

SHIN SPLINTS

Shin splints or medial tibial stress syndrome is caused by tiny tears of the muscle as it attaches to the bone and can lead to stress fractures if not treated. It can be caused by overuse, changes in training, tight musculature, old shoes and low arches.

Signs and Symptoms

- Pain along the anterior portion of the shin
- Typically pain starts only happening during exercise then progresses to after as well and eventually to pain all the time

Please see a physician or athletic trainer if pain is able to be pin-pointed to one location on the shin!

Recovery

1 Prevention

While total prevention is not possible, you can lower your risk of developing or worsening shin splints.

- Wear supportive shoes and replace them every 300 miles
- If you have low arches, wear orthotic inserts
- Start slowly with activity and increase it approximately 10% week. For both intensity and duration.
- Participate in a good warm up and stretch well afterwards.
- Avoid hard surfaces for running.
- Rest to allow your body to heal from exercise.

2 Rehabilitation

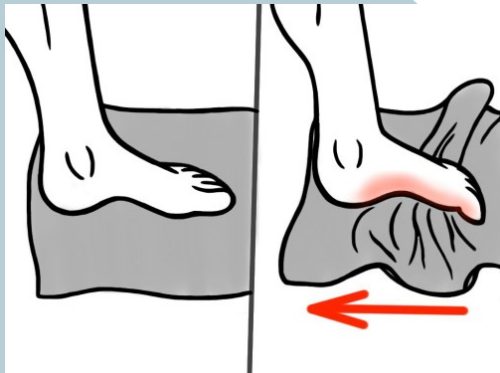
Exercises to aid in healing from shin splints. Reduce activity to allow the area to heal then slowly build back up following the 10% rule.

- **Calf Raises:** Standing on both feet with heels off the edge of a step keep your knees straight as you do a calf raise. The goal is to do 20 in a row. To advance them raise up with two legs, shift your weight to the injured side and slowly lower on that side. To advance them again, perform the calf raise balanced on one leg.



- **Four way ankle:** Using a resistance band pulled in the opposite direction, move your ankle through the full range of motion smoothly and slowly.

- **Towel scrunches:** place a towel on the floor, keeping the heel down use your toes to scrunch the towel and pull it closer to you, once it cannot be brought any closer, unfurl the towel and start again



- **Toe Raises:** Begin with your feet flat on the floor. Lift just your big toe up off the floor while keeping the other four on to ground. Hold for 2 seconds and lower. Repeat the opposite by lifting the four little toes and keeping the big toe on the floor.

3

Soft Tissue Mobilization

Reducing tension in the muscles of the lower leg can help considerably with recovery from shin splints, prevention of shin splints and preventing worsening of shin splints to stress fracture.

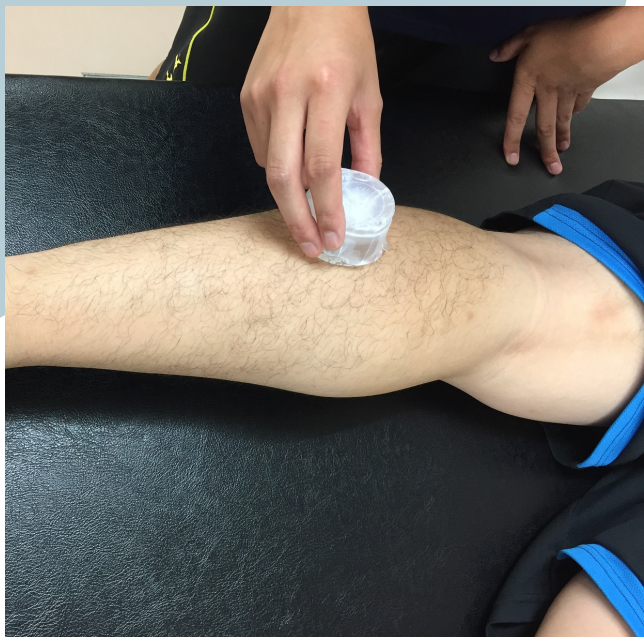
- **Standing stretch:** face a wall and lean into the wall keeping your heel on the ground and knee straight, hold for 30 sec, repeat with knee bent



- **Rolling arches:** Place bouncy ball or tennis ball on the ground and roll your arches on top of it. Some discomfort is alright but it should not be pain, reduce pressure if pain is felt.



- **Shin massage:** Place a tennis ball or bouncy ball on your shins to the inside of your shin bone and use your hand to massage the ball into the tissue. There may be some discomfort but there should not be pain.



- **Ice massage:** Fill a 3-4 oz paper bathroom cup 3/4 of the way up with water and put it in your freezer. Tear away 3/4 of the paper cup (after ice is frozen) leaving the bottom of the cup for you to hold onto, and the ice exposed to rub onto your injury. After exercise, use the ice cup to massage into the area of pain on the medial side of your shin. Ice for 15 minutes.

This is not an exhaustive list of exercises and more should be supplemented in at the discretion of a health care professional. Please seek medical attention if you are experiencing concerning symptoms or delayed healing.