

Sever's Disease – Heel Pain in Kids

Sever's disease, also known as calcaneal apophysitis, is a condition where there is inflammation of the calcaneal (heel) growth plate. Sever's is seen in children usually between the ages of 8-15 with a higher incidence in boys than girls. Pain is typically reported at the posterior aspect of the calcaneus, with symptoms generally being worse during or after athletic activity with rest bringing relief.

Causes & Symptoms:

Sever's is common during age ranges where children are going through growth spurts. This is because bones tend to grow faster than the muscles and tendons of the lower limb. This growth spurt can cause the Achilles tendon to become tight, which puts extra pressure on the calcaneal apophysis and can lead to inflammation of the calcaneal growth plate. This inflammation is the reason for the pain experienced in Sever's disease. Once the soft tissues 'catch up' to the newly developed bone growth, a reduction in symptoms is expected. Due to the nature of the disease, sports that involve higher impact movements, especially to the heel, such as soccer, basketball, or lacrosse are known to cause a flare up in symptoms.

Treatment:

Pedorthic treatment includes custom foot orthotics, heel lifts, and orthopedic footwear recommendations.

Custom foot orthotics with a deep heel cup, strong medial longitudinal arch support, and extra heel cushioning can help stabilize the rear foot and therefore control any improper

biomechanics of the foot that could be increasing symptoms associated with Sever's.

Heel lifts are used by attaching them directly to the foot orthotic or used separately inside of footwear. The goal of a heel lift is to lift the heel, generally 5mm, to help relieve tension from the tight Achilles tendon pulling on the back of the heel. The use of heel lifts should be accompanied with a stretching program for the calf musculature to ensure there are no contractures to the tendon.

Orthopedic footwear can help stabilize the foot and ankle further, if required, with the use of a motion control style shoe. If extra control is not a concern, a neutral cushioning shoe can be used to help absorb some of the impact during athletic activities.

