

## Sever's Disease

### Fact Sheet



Despite its name, Sever's disease is not a disease but a painful condition that affects growing children. It is medically known as calcaneal apophysitis, and is often referred to as '**growing pains**' at the back of the heel. It is caused by irritation to the specific growth plate at the back of the heel.

#### Relevant terminology

While we are growing, growth plates are present in all of our bones as this is where new bone is added and how our bones increase in size. When we reach full maturity, the growth plate will turn to solid bone - this is technically when we stop growing. While present, growth plates are more vulnerable than the strong surrounding bone. Hence, when strong forces are applied to a bone, they are more likely to become irritated (damaged) and inflamed.

#### What are the symptoms?

Symptoms typically occur during a period of growth in kids, particularly between the ages of **eight and fourteen years old**. They can include:

- Pain at the back of the heel that can be sharp or aching
- Pain occurs during or after physical activity, especially running
- Tightness through calves down to the heel
- Swelling at the back of the heel
- Pain that is reduced with rest and ice, but comes back with activity

#### What causes Sever's disease?

Sever's disease is caused by irritating the growth plate

at the back of the heel. This irritation is normally due to a tight or overused achilles tendon that continues to pull on the back of the heel. It may also occur from impact to the heel bone itself, running on hard surfaces, and the like. The cause of the achilles tendon tension include:

- A faster rate of bone growth than muscle growth, resulting in a shorter achilles tendon
- Increasing the intensity of physical activities that repetitively pull on the heel
- Running sports
- Soccer boots and low-heeled shoes

#### Managing Sever's disease at home

The key to managing Sever's disease is not only to settle the painful symptoms, but also to treat the cause and reduce the tension on the heel bone. If you suspect that your child has Sever's disease, we highly recommend that you book an appointment with your Podiatrist.

In the meantime, you can:

- **Rest** - rest the feet and legs, avoid physical activity and any other activities that cause your kids pain at the back of the heel
- **Ice** - use an ice pack to help reduce swelling and pain. Make sure you don't apply the ice for too long (up to 20 minutes every 2 hours) and that the ice does not come in direct contact with the skin (i.e. wrap in a towel)
- **Elevate the foot** - above the level of the heart to help reduce swelling
- **Wear supportive shoes** like sneakers to help support and stabilise the foot. Avoid walking with bare feet and wearing low-set shoes

## How your Podiatrist can help

Your Podiatrist will perform a comprehensive biomechanical assessment and create a tailored management plan for your child. This can include:

- Orthotics to correct any biomechanical or alignment issues and minimise the tension at the back of the heel
- Stretching tight muscles such as the achilles tendon to reduce their pull on other structures
- Strengthening weak muscles to help support and stabilise the foot
- Footwear assessment - to ensure the footwear is helping and not hindering recovery
- Activity modification to prevent the onset of painful symptoms throughout the treatment
- Education about how to best manage the pain once it has started

It is important to follow your Podiatrist's instructions about the stretching and strengthening exercises carefully as they will be prescribed specifically for your child and the severity of their symptoms. Beginning stretches too early or with a high intensity may instead further irritate the growth plate, so please complete this under their guidance and supervision.

*Disclaimer: This document is an informative guide only and is not a tool for diagnosis. If you suspect that your child has Sever's disease or develops heel pain, we recommend that you see your Podiatrist for an accurate diagnosis and an appropriate treatment plan. Referrals are not required to see your Podiatrist.*