[MEDICALLY SPEAKING]

No Rest for the Injured

BY JORDAN D. METZL, M.D.

IN THE BEGINNING days of sports medicine, the advice was simple. Your shins hurt from running, your knees hurts from biking or your shoulders hurt from swimming? Just stop doing those things.

But does that logic work with athletes? Is it good medicine?

The answer to these questions is no! Complete rest is almost always terrible advice—all of the cardiovascular conditioning that goes into training is lost if you don't keep moving. Patients get unhealthy and depressed—and they end up not liking their doctor very much. And as patients have gotten smarter they often press their doctor to find an active solution, or they find another doctor who will.

Which brings us to biomechanics. Much like the mechanics of what makes a plane fly or a car drive, the mechanics of the body are related to the task that the body is being asked to do. Advances in the concepts and practices of biomechanics have greatly shifted the field of sports medicine in the past 10 to 15 years. In addition to trying to keep patients moving, figuring out why the injury happened, and more importantly, how to prevent it from happening again, is now the key to the practice of sports medicine.



Here's how addressing biomechanics helped some of my patients fix their problems.

THE PROBLEM: Jason had bad shin pain due to a pronating foot that rolled inward and loaded excessive force on the tibia, overstriding and weak hips that created an unstable pelvis and trunk.

THEFIX: Over-the-counter orthotics to stabilize his foot, a switch to a higher cadence and shorter stride to reduce loading force, and some squats to build glute strength.

THE PROBLEM: Lindsay had patellofemoral knee pain from cycling.

THEFIX: Raising her seat height. By having her saddle too low during riding, she was loading too much pressure on the front of her knees.

THE PROBLEM: Bob had aching shoulders while swimming due to a strength imbal-

ance, a common swimmer's problem. He had plenty of anterior (front of the shoulder) strength, but he had neglected his posterior shoulder muscles.

THEFIX: Build posterior shoulder strength with exercises such as seated rows or rows in a plank with weights. When the pectoralis muscles are stronger than the scapular muscles, the shoulder gets pulled forward. Over time, this can cause what is known as an "impingement," a pinching shoulder.

Rest will make the pain go away, but thinking about the biomechanical problems, and how to fix them, is the key to miles of injury-free training and racing. ①

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