By: Dr. Alyssa Musgrove

Have you ever experienced pain in the front of your lower leg after vigorous physical activity? If so, you may have experienced shin splints, a common injury that occurs between the knee and ankle.

While not a serious condition, shin splints can be very painful and can reoccur. Shin splints may start out as a muscle ache and then progress into sharp, shooting pains accompanied by swelling. The pain is usually located on the front of the lower leg, along the outside or inside of the shin. The pain begins when you perform weight-bearing physical activity and worsens after exercising is complete. In severe cases, any weight-bearing activity, such as standing or walking, will make the lower leg throb or burn.

The pain associated with shin splints results from an excessive amount of force on the shin bone, muscles and tissues that attach to the surrounding area. The force causes inflammation and swelling of the tissues, which increases the pressure leading to pain.

Common causes of shin splints include:

* beginning a new exercise routine
* running with bad form
* improper alignment of the feet (i.e. fallen arches, overpronation, supination, flat feet)
* not allowing appropriate recovery time
* running on hard surfaces, such as pavement
* running on unstable terrain or uneven surfaces
* activity that involves going uphill or downhill
* wearing new sneakers too long
* wearing worn-out sneakers
* improper warm-up techniques before activity
* lack of flexibility or mobility
* not properly stretching after activity
* sudden change in physical activity
* a previous injury that healed incorrectly
* participating in sports that have fast stops and starts, such as soccer, tennis, basketball, racquetball and dancing

Shin splints can also be caused by repetitive stress placed on connective tissues, as can happen with over-training. If the root cause of your pain is not addressed, the pain can reappear quickly.

There are some steps you can take at home to help ease the discomfort of shin splints. Since the injury is caused by activity, rest is always the most important step. Rest allows the body time to recover and can make a huge difference. Rest does not mean being inactive and idle all day. Rather, just decrease the intensity and duration of your activity to allow your legs time to heal.

Ice or cold compresses placed directly on the problematic area can reduce the swelling and help numb the pain. Apply for 10 to 20 minutes at a time and repeat 3-5 times for the first few days. Elevate the legs for additional healing.

To prevent shin splints – or keep them from reoccurring – follow these steps:

1. Focus on proper tissue recovery after activity. Foam rolling, massage and stretching the calves can all be helpful. To foam roll the calf muscles, place the foam roller on the floor. Place the lower part of your leg on top of the foam roller, and move the leg back and forth and side to side, for 30 to 60 seconds. Repeat 5 to 10 minutes daily.
2. Wear supportive shoes. Some sneakers support your feet and shins more than others.
3. Replace your shoes once they are worn out, typically every 350 to 500 miles.
4. Consider adding arch support. Insoles are a great addition that can properly support your feet. Be sure to talk to a professional who specializes in measuring and assessing feet and arches.
5. Wear compression socks or compression wraps. Both can be helpful in supporting the soft tissue surrounding the shin.
6. Incorporate cross-training. Perform multiple types of exercise each week, rather than continually performing the same activity with the same force. This helps reduce the amount of repetitive stress on your legs, builds strength in other areas and takes pressure off your shins. For example, if you are a runner, try breaking up your weekly activity by adding a day or two of yoga, TRX, biking, swimming or simply walking.
7. Warm up prior to activity and perform proper stretching before, after and in between workouts – especially focusing on the glutes, IT bands and calves.
8. Do not exercise through the pain.
9. Ensure you maintain proper form when exercising.

Some choose to self-diagnose shin splints, but it is always advised to see a doctor or physical therapist. They can take a proper case history, perform a physical exam and take an x-ray in order to prescribe the appropriate treatment and rule out more serious injuries that can mimic shin splints, such as a stress fracture.

*Pathways to Healing specializes in holistic chiropractic care. Dr. Alyssa Musgrove draws on a variety of techniques, including chiropractic, kinesiology, nutrition, food allergy testing and lifestyle counseling to assist clients in achieving optimal health and wellness in one setting. Pathways to Healing is located at 1022 Founders Row, Lake Oconee Village, Greensboro. The office can be reached at 706-454-2040.*