When Pain Means No Gain

Common injuries for cross country runners

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Training works by tearing down the body so it can rebuild better. In other words, training can cause pain. But some pain isn't normal. Sorting out what's normal soreness and what's an impending injury can be difficult. When do a cross country runner's aches and pains merit seeing a sports medicine physician?

Talking to your coach is essential. While no one wants to be a complainer, the coach must know how you are responding to the training load, and your times provide only part of the picture. As long as you don't start every conversation with, "Coach, I think I need to take today off," he or she won't think you're slacking if you point out that your hip has been hurting for a couple days or you're feeling really sluggish. Tell your coach what's happening, let the coach decide how to respond, then accept it and give your all. With good feedback, the coach can better optimize your training, and can help you decide if you need to rest or if you need to go to a doctor.

Here are some common problem areas for cross country runners.

TENDER MEAT

Muscle soreness is common for cross country runners, especially early in the season, especially for new runners. Mild muscle tightness following a hard run is normal. Runners may experience some residual discomfort during warmup the following day, but this should decrease during an easy run.

What to do: Soaking in cold water following the workout can diminish this discomfort. Soreness should resolve during the season, though a post-workout cold soak is worth continuing.

SHIN SPLINTS

Pain in the lower leg, often called "shin splints," is a common problem in young runners. This pain is due to mild tearing of the muscles at the bony attachments. Runners usually feel the pain along the inside aspect of the tibia (large shin bone), usually along a large portion of the bone. Pain develops while running and stops when the running stops. Overpronation (foot rolling in too much) and running on hard surfaces, such as concrete, increase the risk of developing this problem.

What to do: Many runners will find relief by applying ice following workouts and working on stretching and strengthening the muscles of the lower leg, but some will have persistent pain. Adding arch supports to running shoes and running on softer surfaces can sometimes help. Strengthen your leg muscles by placing an ankle weight on your foot and pointing the foot up, in and out; do three sets of 10 reps in each direction. You can continue running as long as the pain doesn't increase.

STRESS FRACTURE

If the pain persists or increases with continued training, there's concern for a stress fracture -- a microscopic fracture due to repetitive stress on the bone. Bone responds to stress by resorbing and rebuilding bone. When the stress is too great, the resorption overrides the rebuilding and, over time, a stress fracture develops.

The symptoms initially present like shin splints, but over time, the pain increases and may be present while walking and even at rest. Stress fractures in runners are most common in the tibia. Other bones that may be injured include the metatarsals of the foot, the fibula and, less commonly, the femur (thigh), heel and other foot bones.

It can be difficult to differentiate between shin splints or tendinitis and a possible stress fracture. A screening test that I've found helpful is to have the athlete stand on the affected leg and hop. If you're unable to hop or experience significant pain with hopping, the concern for a stress fracture increases significantly.

What to do: If you have a stress fracture, continuing to run may result in an outright break in the bone. A stress fracture of the hip can have serious consequences, and running needs to be stopped. Medical evaluation should be sought promptly.

RUNNER'S KNEE

Young runners commonly complain of knee pain. Pain in the front of the knee, often called "runner's knee," is typically due to irritation of the kneecap (patella). Runners feel pain with all activities that involve bending of the knee. Risk factors for this problem

include tight hamstrings, poor strength of the inner quadriceps, knock knees and overpronation.

What to do: Treatment includes icing following activities and doing exercises that strengthen the inner quadriceps and improve hamstring flexibility. Avoiding aggravating activities, such as squatting, helps speed the recovery.

Pain along the outside of the knee is also common. This is usually caused by inflammation of the iliotibial band. Sudden increases in mileage, running on a banked surface (side of many roads), bowed legs, and hip weakness all contribute to developing this problem.

What to do: Working on strength and flexibility of the core and hips is a major component in the treating iliotibial band syndrome. Ice massage and using a foam roller are helpful. Avoid running on banked surfaces whenever possible. For more on iliotibial band syndrome, click here.

HIP POINTERS

Young runners often develop hip pain. The growth plate along the top of the pelvis (iliac apophysis) doesn't fuse in boys until 15-16 years of age and in girls until 13-15 years. Some of the trunk muscles attach to the pelvis, as do many of the hip and leg muscles. The repetitive pulling of the muscles attached to the growth plate can cause a painful inflammation known as apophysitis. An explosive muscle contraction, such as during sprinting, can sometimes pull the growth plate away from the rest of the pelvic bone (avulsion fracture). Apophysitis can be painful enough to stop running for a brief period; an avulsion fracture often requires the use of crutches for a week or two.

What to do: Ice the affected area and stretch and strengthen the core and hip muscles.

RULES FOR BACKING OFF

Other than some stress fractures, none of the above present serious medical complications. Ice painful sites following workouts; a cold bath can prevent a lot of post workout soreness.

If pain develops at the end of the workout but resolves by the next day, cut mileage by 25 percent. Do some non-impact cross-training to supplement aerobic conditioning. Work on improving flexibility and strength of the affected site.

If pain develops during the run, decrease mileage by 50 percent. If pain is persistent, impact activities should be stopped for at least a few days.

Have a knowledgeable person assess your running shoes and gait. Review your training over time for sudden increases in intensity. If you have reduced training, are icing regularly and doing rehabilitative exercises, and the pain doesn't at least improve, if not resolve, seek medical evaluation.

Rest and Recovery Expectations

As athletes, rest and recovery are extremely important to performing at a high level and preventing injuries. High school students are involved and often spread thin; however, it's important to understand that your body needs appropriate amounts of sleep. According to research, adolescent bodies need eight to 10 hours of sleep even when inactive. Obtaining this much sleep isn't always possible, but is nonetheless worth trying to do. As meet days near, getting a good night's sleep is especially important for the two nights preceding the race. The remainder of the week, aim to get at least seven to eight hours of sleep. This is especially important for varsity athletes. Make this a priority in your life.

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