



# The Strange Case of Chronic Back Pain

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Nobody likes pain or illness. Throughout history people have gone to great lengths to avoid them—by performing rituals, gathering medicinal plants, praying to gods, or more recently developing modern hygiene and medicine. Despite our best efforts, we're still visited regularly by both.

Some pain and illness is unavoidable, and some can be prevented with thought and care. A remarkable amount of pain and illness, however, is actually caused by our attempts to get rid of it. Like the psychological difficulties we've been discussing, a lot of physical disorders result unwittingly from our efforts to avoid unpleasant experience—in essence, from swatting at mosquitoes. Stress—our reaction to things we don't like—is at the heart of all of these problems.

The range of medical conditions that are either caused or exacerbated by stress is remarkable. Depending on the criteria used, some 60–90% of all physician visits are for stress-related disorders. Take a moment to see how many of these have afflicted you at one time or another...

While each of these conditions can have many causes, they all can result from or be exacerbated by psychological processes. Foremost among those processes is our tendency to reject unpleasant experiences. Because this propensity is often central to the ailments listed above, mindfulness can help resolve them.

## The strange case of chronic back pain

Chronic back pain offers a good example of how this works. I got involved in treating this condition through a personal encounter that shed light on both what causes the problem and how mindfulness practice can help resolve it. As we'll see, it turns out that the principles involved in understanding and treating chronic back pain can also help us deal with a wide range of other pain problems and stress-related medical disorders.

In the late 1980s I spent four miserable months flat on my back with a herniated disk. After working out on a cross-country ski machine, I developed

pain and numbness running down my left leg. When it got worse, I sought medical advice and eventually found myself in an orthopedist's office. He did a CT scan, diagnosed the problem as a herniated L5-S1 disk, and recommended bed rest.

Since I was on the faculty of a medical school, I had access to orthopedic texts. I kept these on my nightstand next to my radiology report.

I read repeatedly that the disk might heal with rest—but if it didn't I'd need surgery, which was often unsuccessful. As the days went on, I saw no improvement.

Desperate for a more active approach, I saw a sports medicine specialist. He took a look at my CT scan and told me that if I didn't stay off my feet and avoid sitting, I'd be "begging for surgery" in six months. Not what I wanted to hear.

I was getting so depressed and anxious that I felt I couldn't stay in bed any longer. So I decided to build a platform in my office. Thus began a bizarre parody of the classical psychoanalytic scene—I'd be lying down on a makeshift couch as my patients sat up and wondered about my pathology and prognosis. Driving to work, I'd lean my car seat as far back as I could, barely seeing over the steering wheel, trying to take weight off my spine. It's a miracle that I didn't kill myself or someone else.

After a couple of months my wife, who is also a clinical psychologist, made an observation: "You know, sweetheart, you seem to complain more about the pain whenever we have an argument." You can imagine how much I appreciated her insight. Now not only did I have to suffer with this horrible pain, but I had to endure her psychological theories. I knew better. My pain was due to the disk—after all, I reread my radiology report nightly.

Still trying to be helpful, my wife brought home Norman Cousins's book *Anatomy of an Illness*. Cousins was a famous journalist who had cured himself of degenerative arthritis by taking high doses of vitamin C, watching Marx brothers films, and laughing. It was a very inspirational story but

didn't seem relevant. "That's very nice for Norman," I told my wife, "but I have a herniated disk!"

Around the same time, a friend had been urging me to speak with a mutual professional acquaintance. She had supposedly cured her back problem by treating it as a muscle tension disorder—a reaction to stress. "Here we go again," I thought. "This is my punishment for hanging out with psychotherapists."

Partly out of desperation, partly to get everyone to stop bugging me, I called her.

"What are you doing right now?" she asked. "Lying down—that's all I ever do."

"Why don't you go out and buy groceries for the family—your wife will appreciate it."

"Great, a feminist conspiracy," I thought. She went on to describe how she had recovered fully from chronic back pain by getting physically active and treating the pain as a muscle tension syndrome rather than an orthopedic problem.

I wasn't about to get groceries, but I was so desperate, I thought I'd try an experiment. At that point, I couldn't walk for more than a block before the pain became intense. So I set out to challenge myself. I walked a block. Right on cue, I felt pain down my left leg. Determined to persevere, I walked another two blocks. To my utter surprise, now not only did I have pain going down my left leg, but I felt it in my right leg also. "That was a brilliant idea," I thought.

Hobbling home, I realized that it actually may have been a good idea after all. According to my radiology report, I should only have pain running down my left leg. If I felt it on the right too, either I'd shattered my spine completely (a hypothesis I entertained), or the pain might be due to something else. Maybe muscle tension was at least part of the problem.

I was desperate to get better. I started reading everything I could about stress, muscle tension, and chronic back pain and began moving more even though it hurt. Within a couple of weeks I had removed the platform from my office and was driving more or less normally. Soon I was exercising and doing yoga again. I felt like I had awakened from a very bad dream.

I was so impressed by this experience that I set about to learn what I could about mind-body interactions and the potential of using psychological

interventions to help with medical problems. I soon realized that mindfulness practice could be enormously useful in these efforts and began collaborating with area physicians and incorporating it into my work. What I learned studying and treating back pain held the key to using mindfulness practice to work effectively with a surprisingly wide range of stress-related disorders.

## **Bad Back?**

It turns out that the vast majority of chronic back pain is, as in my case, caused by muscle tension, and this tension is maintained by psychological stress. It's necessary to understand this in order to get better. If we believe instead that our pain is due to a damaged disk or other spinal structure, it will be very difficult for us to relax about it and move normally.

While there isn't room here for all the details, let me mention a few of the most compelling pieces of evidence supporting this idea. First, it turns out that the condition of the spine usually has little bearing on whether or not a person is in pain:

- Approximately two-thirds of people who have never suffered serious back pain have the same sorts of "abnormal" back structures, like herniated disks, that are often blamed for chronic back pain.
- Millions of people who suffer chronic back pain show no "abnormalities" in their backs whatsoever, even after extensive testing.
- Many people continue to have pain after "successful" surgical repair. There is little relation between the mechanical success of repairs and whether the patient is still in pain.

Other studies give us clues to the role of psychological stress and muscle tension:

- The worldwide epidemic of chronic back pain is limited mostly to industrialized nations. Remarkably, there is little chronic back pain in developing countries, where people do "backbreaking" labor, use primitive furniture and tools, don't sleep on top-of-the-line Posturepedic mattresses, and drive long distances over rutted roads sitting in the backs of old pickup trucks.
- Psychological stress, and particularly job dissatisfaction, predicts who will develop

disabling back pain more reliably than do physical measures or the physical demands of one's job.

- Rapidly returning to full, vigorous, physical activity is usually both safe and the most effective way to resolve back pain episodes.

None of this would make sense if most back pain were caused by herniated disks and other structural problems, but it all makes a lot of sense if back pain is caused by stress and muscle tension..

### The Chronic Back Pain Cycle

Emotional stress turns into back pain through a process that my colleagues and I call the chronic back pain cycle. It can begin with either an emotional or a physical event. Imagine, for example, that you do some unusually heavy lifting, perhaps putting in an air conditioner in the early summer or shoveling snow at the start of winter. You strain your back, and it begins to hurt. If you happen to live in an industrialized culture with an epidemic of back problems, you might begin to have some worried thoughts: "I hope I didn't injure my back like my cousin did." "I hope I'll be able to go to work tomorrow." If the pain is intense or persistent, these thoughts will begin to make you anxious.

Try a little experiment right now (this will require a bit of dramatic acting—don't be shy). In pantomime, demonstrate with your face and body what fear looks like. Really ham it up. (Don't worry; nobody is watching.) Hold the pose for a few seconds. What do you feel in your body? Which muscles become tense?

You can see here for yourself that fear produces muscle tension. And you know from other experience that muscle tension increases pain. Just think about how much neck muscles can hurt after a stressful day or how painful a charley horse in the calf can be.

So this is how the chronic back pain cycle works. Our initial pain causes worried thoughts, these thoughts create anxiety, and this anxiety causes muscles to tighten. Tight muscles cause increased pain, and increased pain triggers even more dire worried thoughts. Once the cycle sets in,

other emotions, such as frustration and anger, get into the act.

Take a moment to do a little more dramatic acting. In pantomime, show first frustration and then anger with your face and body. Really ham it up again. (Nobody is watching now either.) Hold each pose for a few seconds. Notice how these secondary emotions produce even more muscle tension?

### The Back Sense program

My colleagues and I developed Back Sense, a step-by-step treatment program incorporating mindfulness meditation that helps people interrupt this cycle. The program has three basic elements, all of which work best in tandem with mindfulness practice: (1) understand the problem, (2) resume full physical activity, and (3) work with negative emotions. [For more about this, see [Back Sense: A Revolutionary Approach to Halting the Cycle of Chronic Back Pain](#)]

***NOTE:** Before beginning the program, it is important to have a thorough physical examination to rule out rare but potentially serious medical causes for pain and to receive a doctor's permission to resume normal activities. Without such permission, it will be very difficult to overcome your fears. Physiatrists (rehabilitation physicians) are good sources for such evaluations, as they are most likely to encourage your return to full movement. The good news is that these rare medical disorders, which include tumors, infections, injuries, and unusual structural abnormalities, are the cause of only about one in 200 cases of chronic back pain.*

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