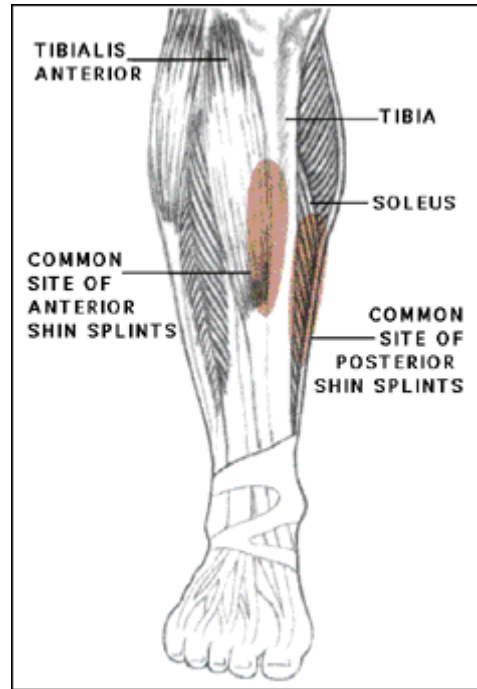


# “Shin Splints”

## Medial Tibial Stress Syndrome

What are Shin Splints?

“Shin Splints” is a term used by most people to describe lower leg pain. Typically the pain is caused an overuse syndrome known as Medial Tibial Stress Syndrome that occurs when the connective tissue of the soleus muscle starts to tear away from its attachment on the tibia bone. This tearing away occurs regularly but when we continue to exercise and the demand on the muscle is too high it cannot repair itself before we demand more. This is what leads to the constant pain we call shin splints.



Who is most likely going to get shin splints?

Girls/Women

People running/exercising on hard surfaces.

People who wear un-supportive shoes.

People who have lower leg muscle imbalances/weakness.

People who have a tight gastrocnemius/soleus complex.

So to prevent Shin Splints you should:

1. Monitor your training surface. If you have to train on a hard surface for your sport, try to cross train on a different surface like grass on alternate days or for warm up drills when you're able.
2. Make sure you are in supportive shoes that fit you. You need to replace your training shoes more often than you think.
3. Being prepared for the competition means preparation and conditioning in many areas as well as specific strengthening in past problem areas.
4. Gastrocnemius Stretch and Soleus Stretch. The first is done with a straight leg, heel on the ground; the second you leave your heel on the ground and just bend your knee. Static stretches like these should be held for at least 20 to 30 seconds.



### Strengthening Exercises:

When you can do these exercises with out shoes on.

Heel Raises, double leg, single leg (gastrocnemius, soleus)

Toe Raises, standing or seated (tibialis anterior)

Seated, Ankle Four Direction with Band or with resistance from teammate

Toe Curls, seated (arch support)

Balance; two leg stand eyes closed, single leg stand eyes open, eyes closed

If you get Shin Splints, what should you do?

1. If you start to have pain, report it to the certified Athletic Trainer at your school if available. They should do a full evaluation to rule out more serious conditions and confirm that it is medial tibial stress syndrome and advise you from that point what to do.
2. Initial treatment should include “active rest”. This usually means that your coach and the Athletic Trainer will adjust your practices based on your symptoms. This might mean that you ride a stationary bike for a few days instead of running on a track.
3. You should also be using ice after exercise. For lower leg pain, like medial tibial stress syndrome an ice whirlpool bath would be ideal. If there is one available in your school athletic training room make arrangements to use it. Another good method is an ice cup massage. You can freeze water in small paper cups, and then use those to massage your legs with a small circular motion along the tibia.
4. There are also taping techniques that may assist you as you transition from active rest to full practice so check with your Athletic Trainer to see if they can assist you in this capacity. If they are unavailable they may suggest an arch insert in your shoe or a lower leg compression sleeve.
5. If rest and ice does not significantly help relieve your pain after a few days then you need to be reevaluated by the Athletic Trainer or seen by an Orthopedic Specialist to consider other conditions. Other lower leg conditions that may have similar symptoms, as “shin splints” would include a stress fracture, and compartment syndrome. These can also be caused by overuse but can be more serious and will have a longer recovery time.

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