

Pain: It's Not All the Same

Chapter

2

In This Chapter

- The biology of pain
- Map your pain and make it relevant to health-care providers
- The role of stress and psychological issues

In his famed novel *Anna Karenina*, Leo Tolstoy wrote, “Happy families are all alike; every unhappy family is unhappy in its own way.” So it is with backs and back pain. When there’s no pain, we’re all alike in not thinking about our spines. But when we hurt, the pain is very personal and very unique.

Obviously, pain is a signal that something is wrong. But what? The causes of back pain are many and it can be quite complicated, time consuming, and difficult to diagnose. That can lead to frustration, which can certainly exacerbate your pain.

Stress. Frustration. Pain. Lack of sleep. Depression. It becomes a vicious, downward spiral. Sometimes we don’t know which is worse or which came first: the pain or the frustration. The main objective, however, is to get rid of your pain. The more quickly we reduce pain, the more efficiently our bodies can heal.

Understanding more about pain in general and mapping yours specifically puts you years ahead on the path toward healing. It guides you toward choices that are more relevant to your pain and your unique needs.

Sudden vs. Long-Lasting Pain

Back pain can come on suddenly or slowly increase in intensity over a period of hours or days. What distinguishes chronic (long-lasting) from acute (sudden, short-term) pain is duration. The intensity may be the same but acute pain will subside in time. It may take a few days or as much as a few weeks, but acute pain eventually leaves your body. Chronic pain stays.

The longer pain stays, the more damage it can do to the quality of your life and your nervous system. The experience of intense and chronic pain can make your nervous system hypersensitive, so that even small bumps, bruises, and stressors can create disproportionately troublesome pain. That's why it's especially important to nip pain in the bud.

Your attitude about your pain is an important part of the healing process. Some people let pain brew in their minds. They fixate on it; it becomes their world. They feel defeated and become depressed. When your body is spending precious resources on pain, it has less to give toward healing. Don't grin and bear it. Instead, work to reduce pain and you'll speed healing.



THE BACK AND BEYOND

According to the National Centers for Health Statistics, pain affects more than 76 million Americans. It affects more people than diabetes, heart disease, and cancer combined. Lower back pain tops the list of most common pain, followed by migraine headaches, neck pain, and facial pain.

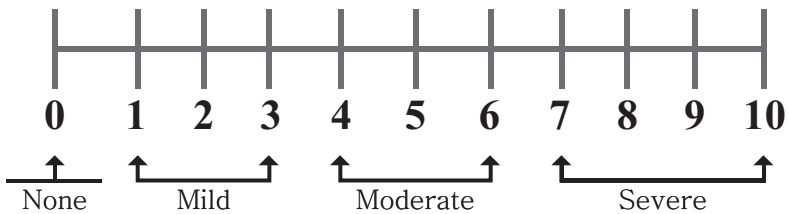
Where It Hurts and What It Feels Like

It hurts to sit. It hurts to stand. It hurts to walk. You can't bend over to tie your shoe or turn around without pain. And sleep? You haven't had a good night's sleep since you can't remember when. Your life is being ruled by your pain. All you want is some relief.

Getting specific about where and what it feels like will help you find it. A numeric scale is a common tool that helps clinicians (and you) understand the severity of your pain. Again, your pain is unique to you. Be honest about what you feel. Consider such things as the intensity, sensation, and location. A chart such as the following is commonly used to help you assess your pain. A score of 10, meaning most severe pain, should be extremely debilitating. That's rare for most people.

NATIONAL INSTITUTES OF HEALTH
WARREN GRANT MAGNUSON CLINICAL CENTER

PAIN INTENSITY INSTRUMENTS
JULY 2003



Common pain scale.

Keep a Pain Journal

Get a notebook and dedicate it to tracking your pain. If possible, keep it with you and make notes a few times a day. The more specific and more consistently you write in your journal, the better. Keep the following points in mind every time you make an entry. Like a diary, note the date of entry and the time too.

- Note the intensity of pain on a scale of 0 to 10, 0 being no pain, 10 being excruciating. Where does your pain fall?
- What were you doing, thinking, or consuming before the pain began?

- Is the pain better or worse upon waking?
- Does activity or exercise make it better or worse?
- Describe your emotional state at the time of pain.
- Where does it hurt?
- What does it feel like? Is it tingling, burning, sharp, dull, throbbing, achy, or something else?
- What makes it better?
- What makes it worse?

This will help you determine what may be triggering pain. It will also reflect when you *don't* hurt, which can be very instructive once your treatments are under way. You'll better know what works and what doesn't and adjustments can be made accordingly.

Finally, your journal is great place to keep health-care provider notes and contact information. Write down who is most helpful in your pain reduction journey, and take note of who isn't helpful and why. Address your concerns with them or seek care elsewhere. Either way, it will be instructive for you to evaluate them as much as they are evaluating you. More on creating healing partnership is addressed later in this book.

The Biology of Pain

The International Association for the Study of Pain defines pain as “an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage.”

You know these unpleasant sensations. Stub your toe on the bed-post ... a moment of silence, then comes the sensation of pain. But what is actually happening inside your body?

Nerves are spread out like a fine web throughout your body, sending and receiving messages for your brain to interpret. Pain is a protective, evolutionary asset. It causes your body to move away from

things that are damaging, such as reflexively jerking your hand off a hot pan handle on the stove.

Gate Control Theory

Developed back in 1965, this theory presented one neurological basis for pain. When it comes to pain, large and small diameter nerves play starring roles. These nerves meet in an area of the spinal cord called the *dorsal horn*, where they trigger the release of chemical signals called neurotransmitters. *Transmission cells*, also known as T-cells, open the pain gate. *Inhibitory cells* keep the gate closed.



DEFINITIONS

An area of your spinal cord known as the **dorsal horn** receives sensory information, such as touch, from your body. The information is processed through two types of cells in the dorsal horn: **transmission cells** open the pain gate and allow pain signals to travel to the brain, where pain is perceived; **inhibitory cells** keep the pain gate closed and help block pain perception.

Both large and small nerve cells stimulate T-cells. But the large nerves stimulate more inhibitory cells. More activity in larger nerves, therefore, equals less pain. If the smaller nerves are more active, you will feel more pain.

Knowing how these nerves function paved the way to developing pain medications. Some reduce the inflammation that causes pain; others block the initial nerve transmission of the pain; still others may ask for more work from larger nerves, producing more inhibitory cells that keep the pain gate closed. Finally, some pain medications reduce the activity of the smaller nerves to prevent the gate from opening.

We've already talked about how the brain interprets pain signals and that the interpretation was dependent on a number of variables. It turns out that your thoughts can have a biological effect on how cells are stimulated. If, for example, you say, "Oh, stubbing my toe on the bedpost wasn't so bad," the brain sends a signal into the dorsal horn that reduces T-cell activity and that will reduce the intensity of pain.

The brain can learn to ignore some types of pain and effectively blunt its transmission. Think of the people who walk on hot coals or broken glass. That's mind over matter taken to an extreme degree.

Psychology, Stress, and Back Pain

How we think about an event can determine how our biochemistry triggers pain reactions. But can emotional stress or other psychological conditions in and of themselves cause our backs to hurt? Some health experts say yes.

Psychological issues such as the internalization of physical and sexual abuse can lead to physical pain. So can chronic stress, rage, and fear. Although pain resulting from these factors may be deemed psychosomatic, or not rooted in physical causes, the pain is very real. The same symptoms such as tenderness to touch, muscular aches, and throbbing sensations can all be felt by those who have psychosomatic back pain.

When people learn that their pain is psychosomatic, they may feel responsible, or that somehow their pain is not real. It is. And it is not helpful to cast blame. In fact, it can make matters worse by creating even more stress. Fortunately, as a society, we've begun to realize that the human experience is more than physical. Thoughts, emotions, life experiences, and spiritual aspects all contribute to our health.



BODY WISE

John Sarno, M.D., a physician and professor of physical medicine and rehabilitation at New York University, believes most back pain can be traced to stress. He term stress-related back pain Tension Myositis Syndrome (TMS).

Research has shown that his psychological approach to back pain relief has been effective in some cases. His treatment regime includes journaling, meditation, and psychotherapy.

Although we acknowledge that some back pain does have psychological factors as its basis, very real underlying physical conditions are usually responsible. There's no disputing that a pinched nerve causes pain.

We also advocate a holistic or whole-body approach to pain relief. The mind and body work together. How we feel influences how we think, and how we think influences how we feel. Managing and reducing pain requires both pieces of the equation.

Other Nonspine Causes of Back Pain

The reason your back hurts may not be related to your spine itself. It may be caused by some other underlying medical condition. Perhaps you have one of these conditions and may not have linked it to your back pain. Regardless, it's important to look at nonspinal causes, not only to rule them out, but to discover whether perhaps they are the cause of your pain. A doctor's diagnosis of these conditions is fairly straightforward.

- Gynecological problems
- Kidney stones
- Bladder issues
- Gastrointestinal problems such as Crohn's disease or ulcerative colitis
- Constipation
- Pain from hip problems

The Least You Need to Know

- The more you can identify the specifics of your back pain, the more likely you will be able to have it treated successfully.
- Keep a pain journal to document and track pain and treatment specifics.
- Pain has a biological basis.
- The brain can influence biochemical functions that determine severity of pain.
- Stress and psychological conditions can create back pain.
- Nonspinal medical conditions can cause back pain.

