

INTRODUCTION

Everyone experiences back pain. If you haven't yet, just wait a few years. If you have, you know that it can be a life-altering problem. At its worst, it can make even the simplest daily activities—walking, lifting, bending—painful or even impossible. When that happens, the idea of having surgery to make the pain go away is very alluring. You just go to the doctor, and he runs some tests. He finds the problem, he operates, and you're cured. Simple, right? Unfortunately, it doesn't always work that way.

There are conditions for which surgery is not only appropriate but necessary; but there are also conditions that don't respond as well to surgery, and telling the difference between the two is what this book is all about. A case in point is chronic low back pain. The odds of curing it with surgery remain uncertain, yet every year almost half a million patients try some kind of invasive or surgical procedure to stop the pain. They all believe their problem is the kind that surgery can fix, although there's compelling evidence that it often isn't. So why are more and more people getting back surgery? The answer is complicated, and involves the surgeon, the patient, and the back itself.

THE SURGEON

If there is evidence that back surgery doesn't always work for low back pain, why do so many surgeons do it? The single most important reason is that surgeons are trained to fix people and they naturally want to use the tools they have to make people feel better. Spinal surgery works wonders for serious problems like a broken bone or disc material crushing a nerve. And so, when someone shows up on a surgeon's doorstep in agonizing pain from an arthritic disc and asks for assistance, the surgeon is inclined to do whatever he can.

The problem is that the "whatever" may not be as helpful as we once thought. The only way to tell if surgery has helped patients is to do some kind of research into how they fared. For a long time, there wasn't a lot of rigorous, reliable research coming out of the spine field (and to see what I mean by rigorous and reliable, see the note that follows on evidence). More is coming out now, but the fact is that top-quality research hasn't kept up with advances in the field.

The last two decades have seen the development of breathtaking new surgical techniques and sophisticated spinal implants. Spinal surgeons now have complete access to the spine: we can get to it from the front, the side, and the back; we can even get to the front from the back! Some researchers have correlated a recent increase in the rates of spinal fusion for low back pain to the FDA approval in 1996 of spinal fusion cages.¹ These and other devices permit a surgeon to realign and fuse the spine into a new position. But having a new technique, a new tool, or a new implant doesn't always mean pain is cured. A critical analysis of trends in spinal surgery of the past twenty years observed that: "Although a shift toward a

greater use of technology was noted . . . the clinical benefit of this trend remains unclear.”ⁱⁱ We have come to a point where there is a mismatch between our surgical skills and techniques and our knowledge of how best to use them to cure back pain.

Surgeons are beginning to understand this and some are becoming more cautious about recommending certain surgical procedures. Six prominent surgeons published a 2003 article about treating low back pain in the medical journal *Spine*. It examined the efficacy of the most common surgical procedures used to treat low back pain, and concluded that:

It should be emphasized that all of the aforementioned procedures for low back pain have unpredictable outcomes; therefore, these procedures should be only considered after failure of conservative therapy of at least 6 months and with the full understanding of patients who are well informed about the potential advantages, disadvantages, and unpredictable outcomes. *It is not established in the literature that any of these procedures, including fusion techniques, are superior to natural history or nonoperative treatment.*ⁱⁱⁱ (italics mine)

Note the key phrase “natural history,” which is what doctors say when they mean “doing nothing.” The gist of the article is that surgery for chronic low back pain hasn’t been shown to be better than other options.

And so treating back pain has proved to be much more complicated than most patients and doctors expected. Thinking that you can show up at your surgeon’s office and he will recommend a surgical procedure that will instantly cure your pain is an unrealistic expectation. This is why patients need to take an active role in both the diagnosis and treatment of their back problems.

THE PATIENT

When a patient walks into a doctor's office, the deck is stacked against him. He's meeting with a guy in a white coat with a whole bunch of diplomas on the wall. The chronic pain he's been enduring for months or years makes him more susceptible than usual to the promise, or even the possibility, of relief. He's eager to find something—anything—to make his back stop hurting, and naturally he wants his doctor to help him.

In my experience, patients are often unwilling to second-guess doctors who recommend surgery, and sometimes even protest when doctors *don't* recommend surgery. I've seen patients who, in the face of all the evidence and the recommendations of several doctors, are convinced that surgery—and only surgery—will fix their problems. Maybe it's because their aunt Sally had a similar problem that surgery fixed; maybe they read about it on the Internet; maybe they saw an ad for a particular procedure. They're true believers.

I understand how it happens. Patients are looking for a way to stop the pain, and surgery is awfully tempting. It doesn't require them to undertake a long, and sometimes uncomfortable, regimen of physical therapy. It doesn't require them to get regular exercise. And it doesn't require them to find another doctor who has a solution other than surgery. Even though surgery may not be the best long-term answer, it's simple. When you're in pain, what you want more than anything else is for someone to make it go away, and that desire grows stronger with every round of unsuccessful nonsurgical treatment. I've seen many patients who feel as though they've tried everything else, and they come to me almost in desperation, with the strong conviction that surgery is

the only answer. Often, though, they've been trying the wrong things, or the right things in the wrong combination, or potential right things that just need a little more time to work.

CASE STUDY

Since college, TONY, a forty-eight-year-old furniture maker, had occasional, but manageable, backaches. A year or so before he came to me, they started to get progressively worse, and he went to see a spinal surgeon. After an MRI scan showed a degenerated disc, he was given a prescription for codeine and physical therapy. He thought therapy sounded like a great idea, since he'd put on some weight and was too busy and stressed to find the time to exercise on his own. His therapy, though, consisted more of hot packs and ultrasound than exercise, and didn't help his pain. He went back to the surgeon, who found that a second MRI scan showed a herniated disc in addition to the degenerated disc, and recommended a laminectomy and spinal fusion. Tony was relieved to hear that there was a cure for the pain that was taking such a toll on his job and his life. When he came to me for a second opinion, he told me that all nonsurgical treatments had failed, and that surgery was the only option. It took some doing to convince him that there were options he hadn't tried that were as likely as surgery—and perhaps more likely than surgery—to alleviate his pain. Four months into a program of exercise and physical therapy, and fifteen pounds lighter, Tony had his back pain well under control.

While not every case of back pain responds the way Tony's did, Tony's experience, with its wrong turns and delays, is very common. This book will help you zero in on the kinds of treatment

that are most likely to work, and skip the kinds that won't. If you find effective nonsurgical treatment early, you're much less likely to get to the desperation phase of back pain, when surgery seems like the only option. To make the right treatment choices, you have to start by understanding the complicated, maddening, poorly understood structure that is the source of all the problems that led me to write this book: the back itself.

THE BACK

There's a lot about back pain we simply don't understand. Most instances of surgery that don't work out follow a similar pattern. A patient has pain, and the surgeon runs tests that reveal some kind of abnormality in the spine. The surgeon performs a procedure to correct the abnormality, the patient recovers, but the pain doesn't go away. Sometimes the surgery results in even more pain.

The biggest reason this happens is very straightforward. That abnormality—the one you just had surgically corrected—may not have been causing the pain that drove you to the surgeon.

About thirty-five percent of all forty-year-olds have at least one degenerated disc that shows up on an MRI, and many of them have no back pain at all.^{iv} The idea that a degenerated disc may not be the source of pain seems difficult for both patient and doctor to accept. Way back in 1990, Dr. Scott Haldeman, then president of the North American Spine Society, saw the problem coming. In his presidential address, he voiced a prescient concern that the very human desire for certainty would lead to an increasing trend in inappropriate surgery. "Physicians and patients tend to feel more comfortable with a clear-cut relationship between pathology and symptomatology, between health and disease, and between cause and effect."^v

Abnormalities on tests are often unrelated to back pain. Many people over a certain age—about forty—get back pain. Lots of people that age also have some kind of spine abnormality. The problem is that the abnormality is rarely the source of the pain.

Take, for instance, the case of herniated discs. While there are some kinds of pain (sciatica, primarily) that can be reliably pegged to a herniated disc and alleviated with surgery, there are other kinds that most definitely can't. Of course, when an adult over forty *with* back pain has a herniated disc, it's tempting to conclude that the disc is causing the pain. But then how do we explain all those adults who are walking around with herniated discs and *no* back pain? The 2003 *Spine* article addresses the difficulty of answering that question:

The clinicians' challenge in treating patients with persistent low back pain is the absence of a test to accurately diagnose discogenic pain and the absence of reliable patient selection criteria favoring a good outcome. . . . More research to determine the pathogenesis of disc degeneration and the mechanism or source of low back pain will guide the logical choice of therapeutic strategies or interventions in the future.^{vi}

In other words, finding the source of pain can be difficult, and it is dangerous to seize on a lump on an MRI as the culprit. We often can't tell where pain is coming from, and we need to do more research to find ways to do it better. In the meantime, one of the things my patients find most difficult to accept is that the answer to their most basic question, "What's causing my pain?"

is all too often, “We don’t know for sure.” They have to go to a *doctor* to hear that? The patient’s first impulse is to find another doctor, a better doctor, to tell him what’s wrong. I’m sorry to say that I have had many patients who, frustrated with my recommendation against surgery, found another doctor who was willing to operate. Sometimes they came back with pain worsened by the surgery they sought. That doesn’t mean that there is no help for your back pain. It does mean that in order to find the best solution for you, you need to fully understand what choices are available.

WHY THIS BOOK?

Back pain is a complex problem with an equally complex set of treatment options. This book is designed to help you make the match between your particular problem and the treatment options most likely to work for you. Sometimes, that’s a straightforward process. Where diagnoses are definitive and treatment is well established, I’ll just give you the basics. Where doctors disagree, and treatments are unpredictable, I’ll go into much more detail and help you decide which side you should be on.

In short, I want to show you what you’re up against and prepare you to deal with it. I’ve been operating on backs for over fifteen years and I’ve seen both remarkable successes and unnecessary failures. The bottom line is that a patient who is well informed has the best chance of finding the most effective treatment. The goal of this book is to help you be that patient.

ENDNOTES

- i R. A. Deyo, D. T. Gray, W. Kreuter, et al., "United States Trends in Lumbar Fusion Surgery for Degenerative Conditions," *Spine* 30, no. 12 (2005), pp. 1441–45.
- ii C. M. Bono, C. K. Lee, "Critical Analysis of Trends in Fusion for Degenerative Disc Disease Over the Past 20 Years: Influence of Technique on Fusion Rate and Clinical Outcome," *Spine* 29, no. 4 (2004), pp. 455–63.
- iii H. An, S. D. Boden, J. Kang, et al., "Summary Statement: Emerging Techniques for Treatment of Degenerative Lumbar Disc Disease," *Spine* 28, no. 15S (2003), pp. S24–25.
- iv S. D. Boden, et al., "Abnormal Magnetic-Resonance Scans of the Lumbar Spine in Asymptomatic Subjects: A Prospective Investigation," *Journal of Bone and Joint Surgery (Am.)* 72-A, no. 3 (1990): pp. 403–8.
- v S. Haldeman, "North American Spine Society: Failure of the Pathology Model to Predict Back Pain," *Spine* 15, no. 7 (1990), pp. 718–24.
- vi H. An, et al., "Summary Statement."