Heel Pain in the Young Athlete

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Spring is a wonderful time of year; the weather is changing, flowers are blooming, and sports such as baseball, softball, track, golf and soccer are in full swing.

Young athletes who participate in these sports are practicing or playing games several times a week. Although physical activity is encouraged for a healthy lifestyle, frequent physical activity can cause repetitive stress to certain areas of the body and increase injury risks.

A common complaint from young athletes who participate in running and jumping activities, especially on hard surfaces, is heel pain. Different than the heel pain seen in adults, the inflammation or swelling of the heel bone (calcaneus) where the Achilles tendon attaches is known as Sever’s disease.

Cause

Sever’s disease is a painful bone disorder which usually occurs during a two-year period of the early puberty growth spurt. As a child grows rapidly during this growth spurt, the heel bone may grow faster than the calf muscle and the Achilles tendon. Thus, the tendon and muscle is shorter. The repeated stress of running and jumping puts pressure on the growth plate, causing inflammation and tenderness.

Girls may experience this growth spurt between the ages of eight and 13 and boys between the ages of 10 and 15.

“The first thing I always ask the parents is if their child has experienced a recent growth spurt,” says Beau Sasser, M.D., medical director of Southeast Georgia Health System Sports Medicine. “Most of the time the answer is ‘yes,’ which leads me to focus on issues where a shortened tendon like the Achilles is pulling on its attachment. It’s the constant tension which leads to the pain and impairment.”

Signs and symptoms

The young athlete may complain of pain or tenderness in one or both heels where the Achilles tendon attaches. Physical signs may include difficulty walking, limping, or the child may walk on his or her toes to avoid putting stress on the heel. Pain is usually worse with activity or immediately after, but gets better with rest.

Diagnosis

A physician will ask the athlete questions to obtain a history of symptoms. Based on the reported symptoms, the doctor’s exam may consist of squeezing the back of the heel to determine if it causes pain. During the exam, the physician may ask the athlete to stand on his or her toes. “X-rays are usually beneficial to evaluate the calcaneal growth plate,” Dr. Sasser says. “Usually on an X-ray, the heel bone, or calcaneus, will have a normal appearance, whereas the growth plate can be more defined on the X-ray or look like it has small fractures. This appearance represents the growth plate’s reaction to the constant pull of the tight Achilles tendon.”

Treatment

Treatment consists of rest, ice, and stretching the Achilles tendon to lengthen the muscle and relieve the pressure. An athlete should apply ice to the affected area for 15 to 20 minutes three to four times per day. Icing too frequently can cause more harm than good, so it is important to allow the tissues to re-warm before icing again. Icing before an activity is also beneficial because of the numbing effects of the ice. The pain can also be relieved by placing small “heel lifts” in the athlete’s shoes. Heel lifts can be found in a store or pharmacy’s foot care section.

Stretching is also effective and can be done without any fancy equipment (as pictured left). The athlete stands with hands placed on the wall, and takes two steps back so he or she is leaning at an angle. Place one foot forward, keeping the forward knee slightly bent and the back knee straight. Both feet should be flat on the floor and the toes straight ahead for this exercise to be beneficial. Hold this position for 20 seconds, swap feet, and repeat each leg three times. It is extremely important to stretch both legs to maintain a balanced flexibility.

“A proper stretching program, along with a short duration of decreasing the frequency of the inciting activity will usually get an athlete back on the field without further episodes,” Dr. Sasser says.

The good news is that Sever’s disease is temporary and has no long term effects. Most athletes return to play as soon as the symptoms go away. Athletes, parents, and coaches should follow their physician’s and certified athletic trainer’s return to play advice. This will allow the athlete to return to the field of play as safely and quickly as possible, without the risk of re-injury.

Meet Dr. Beau Sasser

Beau Sasser, M.D., is a native of Glynn County and a graduate of Glynn Academy. He received his undergraduate degree from Washington University in St. Louis, Missouri, and his medical doctorate degree from the Medical College of Georgia, where he also completed both his internship and orthopaedic residency.

Following his residency, Dr. Sasser received exclusive sports medicine training while in a fellowship program with the Kansas City Orthopaedic Institute. During his time there, he worked with the NFL’s Kansas City Chiefs, treating a variety of sports and orthopaedic injuries incurred by these elite athletes.

Dr. Sasser returned to Glynn County in 2005 and joined Summit Sports Medicine & Orthopaedic Surgery, where he specializes in sports medicine.

At Southeast Georgia Health System, Dr. Sasser is a key orthopaedic surgeon at the Orthopaedic & Spine Center and serves as medical director of Sports Medicine. Dr. Sasser is board-certified by the American Board of Orthopaedic Surgery.

Summit Sports Medicine & Orthopaedic Surgery is a strategic affiliate of Southeast Georgia Health System and has three convenient locations. For more information, call 912-262-9961 in Brunswick, 912-466-5570 on St. Simons Island, or 912-576-6355 in St. Marys.

Standing calf stretch

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