

## Sever's Disease (Calcaneal Apophysitis)

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**Definition-** Sever's disease is really no "disease", rather a common problem affecting growing children. Young individuals have a growth center (apophysis) of the heel bone (Calcaneus). It resembles a crescent moon. The top of the growth center attaches to the Achilles tendon and the bottom attaches to the plantar fascia. When children are going through growth spurts, the growth centers are put under tension as the bones grow faster than the muscles and tendons. The problem is most common in children ages 7-10 years. It is also more common in active children, especially boys.

**Clinical symptoms-** Children often complain of pain in the heel or foot. This is typically more of a problem after sports/activities and at the end of the day. It may affect one or both sides.

**Physical exam-** Children are often point tender on the heel. Frequently they have "tight" heel cords and hamstrings. A flat foot is sometimes present. There should be no obvious swelling, redness, or warmth.

**Diagnostic test-** It is not necessary to obtain x-rays to make the diagnosis of Sever's disease. X-rays may be obtained for cases not responding to typical treatment modalities or conditions presenting in an atypical manor.

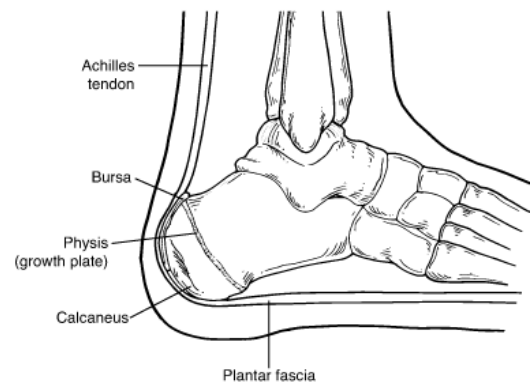
### **Differential diagnosis-**

- Achilles tendonitis or plantar fasciitis
- Infection
- Bone cyst or tumor

### **Treatment-**

- Conservative treatment includes relative rest (limiting activities which cause pain and limping)
- Ice therapy for 15-20 mins. (especially after activity)
- Anti-inflammatory medicines (motrin or naproxen)
- Stretching. Stretching the hamstrings, calves, and foot should be done 3-4 times a day until adequate flexibility is obtained.
- Gel heel cups may help cushion the heel bone. Heel cups also shorten the distance from the calf to the heel, thus reducing stress.
- Shoes should be supportive in the arch and be the appropriate size (especially not too large).
- Excess body weight only adds more stress to the foot and should be avoided.

**Outcomes-** With adequate rehabilitation, most children are able to return to sports and activities with little to no pain. Typically the pain completely resolves as growth begins to slow down and the growth centers close.



### **Dr. Locke's clinical care team**

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