

### Description

---

Sever's disease is a common cause of heel pain in children to adolescents (11-13yr girls, 12-14yr boys). It is characterised by swelling and pain where the achilles tendon inserts into the heel bone (at the back of the heel). It is possible that a small bump will form at the site of attachment and in more severe cases the tendon can actually pull some bone away from the heel (visible on x-ray).

### Anatomy

---

A tendon is a structure that attaches muscle to bone. The Achilles tendon attaches your calf muscle (Gastrocnemius and Soleus) onto your heel bone (Calcaneus). Your calf muscle generates force required for walking and running and transmits this force through the achilles tendon to lift your heel off the ground, bringing your foot up onto its toes.

In adolescents, a growth plate (an area where bone growth occurs) exists near the site of the achilles tendon attachment. Growth plates are more active during growth spurts. The most rapid growth spurt occurs from 11-13 years in girls and 12-14 years in boys. Growth plates eventually stop activity and close. This varies between 16-19 years in females and 18-21 years for males.

### Causes

---

Severs disease occurs due to a combination of exercise, reduced flexibility and growth spurts. During a growth spurt, the calf and achilles pulls on the growth plate causing an increased stress or traction where the tendon inserts into the bone. This extra stress is more common in growing adolescents who perform repetitive running and jumping activities or sports.

### Treatment

---

A period of rest is mandatory in the early part of rehabilitation. Physiotherapy treatment will assist in the fastest return to activity and may consist of:

- Advice regarding relative resting
- Ice, stretching and massage
- Strength and conditioning
- Return to sport drills
- Biomechanical correction
- Possible Podiatry referral
- Training and technique modification



Complete resolution of pain may not occur for 1-2 years, as a minimum and will not improve without a reduction in activity. This condition should be managed carefully so that an active sporting regime

can continue without exacerbating the injury. Early rest from activity is vital.

**Please feel free to discuss any problems or queries with your physiotherapist or get up to date treatment options by subscribing online at [www.rehabonthenet.com](http://www.rehabonthenet.com).**