

When to Worry about Back Pain

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Dave, a triathlete, walks into the office saying, "Doc, here's the deal. I have been out riding this spring and my training was going well. In the past few weeks, however, my back has been killing me. I'm really having trouble doing anything; the past couple of weeks have been terrible. You really need to fix me!" he implores.

Wow, I really need to help this guy, I think. But before I can do that I need a little more information. "How did it start?" I ask. "And can you describe the pain in more detail?"

He tells me, "Doc, the pain came on all of a sudden. One day I was training, no problem. The next day, I had this terrible pain in my back. In the past few days, it has also started to shoot down my leg. Did I slip a disc?"

Back pain is a very common complaint in

the office. There are three main categories of back pain that befall the triathlete and runner: muscular, bone-related and discogenic back pain.

Muscular back pain is the most common type of back pain, and involves the acute onset of pain along the sides of the spine. The paraspinal muscles, also known as the erector spinae muscle group, are strong muscles on either side of the spine that are responsible for moving, twisting and bending the spine. These muscles run from the back of the hip, along the spine, all the way to the bottom of the skull, and are among the strongest muscles in the body.

So what happens with muscular back pain? In general, the muscles are either too tight, not strong enough, or both. Muscular back pain is characterized by an almost immediate onset, often when the athlete twists suddenly and feels a tear along the side of the spine. Acute muscular back pain is quite severe; often



its sufferers are those people you see walking around bent over, resembling a human comma.

The good news about muscular back pain is that it is almost always quickly reversible, and if someone has had it once, good prevention can keep it from coming back. Treating muscular back pain initially involves ice to control the muscle pain, as well as the

use of an anti-inflammatory medicine and a quick visit to a good massage or physical therapist to try and stop the spasm in the muscles. Some patients swear by acupuncture, which can also be helpful in the setting of an acute muscle spasm.

Once the initial pain has been reduced, the real work begins: fixing the cause of the muscle pain. This can include low back and hamstring stretching and core muscle strengthening. The most effective core strength program is through the Pilates method, a system of exercises that emphasize core muscle

strength. It's best to pursue your Pilates program under the guidance of an instructor, as proper technique is important, but some of the videos that present Pilates workouts are helpful as well.

Poor bike setup is also a common cause of muscular back pain. When triathletes don't fit properly on their bikes, they may find themselves in a position that puts excessive stress on the low back. If muscular back pain is the diagnosis, a bike fit can sometimes fix the problem.

What about bone-related back pain? Not nearly as common as muscular back pain, this type of back pain results from a problem inside the bone structure of the spine called the vertebrae. Most commonly the problem is arthritis in the spine. It is characterized by a gradual onset beginning with a dull ache, which becomes progressively worse over many months.

Other forms of bone-related back pain include a stress fracture called spondylolysis, as well as a slip in the spine called a spondylololthesis. With all causes of bone-related back pain, an X-ray and proper diagnosis is the first step towards understanding and fixing the problem. As is the case with muscular back

pain, good core muscle support can fix most of the symptoms of bone-related back pain.

Discogenic back pain, otherwise known as a slipped disc, is the third cause of back pain. The intervertebral discs, made of cartilage, are built like marshmallows that sit between the vertebrae. When a patient "slips" a disc, it means that part of the lining of the disc is torn, and the disc material inside bulges out, pinching the nerves from the spinal cord that sit just behind. Different than muscular back pain, which hurts on the side, and bone-related back pain, which hurts in the middle, discogenic back most often shoots pain down the leg, since it is pinching on the nerve.

Discogenic back pain often takes several weeks to cure, and usually involves medication, an MRI to evaluate the size of the disc herniation and sometimes an injection of cortisone. Surgery is rarely necessary. Physical therapy is a must for patients with discogenic back pain, both to reduce the acute muscular pain that often accompanies this problem and also to try and provide more muscular stability in the spine.

Of note there are many more people walking around with asymptomatic bulging and herniated discs than there are people who

have symptoms from them. A study of 100 people without back pain in their 40s and 50s found that roughly 30 percent had evidence of disc herniation on MRI. The key to recognizing a symptomatic disc, therefore, is usually the presence of nerve symptoms including pain shooting down the leg.

So what about Dave? He had a small lumbar disc herniation, which, I learned, had given him trouble a couple of times previously. He was started on an anti-inflammatory medicine, sent to physical therapy and an MRI was obtained, which showed a small disc herniation in his lumbar spine. He kept his fitness through swimming and weightlifting and he strengthened his muscles with Pilates and physical therapy. After one month he was 75-percent recovered, and by six weeks he was moving full speed ahead. If he continues to do his preventive strengthening and stretching exercises, chances are I'll only see him on the road, not in my office. S

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