

# Sever's disease

## what is Sever's disease?

Sever's disease is an overuse syndrome found in child/adolescent athletes and is characterized by inflammation and pain around a growth plate on the back of the heel bone (calcaneus). This area is where the heel cord (Achilles tendon) attaches to the heel bone. The pull of the tendon on the bone and growth plate creates inflammation in some children and adolescents. This may lead to pain with activities and occasionally a limp. The discomfort may last over a period of months.

## who is at risk?

- Children/adolescents between the ages of 9 to 15 years old.
- Children/adolescents who participate in running and jumping activities (i.e. volleyball, basketball, gymnastics, dance, etc.).
- Children/adolescents during growth spurts who have poor leg flexibility (tight muscles).
- Children/adolescents with flat feet may develop Sever's because of muscular tightness of the Achilles tendon (heel cord).

## what are the symptoms?

- The child/adolescent will complain of pain/tenderness/swelling at the insertion site of the Achilles tendon on the back of the heel bone.
- The child/adolescent might have muscular tightness in the gastrocnemius/soleus (calf) muscles.
- The child/adolescent might have poor tolerance to running and jumping activities.

## what are the treatment options?

### Conservative/non-surgical treatment:

- Rest from aggravating activities or "relative" rest.
- Ice the area after activity and when painful for 10 to 20 minutes up to once a hour.
- Muscle stretching to improve flexibility.
  - Stretching should be done both before and after activity.
  - Concentrate on the gastrocnemius/soleus (calf) stretching, but hamstring (back of thigh), quadriceps (front of thigh) are useful as well.
- Heel pads/cups/lifts can be helpful in relieving pain to the heel area.
- If the condition does not improve, a referral to physical therapy to address pain, swelling, range of motion, flexibility, strength, gait, bracing and a return to sport training program will usually improve symptoms.
- This is a self-limiting condition that with muscle stretching and patience, resolves with time.

### Surgical treatment:

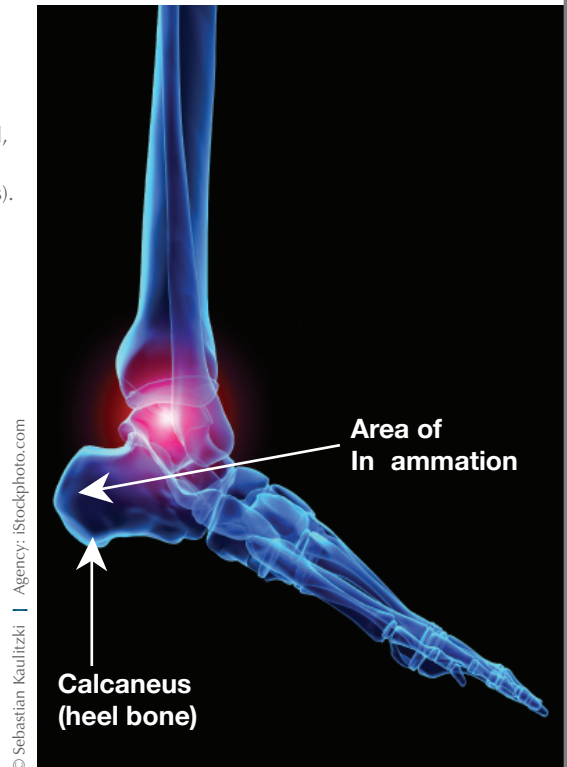
Surgery is not needed.

## what is the time frame for returning to activity/sport?

Patients may continue with activity if the symptoms are mild by increasing their flexibility with muscular stretching and using ice after activity. For more severe symptoms, rest from activity is required for 10 to 24 months to improve the pain.

## what are the long-term side effects?

No long-term problems are expected. Resolution of pain is normal.



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Lateral/Outside View of Ankle