

Helping Hand[™]

Health Education for Patients and Families

Sports Medicine: Sever's Disease

Sever's disease is a painful condition of the heel that occurs in growing children. It happens when the tendon that attaches to the back of the heel (the Achilles tendon) pulls on the growth plate (the apophysis) of the heel (the calcaneus), as well as from repeated stress from the heel striking the ground. The repeated stress on the growth plate causes pain and inflammation (swelling) at that site (Picture 1).

It usually occurs in physically active children between the ages of 8 and 14 years of age. Pain is often worsened by physical activity.

Pain can also be worse during a "growth spurt," when the bones grow faster than the tendons. This increases the pull of the tendon on the heel.

While painful, Sever's disease is not a serious condition. It will not cause long term damage or arthritis. It often resolves once the growth plates close.

Signs and symptoms

- tender area along the heel
- pain that is worse with running or jumping and better with rest
- pain when pressing on the back of the heel or squeezing the heel
- playing sports that require sprinting and kicking (like soccer and football)
- growth spurts
- tightness in Achilles tendon
- too much conditioning like running, jumping or jogging with a quick change in mileage
- poorly cushioned shoes, such as cleats



Picture 1 Inside the heel

Continued...

Treatment

- Rest from painful activity.
- Use heel cups to cushion the heel.
- Perform rehabilitation exercises at home or with a physical therapist or athletic trainer to increase strength and flexibility.
- If injury is severe, your doctor may suggest immobilizing the foot in a boot or cast for a brief period to decrease pain and inflammation.
- Medicine
 - Anti-inflammatory medicines, such as ibuprofen (Motrin[®] or Advil[®]) or naproxen (Aleve[®]) may be recommended. Take these as directed by your health care provider.
 - Other minor pain relivers, such as acetaminophen (Tylenol®), may be used.
 - Topical (on the skin) ointments may help.
- Use of heat and cold
 - Cold is used to relieve pain and reduce swelling for acute and chronic cases. Cold should be applied for 10 to 15 minutes every 2 to 3 hours and after any activity that makes symptoms worse. Use ice packs or an ice massage.
 - Heat may be used before stretching and strengthening activities prescribed by your health care provider or athletic trainer. Use a heat pack or a warm soak.

How to prevent

- Do correct warm up and stretching before practice or competition.
- Maintain proper conditioning, strength, flexibility, endurance, and cardiovascular fitness.
- Exercise moderately. Avoid rapid or extreme change in training or activity.
- Wear a well-cushioned pair of supportive shoes and do not walk in bare feet.

When to call the health care provider

Call your health care provider or the **Sports Medicine** team at **614-355-6000** if:

- symptoms worsen or do not improve in 4 weeks of treatment
- you have a fever greater than 101°F or 38.3 C
- severe swelling or redness to the heel
- you have other new symptoms

To schedule an appointment with Sports Medicine, visit NationwideChildrens.org/Sports MedicineScheduling or scan this code with your camera phone.



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