Heel Pain (Plantar Fasciitis)

We take our ability to walk for granted until we are affected by a disabling disorder such as heel pain. We have become more aware of heel pain through the experiences of injuries to the foot and ankle of high profiled athletes and the effect they have on their ability to perform their sport. In this article we will discuss the causes of heel pain and methods of treatment.

The most common reason for the development of heel pain is excessive pronation, or flattening of the arch toward the ground during ambulation (gait). It is normal during gait for the foot to slightly flatten to the ground, so that it may readily absorb the shock created when the foot contacts the supporting surface. This is normal pronation. However, if the foot stays in a pronated position for a longer period of time than what would be ideal for efficient walking, this places an undo strain on a ligamentous-like connective tissue structure on the bottom of the foot, called the plantar fascia. The plantar fascia, which is considered to be a continuation of the Achilles tendon at the back of the leg, connects from the heel to the metatarsals of the foot. If the foot excessively flattens to the ground or over pronates, the plantar fascia is stretched out and pulls at its insertion to the heel bone, resulting in inflammation, which over time may lead to the formation of a heel spur. This condition is called plantar fasciitis.

Patient’s with plantar fasciitis usually present with pain in the heel when arising out of bed or immediately standing after sitting for an extensive period of time. The pain may decrease after a few minutes but usually will return after a period of weight bearing activity. Oftentimes, runners will experience such heel pain either during or after their run. Associated factors which may increase the symptoms of heel pain are weight gain, tight Achilles tendons or calf muscles, and wearing non-supportive shoe gear.

Appropriate physical examination by a foot and ankle specialist is usually necessary to diagnose the patient with heel pain (plantar fasciitis). During such examination a complete bio-mechanical examination of a person’s gait is necessary to determine the extent of abnormal forces being applied to the foot as the patient is walking. Weight bearing x-rays of the feet can detect abnormalities in the architecture of the feet and visualize heel spurs that indicate that abnormal forces have been acting on the foot for at least 6 months.

Initial treatment of plantar fasciitis may include: change to more supportive shoe gear, night splints, stretching exercises for the calf muscles and Achilles tendons, ice massage to the inflamed heel, and supportive taping of the foot. In the event of extreme pain and tenderness in the heel, cortisone injections may be necessary to reduce the inflammation. The most beneficial treatment for long-lasting heel pain relief is usually custom-made functional foot orthotics (shoe inserts), which most effectively reduces excessive pronation of the foot, thus relieving stress on the plantar fascia. Such custom functional foot orthotic may also relieve the additional forces acting on the foot that could lead to such foot deformities such as bunions, hammertoes, and osteoarthritis.

While most cases of plantar fasciitis will resolve with the aforementioned treatments, there are occasions when more aggressive treatment becomes necessary. Such treatment may include cast immobilization, and the noninvasive application of an acoustical shockwave to the heel known as orthotripsy. This method of treatment in which Dr. Kase and Dr. Wang are certified, is performed on an out-patient basis. This treatment is FDA approved for patients who have been non-responsive to the above conservative treatments for a period of at least six months. In less than 5% of all cases of heel pain, surgical intervention may be necessary.

If you or someone else you know has heel pain, please feel free to contact our office for an appointment. Early treatment will prevent long term disability and pain in your feet so that you may continue an active lifestyle.

Did You Know...

Congratulations to Dr. Kase, the immediate past president of the California Podiatric Medical Association, for being chosen as “California Podiatric Physician of the Year,” by the California Podiatric Medical Association. This is the first time in California history a sitting President has received such an honor.

Dr. Wang is a Faculty Attendee at UCLA Olive-View Medical Center. He is an instructor to students and residents, teaching them about complex foot and ankle surgical procedures. He also has extensive knowledge and training in the treatment of complicated foot and ankle injuries.

Dr. Kase, Dr. Wang, and staff participated in the Dream Works Employee Health Fair, Joslyn Center Health Fair, and Warner Brothers Employee Health Fair. Dr. Wang recently lectured to the BNI Rose Bowl Chapter and the Glendale Chapter of Medical Assistants on, "Foot and Ankle Traumas and their Treatments."

Upcoming events include: Dr. Kase lecturing to the UCLA Nurse Practitioner Students. He will also be lecturing to participants at the Toluca Lake Health Center on “The Diabetic Foot.”

In conjunction with Step Ahead Physical Therapy, Dr. Kase lectured on the “Prevention and Treatment of Athletic Injuries,” on Tuesday, February 8, 2005. Our sincere thanks for Step Ahead’s hospitality.

Please contact our friendly staff if you have any questions, comments, etc. at (818) 848-5583. Weekend appointments are available with Dr. Oliver Wang.