

# Sever's Disease

You may have heard of this condition as calcaneal apophysitis. Basically this is a condition in which the growth plate found in a child's heel becomes inflamed. It is caused generally by repetitive stress and more prevalent in children who are athletic. It presents simply as pain around the back of the heel. Generally it will resolve itself once the bone is completely grown or when the activity that is aggravating it is lessened.

## Sever's Disease Anatomy

The heel is at the back of the foot and it both supports the body and assists in providing balance for when you are standing, running, walking and even jumping as well as many other movements. It goes from the lower part of the back of the leg around to the bottom of the foot.

The heel bone is known as the calcaneus. In children there is a growth plate present which is an extra bone sitting at the back of the heel. It is known as the calcaneal apophysis. It doesn't fuse until the child is aged 12-15 years old, at which point the pain often stops. However, repeated stress through the back of the heel can cause an inflammation of the apophysis which is where calcaneal apophysitis comes from.

## How to Treat Sever's Disease:

1. Elevation of the heel is often recommended in an effort to reduce the swelling. When the swelling is reduced then the pain is also reduced.
2. Stretch calf and hamstring muscles 2-3 times each day. Make sure that the stretching exercises do not cause any pain and if they do then stop doing them.
3. Rest from any activities that cause or worsen the pain. If running causes pain then try to avoid running. Substitute another activity for the running...like swimming.
4. Apply ice to the injured site for 5 – 10 minutes at a time three to five times per day.
5. Compression by wrapping the heel in an ace bandage but do this carefully so that you do not cut off the circulation or ask your therapist for some tips on how to strap the heel.
6. Foot orthotics such as a heel pad may cause some relief due to the fact that it will raise the heel. When this happens, the calf muscles are shortened and the strain is taken off of the back of the heel.
7. Physical therapy helps to decrease both the inflammation and the pain. A physical therapist may use such treatments as electrical stimulation, ice or even ultrasound therapy to both reduce the swelling and also to reduce the pain.
8. Medication such as an anti-inflammatory should be used if the pain cannot be controlled by other means. An anti-inflammatory in this case will have a dual purpose. It will make the swelling go down a bit and as it does that it will also reduce the pain that is caused by the swelling.
9. Heating therapy can be applied to the area. This is also a method that is used to minimize pain by reducing the amount of swelling.
10. Reduce sport until symptoms improve.

### Tips:

- Make sure that the muscles are flexible by doing stretching exercises. Do only stretching activities that do not cause pain or exacerbate the pain
- Avoid running on surfaces that are hard. While this may not be avoidable during some activities try not to do it at an excess.
- Use shoes that both fit properly and provide both a firm support and resistance to shocks.

There is not really anything that can prevent this condition as it is mostly caused by growing. However, it is something that will be outgrown and will not cause any lasting negative effects.