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"treating the cause of your problem, not just the symptoms"

Heel Pain in Children

Although heel pain is more common in adults and is often due to "heel spurs" at the front of the heel bone (calcaneus), children can be afflicted as well. However, a child's heel symptoms are usually due to a disturbance to the growing area at the back of the heel bone (calcaneus) where the strong achilles tendon attaches to it. This is known as "Sever's disease" or "calcaneal apophysitis" (inflammation of the growth plate).

What is Sever's disease? - Sever's disease occurs in children when the growing part of the heel bone (calcaneus) is injured. This growing part is called the "growth plate". This usually occurs in early puberty. During this time, bones often grow faster than muscles and tendons. As a result, the muscles and tendons throughout the body become tight. During weight-bearing activity (activity performed while standing), the already tight heel tendons may put too much "pulling" pressure where they attach to the back of the heel. Over time and particularly in repetitive physical activity, the growth plate area of the heel bone (calcaneus) becomes inflamed and sore.

When is my child most at risk for Sever's disease? - Your child is most at risk for this condition when he or she is in the early part of the growth spurt in early puberty. Sever's disease is most common in physically active girls 8 to 10 years old and in physically active boys 10 to 12 years old. Soccer players and gymnasts often get Sever's disease, but children who do any running or jumping activity may be affected. Sever's disease rarely occurs in older teenagers because the back of the heel has finished growing by the age of 15.

How do I know if my child's heel pain is caused by Sever's disease? - In Sever's disease, heel pain can be in one or both heels. It usually starts after a child begins a new sports season or a new sport. Your child may walk with a limp. The pain may increase when he or she stands on tiptoe. Your child's heel may hurt if you squeeze both sides toward the very back. This is called the squeeze test. Your chiropractic doctor may also find that your child's heel tendons have become tight.

How is Sever's disease treated? - First, your child should cut down or stop any activity that causes heel pain. Apply ice to the injured heel for 25 minutes 3 times a day. If your child has a high arch, flat feet or bowed legs, your chiropractic doctor may recommend orthotics, arch supports or heel cups. Your child should never go barefoot.

Will stretching exercises help? - Yes. It is important that your child performs exercises to stretch the hamstring and calf muscles, and the tendons on the back of the leg. Your child also needs to do exercises to strengthen the muscles on the front of the shin. Refer to the bottom of the page for details.

When can my child play sports again? - With proper care, your child should feel better within 2 weeks to 2 months. Your child can start playing sports again only when the heel pain is gone. Your chiropractic doctor will let you know when physical activity is safe.

Can Sever's disease be prevented? - Sever's disease may be prevented by your child maintaining good flexibility in his or her leg muscles while he or she is growing. This can be accomplished by having your child perform stretching exercises during their growth spurt. Again, ask your chiropractic doctor for advice on this. Good-quality shoes with firm support and a shock-absorbent soles will also help. Fitting your child with custom orthotics is an even better bet. Finally, your child should avoid excessive running on hard surfaces.

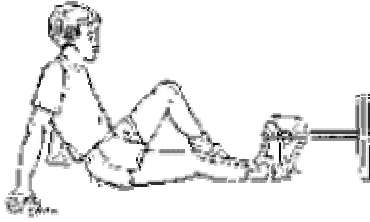
If you have any further questions or would like to know what stretching and strengthening exercises are appropriate, please call my office.



Heel cord (Achilles tendon) stretch



Hamstring stretch



Strengthening exercise using a bungee cord or rubber tubing

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Will stretching exercises help?

Yes. It is important that your child performs exercises to stretch the hamstring and calf muscles, and the tendons on the back of the leg (see pictures 1, 2 and 3). The child should do these stretches 5 times each, 2 or 3 times a day. Each stretch should be held for 20 seconds.

Your child also needs to do exercises to strengthen the muscles on the front of the shin (see picture 4). To do this, your child should sit on the floor, keeping his or her hurt leg straight. One end of a bungee cord or piece of rubber tubing is hooked around a table leg. The other end is hitched around the child's toes. The child then scoots back just far enough to stretch the cord. Next, the child slowly bends the foot toward his or her body. When the child cannot bend the foot any closer, he or she slowly points the foot in the opposite direction (toward the table). This exercise (15 repetitions of "foot curling") should be done 3 times. The child should do this exercise routine twice daily.

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Are there any problems linked with Sever's disease?

No long-term problems have been linked with Sever's disease. However, call your doctor if your child's heel pain does not get better or gets worse, or if you notice changes in skin color or swelling.



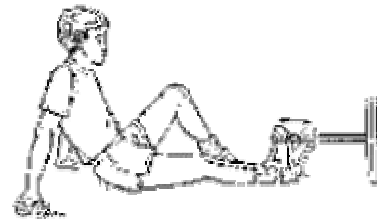
1. Calf stretch.



2. Heel cord (Achilles tendon) stretch.



3. Hamstring stretch.



4. Strengthening exercise using a bungee cord or rubber tubing.

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Can Sever's disease be prevented?

Sever's disease may be prevented by maintaining good flexibility while your child is growing. The stretching exercises pictured here can lower your child's risk for injuries during the growth spurt. Again, ask your doctor for advice. Good-quality shoes with firm support and a shock-absorbent sole will help. Your child should avoid excessive running on hard surfaces.

If your child has already recovered from Sever's disease, stretching and putting ice on the heel after activity will help keep your child from getting this condition again.