

# The ITB Conundrum

By Jordan D. Metzl, M.D.

The scenario goes something like this: A triathlete comes walking into the office with a confused look on his face.

“Doc, here’s the deal,” he says. “My knee is fine when I walk into your office, it’s fine when I’m walking around town, but after 10 minutes of running, it’s killing me!”

“Where does it hurt?” I ask. “It’s here, just on the outside of my knee, where the bone bumps out just above my knee,” he says. “After I’ve run for 10 minutes, it starts to feel as though someone is jabbing the outside of my knee with a needle.” Hearing this much of the story, even before the physical exam or X-rays, I am almost always ready to make the diagnosis. It’s the dreaded iliotibial band



impingement syndrome, otherwise known as a painful ITB. Upon learning the diagnosis, the patient often responds, “I hate this stupid ITB.”

As my mom taught me, it’s never good to hate. Rather, a better course is to understand and fix the problem. The iliotibial band (ITB) is a thick tendon that connects the tensor fascia lata muscle—which starts on the outside of the hip—to the outside part of the tibia, the major bone in the lower leg. The ITB crosses two joints, the hip and the knee, and helps control the angle of the lower leg with running. It can also cause a pain in the hip called trochanteric bursitis, a pinching on the outside of the hip joint. In the knee, a tight ITB causes a similar pinching.

So what actually causes the pain in ITB impingement syndrome? There is a little fluid-filled sack called a bursa that sits between the tendon and the outside of the femur bone, the area called the lateral femoral condyle in the knee and the greater trochanter in the hip. When the ITB is tight, it creates tension on the outside of the hip and knee, much like

a string on a violin that is strung too tight. The result is that the ITB pinches along the outside of these two sites and the bursae beneath these spots begin to swell. Over time, the bursa becomes enlarged, big enough to cause pinching every time a runner begins to run. Over time, this pain can become unbearable.

To diagnose ITB impingement syndrome, the physician will push on the area of tenderness, sometimes take an X-ray to make sure there is healthy bone beneath, and also bend the hip and knee. Sometimes the diagnosis is tricky, because the lateral meniscus, the cartilage inside the knee, sits just beneath the ITB and a tear can sometimes mimic ITB pain. The difference, however, is that cartilage damage tends to hurt both with walking and with running, while ITB pain generally only occurs with running. The same is true of arthritis in the hip or knee, which hurt both with running and with walking.

If the problem is that the ITB is tight, the obvious solution is to stretch it. There are many stretches for the ITB, none of which is

terrific. This is a tough area to stretch, principally because it covers so much distance. To stretch the TFL, the muscular top part of the ITB that is just outside of the hip, try a “figure four” stretch: Lay on your back, cross one leg over the other in a figure four position where one leg is bent and crossed over the other straight leg. By pulling the leg towards the chest, the outside of the hip is stretched.

The best tool for ITB stretching is the foam roller. Therapeutic foam rollers are available at some physical therapy offices and through Web sites such as Body Trends ([www.bodytrends.com](http://www.bodytrends.com)). The 6-by-36-inch roller works the best. By laying on the foam roller and dragging yourself across it from hip to knee, the ITB is gradually released. It’s important to know that this hurts like the dickens for the first couple of weeks, but gradually gets better.

As is the case with all lower body injuries, foot mechanics often play a role, so choosing the appropriate running shoe, sometimes with an orthotic, can help tremendously. A sports

medicine doc, in combination with a good sports medicine physical therapist, should be able to help with these issues. Having a proper bike fitting can also help triathletes who are suffering ITB impingement when riding.

And if this doesn’t work, an injection of a corticosteroid—not an anabolic steroid like the baseball players use, but an anti-swelling steroid—into the bursa often helps. We use this in the office when the first steps don’t work, or sometimes when the patient has a race coming up and a quick fix is needed.

So please don’t hate your ITB. As is the case with most injuries, getting it checked out early makes it easier to treat. By addressing the cause of the problem—be it foot mechanics, tightness or the mechanics of running—these injuries can usually be corrected early on. s

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