the foot, whereas symptoms of **HFPS** are characteristically located in the centre of the heel and described as a deep, dull ache that feels like a bruise. Other symptoms characteristic of **HFPS** include central heel pain that is aggravated by prolonged periods of standing and barefoot walking on hard surfaces. It is also possible to have both plantar fasciitis and **HFPS** present at the same time.



There are several factors that can contribute to the development of **HFPS**. Trauma to the heel from high impact sports or a forceful blow to the heel from a fall can cause injury to the fat pad. Hip, knee, and ankle injuries/conditions can cause altered walking patterns that can aggravate the fat pad. Repetitious chronic overload from activities such as running, jumping or prolonged walking and standing can also cause injury which can be exacerbated by the use of improper footwear. It is known that the fatty heel pad breaks down as we get older which can make an individual susceptible to this condition. Carrying extra pounds can also break down the protective fatty tissue under the heel bone.

Self-care strategies for reducing the pain of **HFPS** include: relative rest from any painful activities; ice application; and gentle stretching of the achilles tendon, and calf muscles. Gel or “donut pads” placed under the affected heel(s) in shoes may also provide relief. Long-term strategies may include activity modification and weight loss where applicable.

HFPS that does not respond to self-care strategies may require professional treatment. This can include cold laser application to assist with pain and healing, manual and soft tissue therapy to supporting structures, therapeutic taping of the heel, and specific rehabilitative exercises for the muscles and joints of the upper/lower leg and foot. Supporting the foot with proper footwear and correcting faulty foot mechanics can decrease excessive strain on the fat pad. A custom made orthotic with a deep heel cup design to cradle and cushion the fat pad may also be helpful for decreasing symptoms.



It is important to establish an accurate diagnosis of **HFPS**. Other causes of heel pain may include stress fractures, achilles tendonitis/bursitis, arthritis, gout, or nerve irritation. If you are having difficulty with heel pain, a qualified health professional can determine the cause of your pain and prescribe appropriate therapy and rehabilitation strategies specifically for your circumstance. For more information, visit www.nhwc.ca.

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