

Information for parents and children about....

# Heel Pain in Children



## Stretches

The stretches below are examples of how to stretch your calf and hamstring muscles. Hold for 30 seconds and repeat 3 times on each leg. Try to do some stretches every day. Always stretch when the muscles are warm such as after a shower or after activity. It is possible to quickly regain muscle flexibility by stretching and improving the length of the muscles, therefore relieving the tension on the growth plates, leading to relief of pain.

## Hamstring stretches



Lying on the floor, support your leg behind your thigh. Starting with the knee bent straighten your leg and hold. The leg not being stretched should be lying straight on the floor. A stretch should be felt in the muscles behind the thigh of the leg being held.



Lie on the floor and instead of using your hand to support your leg, with this stretch you can rest your leg against the wall or a door frame.

## Calf Stretches

These stretches can be performed in trainers especially if you find them uncomfortable to do.



Stand with support against a wall. Step one leg behind with feet facing forward. Keep the back leg straight with the heel on the floor and bend the front knee. Feel the stretch in the calf muscle.



Standing with both feet on a step slowly move the feet back so only the toes are on the step. Now drop the heels down towards the floor and feel a stretch in both the calf muscles



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## What causes heel pain in children?

Children and adolescents may often experience pain in the heels during periods of rapid growth. This is more common when there is an accelerated rate of bone growth, especially in the feet between the ages of 8-12 years.

Children who participate in regular sport are more likely to experience heel pain. These include sports such as football and rugby which involves the wearing of boots and footwear that has little or no shock absorption. Children involved in dancing and gymnastics and who do exercise in bare feet are also more vulnerable to developing heel pain.

Less active children with an increased BMI are also at risk of developing heel pain. The excessive body weight puts increase pressure on the developing cartilage and relative immature bone which causes pain.

Young people may complain of pain on and off for several months or even years. When bones grow at a rapid rate the muscles, tendons and soft tissues are often unable to keep up with the rate of bone growth. The muscles lose their flexibility and pressure is placed upon the growth plates within the heel bone (calcaneus) causing pain. The vast majority of growth related pain is not serious and will often resolve quickly with a simple regime of muscle stretches. Some children may also benefit from strengthening exercises too.

## Sever's disease

Sever's Disease



Heel pain is often referred to as Sever's disease.

Sever's disease is a "traction apophysitis". The Achilles tendon pulls on the growth plate (apophysis) at the back of the heel causing pain and inflammation (itis).

The pain often develops at the back and sides of the heel, but can also be felt under the heel.

With Severs, due to the inflammation, there will be swelling at the site of the growth plate.

Constant repetition of the same activity/sport is more likely to cause Severs.

## What is the treatment for heel pain?

Calf and hamstring stretches will lengthen the muscles, improve the flexibility and relieve the tension being placed on the growth plate.

In addition, gel heel pads and orthotics can be used to help relieve pain.

Wear supportive footwear such as sports trainers and school shoes with cushioning under the heel. Avoid unsupportive flat shoes such as flip flops and pumps.



Anti-inflammatories can help to reduce pain. Consult with a pharmacist or your child's GP. Cold packs and ice can also help relieve symptoms.

Although the pain can be aggravated by sporting activities such as football and gymnastics, try to keep up with P.E where possible and maintain some level of physical activity.

Rest from activities that provoke the most pain or induce swelling, try to do a variety of sports which will work muscles differently thus avoiding repetition of the same activities.

Monitor your child's growth and re-visit stretches during a growth spurt or with the onset of the pain. Maintain a healthy weight and diet.

**Severs is a self-limiting condition and should eventually go away but you must consult your GP if you have any of the following;**

- Persistent pain, especially at night
- Hot, swollen and inflamed joint(s)
- Fever, sickness, fatigue
- Weight loss, and/or loss of appetite, associated with the onset of leg pain(s)
- Recent history of trauma or injury