

## UW Medicine

SPORTS, SPINE &  
ORTHOPEDIC HEALTH

### Shin Pain in Runners

As runners increase mileage before a marathon, overuse injuries become more commonplace. A frequent complaint in runners is so called shin splints, referring to pain over the tibia (shin bone). Another name for this is medial tibial stress syndrome.

In medial tibial stress syndrome, pain is often hard for the runner to localize. Pain is generally described as a dull ache felt diffusely over the front of the lower leg. Gentle pressure on the tibia or surrounding muscles may cause pain. In the beginning, pain is only when running. As it progresses, pain can become more continuous and last for longer after the run ends. Treatment generally consists of reducing mileage, running on softer surfaces (trail instead of pavement) and replacing old shoes if needed. Ice packs or ice massage over the painful area can be helpful to decrease pain and inflammation. Stretching of the muscles in both the front and back of the calf is also beneficial.

If left untreated, medial tibial stress syndrome can progress to a stress fracture. Stress fractures can also occur without preceding pain in times of very rapid increases in training. Stress fractures occur when the body does not have adequate rest time to repair damage caused by training. The pain of a stress fracture is usually better localized than that of medial tibial stress syndrome, and pressure over the tibia will cause more intense pain in one specific area. Anyone with poor nutrition and especially females with female athlete triad (see other informational handout specifically presenting the female athlete triad for more details) are also at increased risk for a stress fracture. Rest is the key component for allowing stress fractures to heal. Cross training with swimming, deep water running and cycling can allow you to stay in shape while keeping pressure off your leg.

If your pain is not responding to a decrease in mileage, if you have pain with walking or at night, or if you have numbness or tingling, you should see your doctor to determine the best course of treatment. If you have pain with just walking, a short period on crutches may even be needed to allow healing to occur.

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