

# Management of Common Running Injuries



By Howard Liss, MD

We know we are supposed to exercise to maintain good health, and many of us try hard to do so. More than 40 million Americans run regularly, perhaps because it is such an easy sport to take up. Running not only results in good health but, unfortunately, often results in injuries. The vast majority of injuries are as a result of repetitive stress rather than a single traumatic event. A large percent of the injuries are attributed to an increase in running speed, duration or to negotiating more challenging terrain too quickly. The overwhelming majority of running injuries can be successfully managed through nonoperative care, which allows the majority of runners to continue to enjoy running.

Runners who are at the highest risk of injury are beginners, those who run more than 40 mile per week, runners with previous injuries, those who suddenly increase speed or distance, and runners with low bone density. As one can imagine, this encompasses a large percentage of the running population.

General recommendations to prevent injuries include starting running at a slow pace and short distance and increasing training slowly. A "runner's high" and enthusiasm can push us to take on too much too fast. It is advisable to rest one to two days per week from running and to exercise in a different manner ("cross training"). It is advisable to perform strengthening exercises two to three days per week to maximize muscular support. Wear supportive shoes that are specifically aligned for your feet, and change your shoes every 350-500 miles. Choose soft and even surfaces to run on when possible. Although there is no evidence that stretching affords prevention, my experience is that runners with prior injuries fare better if they stretch the specific muscles and tendons that have been previously injured.

The following paragraphs describe common running injuries. The most important diagnostic tools are the patient's history and the physical examination. Making a very specific diagnosis is critical to facilitating an effective treatment. For instance, pain in the front of the knee can result from a number of knee joint abnormalities as well as hip joint and upper lumbar spinal pathology. It is through eliciting a detailed history, performing a detailed examination and proper interpretation of the findings that a physician can make a correct and specific diagnosis.

The most important condition to be aware of is a stress fracture, which is a bone fracture as a result of overuse. One must have a high index of suspicion so that imaging, usually an MRI, is done to make the diagnosis. These fractures do not involve any displacement or malalignment initially but can progress to fully displaced fractures if not treated. Treatment usually involves adequate rest and, on rare occasions, surgery. Most patients should have bone density testing if they have sustained a stress fracture to determine whether they have underlying osteoporosis. A careful training regimen must be outlined to allow for a safe return to running.

The running injury that I see most commonly is runner's knee which used to be called chondromalacia patella and is often called patellofemoral syndrome. In this condition, pain emanates from the joint formed by the kneecap (patella) and the lower end of the thigh bone (femur). The patella sits in a groove on the lower femur and is embedded within the quadriceps tendon that connects the large thigh muscle to the front of the upper part of the leg bone (tibia). Pain and possibly inflammation can develop from overuse combined with any cause of abnormal tracking of the patella that shifts it out of its groove. Wide

hips, abnormal angles at the knee, flat feet, tight or weak muscles or ligaments are all potential culprits. Patients complain of pain over the front of the knee particularly with running downhill, walking down steps or sitting with their knees flexed (positive theater sign). The goal of the treating clinician is to discover the source of the abnormal tracking and correct it with manual therapy, stretching, strengthening, orthotics or taping as deemed necessary. Rest, ice and anti-inflammatory creams or pills may have a role in treatment. Rarely is surgery a necessary option.



Achilles tendonitis is a stubborn condition that can end a runner's career. It involves microtears of the structure that attaches the calf to the top of the heel bone (calcaneus). Patients present with tenderness and swelling at the lower portion of the heel cord, which causes pain particularly on push off. The injury occurs in a region of the tendon that has poor blood supply and therefore healing is often slow and incomplete. Treatments include a reduction in running, wearing heel lifts in both shoes, physical therapy with therapeutic ultrasound and stretching, and wearing supportive footwear. Cortisone injections

may result in an achilles tendon rupture and are, therefore, ill-advised. Injection of blood products (platelet rich plasma) may promote healing.

Shin splints (medial tibial stress syndrome) is felt to be a microtear of the origin of the posterior tibialis muscle at the upper and inner tibia (leg bone). This condition usually arises in the setting of overuse. It occurs in runners with inadequate arch support. Pain is felt over the front and inner leg primarily as the foot hits the ground. The treating physician must be certain that the patient does not have a stress fracture. Shin splints can also be confused with a compartment syndrome, a condition in which there is an elevation of pressure within one of the linings that house the leg muscles. Treatments include a reduction in physical stress through modifying the running regimen and assuring that there is adequate arch support. Physical therapy has a role, as do injections on occasion.

There are numerous other specific running injuries, most of which involve muscle or tendon strains. The principles of diagnosis and treatment as described in the prior conditions apply to all running injuries.

Howard Liss, of the Howard Liss, M.D. Rehabilitation Institute, is an assistant clinical professor of Rehabilitation Medicine at Columbia University. He has offices at the following locations: 177 North Dean, Suite 203, Englewood, NJ 07631, 201 390 9200; 2150 Center Avenue, Suite 1B, Ft. Lee, NJ 07024, 201 820 7610; 3333 Henry Hudson Pkwy, Suite 1L, Riverdale, NY 10463, 718 873 6362. He can be reached at [www.lissrehab.com](http://www.lissrehab.com). Call today to schedule an appointment with Dr. Liss.



June Mandeville - Kamins,  
M.S.W., L.C.S.W.  
PSYCHOTHERAPIST

- Cognitive Behavioral Therapy
- DBT Skills
- Transformational chair work
- Hypnotherapy

ADULTS, ADOLESCENTS, CHILDREN

BY APPOINTMENT

201-552-1765

[junemkcounseling.com](http://junemkcounseling.com)

[JMKCounselingllc@gmail.com](mailto:JMKCounselingllc@gmail.com)

175 Cedar Lane, Suite 6  
Teaneck, NJ, 07666



DR. SAUL H. LEJTMAN  
FAMILY AND COSMETIC DENTISTRY

120 County Road Suite 203  
Tenafly, NJ 07670  
[Lejtmanoffice@gmail.com](mailto:Lejtmanoffice@gmail.com)  
[www.TenaflySmiles.com](http://www.TenaflySmiles.com)

- ☒ Implants
- ☒ Veneers
- ☒ Crowns
- ☒ Hours by Appointment Only

201-568-1190

Let us give you a perfect smile

TREATING YOUR FAMILY IN  
A WARM STATE-OF-THE-ART  
COMFORTABLE ENVIRONMENT

WELCOMING NEW PATIENTS

WE NOW PROUDLY USE  
"BETTER THAN ORGANIC" | RAISED ON PASTURE IN THE USA  
NO HORMONES - NO ANTIBIOTICS



1415 PALISADE AVE, TEANECK, NJ, 07666 • 201-530-7733  
[WWW.TEANECKDOGHOUSE.COM](http://WWW.TEANECKDOGHOUSE.COM) • [f](https://www.facebook.com/teaneckdoghouse) [i](https://www.instagram.com/teaneckdoghouse) [y](https://www.youtube.com/teaneckdoghouse) [t](https://www.tiktok.com/teaneckdoghouse) @TEANECKDOGHOUSE

סופר סת"ם  
רפאל הירש

Schedule your  
Mezuzah House call now

REPHAEL 3-33 31st Street  
HIRSCH Fairlawn, NJ 07410  
Sofer STaM Tel. 530-SOFERBC  
530.763.3722  
[soferoffbergencounty@gmail.com](mailto:soferoffbergencounty@gmail.com)

- Mezuzah House Calls
- Sifrei Torah
- Tefillin and Retzuot
- Megillot
- Sales and Service