

**RESOURCE CENTER - Sports Medicine**  
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*As part of our continuing effort to service and educate our membership, each Thursday the U.S. Soccer Communications Center will send out an informative article from one of its departments. Once a week, you will receive an article/paper/essay that will hopefully enhance your enjoyment and knowledge of the game of soccer - on and off the field.*

Today we examine an injury that effects many different athletes, but can be very difficult to diagnose. We hope you find the following information educational, but please use it only as a guideline and be sure to consult a professional if you continue to experience pain in your lower leg.

## **Shin Splints**

As is the case with most contact sports, injuries in soccer can take its toll on a player and a team. Following the 1999 Women's World Cup, the team was beset with a variety of injuries. One of those was a very common injury that hit WWC hero Briana Scurry.

After the Women's World Cup, Scurry began suffering from shin splints. Shin splints are an injury that many youth and amateur athletes know about, and an injury that is not exclusive to soccer. While this injury is fairly common, identifying shin splints is a diagnostic dilemma. Most any athlete who has pain in their lower leg may call the pain "shin splints," but, unfortunately, it's not quite that easy.

Aching pain in the lower leg can happen to beginner athletes who are unaccustomed to exercise on a new surface, as well as to experienced athletes who increase their exercise intensity, change shoes or move to harder surfaces. The pain comes with exercise, especially when running on roads or tracks with tight turns and is usually felt on the medial (middle) aspect of the lower leg and may even linger even after exercise itself.

Shin splints are a common problem in figure skaters and gymnasts, as they don't use training shoes with lots of support and cushioning. If runners are accustomed to training on one training surface and then switch to a new surface, shin pains usually follow.

The actual medical term for shin splints can be 'medial tibial stress syndrome' or 'posterior tibial syndrome.' All of the muscles of your lower leg are attached to the tibia or fibula. The common perception is that the change in exercise habits leads to a tearing of the muscles as they attach to the tibia, however, some tendon involvement may be present as well.

The typical treatment for shin splints is:

- Rest (do something other than running)
- Non-steroidal, anti-inflammatory medications (e.g. ibuprofen)
- Stretching and thorough warm-up before activity
- Ice massage for 15 minutes after exercise
- Stretching exercises to improve flexibility of the calf and heel cord
- Work on strengthening ankle dorsiflexors
- Slow, gradual return to running (progress from water running to Stairmaster to treadmill to over the ground running).
- Also, make sure running shoes are of good quality. If there is access to an athletic trainer, there are some taping techniques that help.

- Over the longer-term, Orthotics may be prescribed

What is presented above is strictly a general guide - don't take these comments and self-treat any pain in the shins. See a sports medicine physician. Why? Unfortunately, there are more serious problems that also cause lower leg pain and are mistakenly called shin splints; specifically stress fractures and compartment syndromes (which require surgery). This is why it can be very dangerous to simply shrugging off lower leg pain as 'shin splints'. So, use this information as a guideline, but also be sure to see a professional if you are experiencing prolonged or consistent pain in your lower leg.

*For more information on injuries and soccer, please contact Hughie O'Malley, U.S. Soccer's Manager of Sports Medicine Administration. Hughie can be reached at [homalley@ussoccer.org](mailto:homalley@ussoccer.org) or at (312) 528 1225.*