

CAUGHT ON THE WRONG FOOT

Even if it hurts, don't scream and shout, instead work out. That's the latest mantra in the fitness world. Says Jayanti Bhatia, a Calcutta based 22-year-old software executive and a fitness freak, "If it's hurting in the shin, chin or spine don't whine, but get rid of it by doing another aggressive session the next day." Jayanti is unaware that misplaced determination could actually cause more harm than good. Especially, if you are a victim of shin splints. Also known as medial tibial stress syndrome, shin splints are an exercise-related pain caused by the overuse of the legs. Such pain can be extreme and could even prevent you from continuing with your workouts. Spanning about three to four inches, the pain might recur if you start exercising before the injury actually heals.

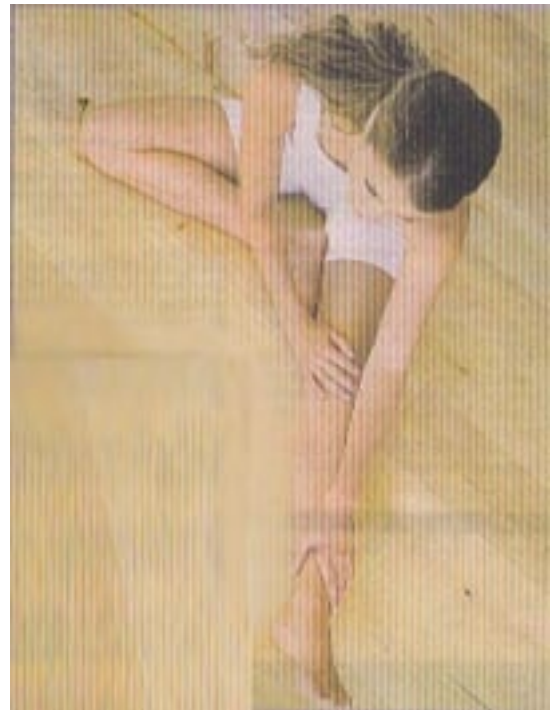
With a steep rise in the number of people hitting gym, the number of people suffering from this condition has gone up; more so because of the rigorous sessions some of them indulge in, without the guidance of a physical trainer. Explains Kiran Sawhney, Delhi-based wellness trainer, "Shin splint is the lay term used to describe symptomatic pain caused by an inflammation of the muscles or tendons in front of the shin. It can be so bad that the muscles can be damaged, tendons torn and even splinters of bone pulled free. It affects your two leg bones: the tibia and the fibula, and develops when the muscles attached to these bones get inflamed, causing intense pain."

Shin splints are also common among aggressive walkers, those involved in high-impact sporting activities and

especially those with flat feet.. Says Dr Samir Gupta, a Calcutta-based orthopedic surgeon. "Usually, flat-footed people are vulnerable to shin splints. This is because there's a pooling of blood in the legs and the venous return through the peripheral veins gets hampered. So the blood tends to move proximally through the venous pathways within the bone. Consequently, the venous pressure in the bone increases, causing severe pain the shin."

Inexperienced runners and aerobic dancers are also vulnerable to such injuries. In case of runners, shin splints result when the anterior leg muscles are stressed. The condition is further aggravated if one runs on a hard surface such as concrete. The harder the surface, the greater the shock wave. That's because the pain in the lower legs is caused by the stress on the bones or on the muscles in that region, notably the tibialis anterior. These muscles are partly responsible for the up-and-down movements of the foot at the ankle joint.

Says Gautam Deb, senior fitness trainer, Adlife Gym & Health Spa in Calcutta. "In aerobic dance, for instance, there is a fair amount of movement at the ankle joints. Such activities involve considerable vertical movements which cause further stress on the muscles." The muscles can absorb only a certain amount of shock and the rest is



transferred to the bones, leading to their stress fracture. So in the initial stages, the 'shins' (actually the muscles) pain and even restrict movements.

There are two different ways of handling a shin splint problem. The first involves total rest and the second is a run-through-it approach. Total rest is often unpopular with amateur athletes for whom regular practice is part of developing and mastering professional running skills. The later the run-through-it approach is worse, because it aggravates the injury. Currently, a multifaceted approach of "relative rest" including elements such as specific workouts that enhance one's cardiovascular fitness and anti-inflammatory medications, among other things is gaining popularity.

Sawhney, however, advises an initial treatment that involves the RICE principle: rest, ice, compression and elevation. "To avoid future shin splints, you must warm up your muscles before and after any physical fitness activity including walking," she emphasizes, adding, "take special care to stretch the calf muscles; wear walking and exercise shoes with a good fit and proper support. You must especially use insoles and other shoe inserts to reduce the stress placed on muscles and tendons on the front and sides of the legs. To strengthen the tibialis anterior muscle, you can perform toe tapping or place a weight on the top of the foot and pull the foot up repeatedly."

So the next time you have a searing pain in your lower leg, you know what to do.