



IT band syndrome in distance runners

Author: Corey R. Duvall, DC

Lateral knee pain in a distance runner is a common presentation. A few miles into your run you start to feel it, that pinching sensation on the outside of your knee that feels like a clothes pin is tightening with each step. It is often accompanied with a tight feeling in the outside of your hip. A possible diagnosis: IT (ilio-tibial) band syndrome, the tissues on the outside of your thigh tighten and lead to pain.

Often, professional advice consists of rest, ice, heat, stretching, or strengthening. You try rest but it always comes back. You try stretching but it always comes back. You try strengthening but it always comes back... is your running career over? This advice is not incorrect but is often applied in the wrong order or to the wrong tissues. To understand how care at The Stay Active Clinic is different you must understand what predisposes one to this problem, how it becomes chronic, and how our care is direct and specific.

The human body achieves a movement in multiple ways. The optimal and efficient way is based soundly on bone structure, muscle fiber orientation, and firing patterns rooted in our brain and spinal cord. To achieve this, all muscles must work together with exactly balanced tension. It helps to think of them as springs. A tight spring offers more tension than a loose spring. If some springs are tighter than others it is referred to as a restriction, as that spring does not move as easily. The loose spring is then called the compensation because it moves further as a result of the tighter spring. This changes how the body moves. There is no problem with temporary changes but **long term altered movement transfers load to tissue not meant to handle them** and leads to pain.

Three scenarios can create tighter springs, though there is often an accumulation of multiple reasons before a problem is noticed. The three scenarios are:

- Repetitive movements like throwing a ball or running long distances
- Sustained postures like sitting at a desk or standing at a counter
- Acute injury like tearing a muscle or spraining an ankle.

IT band syndrome is the diagnosis because of the pain location but the dysfunction is excessive medial rotation of the thigh bone. A muscle attached to the IT band called tensor fascia lata, Latin for tightens the lateral tissue, medially rotates the thigh, i.e. turns the knee inward. When this becomes a tighter spring changes occur up the torso and down the leg. The body is an interconnected network and nothing changes in isolation. If the thigh medially rotates, all the muscles that create medial rotation of the thigh, in the hip, knee, lower leg, and foot become tighter springs. The muscles that create lateral rotation of the opposite leg will tighten as well. **If you fail to recognize/treat dysfunctional areas other than the area of pain the problem could return.** This could be a daunting task.

How does one identify all of the structures that are affected? At The Stay Active Clinic, watching you move, identifying the abnormal patterns, and treating the structures that cause altered movement is like a clinical dance. We use a **real-time analysis to see our treatment immediately create the effect we want**: more balanced and efficient movement. When movement is balanced and efficient the aches and pains disappear. This way we do not spend

weeks to see if we are on the right path, we immediately know if your condition is improving or worsening. We follow this with closely monitored rehabilitative activity to strengthen only the correct movement and not the compensation. This method ensures you correct all the dysfunction and increase your odds for a quick and lasting recovery.

Dr. Corey R. Duvall is co-owner of The Stay Active Clinic. He is a Chiropractic physician and Crossfit certified strength and conditioning coach. The Stay Active Clinic follows a rational and evidence-based approach to provide the best musculoskeletal care, whether you are a weekend warrior or an elite athlete. Contact him at www.StayActiveClinic.com or StayActiveChiro@gmail.com.