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Back or Neck Pain? Surgery is the Last Option.



Contributor: [James D. Kang, MD](#)

James D. Kang, MD, is Chairman of the Department of Orthopaedic Surgery at Brigham and Women's Hospital (BWH).



Contributor: [Hasan Zaidi, MD](#)

Hasan Zaidi, MD, is a neurosurgeon in the Department of Neurosurgery at Brigham and Women's Hospital (BWH).

Paul Beausoleil couldn't lift his right arm without excruciating pain. When the former prison guard visited [Hasan Zaidi, MD](#), a neurosurgeon in the [Department of Neurosurgery](#) at Brigham and Women's Hospital (BWH), Paul's MRI showed a severe herniation of a disc in his neck.

The dislodged disc was pressing on nerve roots, causing pain and weakness in his arm. Paul was quickly scheduled for an operation and the disc was removed through a surgical treatment, known as a [cervical discectomy](#). Several hours later, Paul woke up and could use his arm with almost no pain.

Surgery: A small piece of the puzzle

Such surgeries are gratifying for Dr. Zaidi. They're like a light switch. He removes a defective structure and his patient regains the use of their arm or leg. They usually sleep better, return to work and continue their hobbies.

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But most patients aren't like Paul. More than 90 percent of patients who visit Dr. Zaidi with a spinal condition will not need an operation. Unless they are experiencing neurological problems, such as sciatica (nerve pain down the legs), weakness or numbness in their arms or legs, or severe pain, surgical treatment is the last option.

“Before surgery, a patient should have input from multiple disciplines, including [physiatry](#) (physical and rehabilitation physicians), [physical therapy](#), and [pain management](#). I won't operate unless the patient has exhausted these non-surgical alternatives, even

alternative therapies in some cases, which includes [chiropractic care](#), [ergonomics](#), and [acupuncture](#)," says Dr. Zaidi.

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Disc Degeneration is not a "disease"

Despite learning about alternative measures, some patients are eager for an intervention. They're usually in pain. They may be scared. And they often believe an operation will solve their problem. They might have seen a dark disc on their MRI, a "structural abnormality," and think they have a disease.

"When a patient believes they have a disease, they think they need an intervention," says [James Kang, MD](#), an orthopaedic surgeon and [Chairman of the Department of Orthopaedic Surgery](#) at BWH. "Most patients are surprised to learn that about 8 or 9 patients out of 10 will spontaneously improve with non-operative, conservative measures, such as anti-inflammatory medicines, pain management, physical therapy and exercise."

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The misconception is partly the fault of his profession, confesses Dr. Kang. For decades, surgeons have used the terms "degenerative disc disease," and it's fueled a misnomer that the gradual "degeneration" of spinal discs is a "disease."

"We've made something a disease that's *not* a disease. There's no such thing as degenerative disc 'disease.' Our spines age like any other part of our body. It's a normal part of aging. And with aging comes occasional neck and back pain that almost all human beings experience in their lifetimes," explains Dr. Kang.

Setting the record straight: Rehabilitation first

It can be difficult for a patient in severe pain to comprehend that they will likely improve with time and [physical therapy](#), but most neurosurgeons and orthopaedic surgeons will typically recommend 12 weeks of physical therapy before surgical treatment.

If a patient fails physical therapy, or can't performed physical therapy because of severe pain, a physician may recommend [epidural steroid injections](#), or [fact joint injections](#). Such outpatient procedures help blunt pain by reducing the swelling around inflamed nerves. A steroid injection can reduce pain enough to start a course of physical therapy.

"If a patient fails *both* physical therapy and injections, and is still in pain or experiencing neurological symptoms, then we start considering surgery," says Dr. Zaidi.

" There's no such thing as degenerative disc 'disease.' Our spines age like any other part of our body. It's a normal part of aging. And with aging comes occasional neck and back pain that almost all human beings experience in their lifetimes. "

When is the appropriate time for surgery?

As the spine ages, a minority of patients may develop diagnoses such as a herniated disc or spinal stenosis in which case they will experience [back or neck pain](#) as well as neurologic symptoms, such as arm or leg pain or weakness, and/or sciatica.

Paul Beausoleil was one such patient. Paul skipped physical therapy and injections because he was experiencing severe pain and significant weakness in his arm. The nerves in the vertebra in his neck were critically compressed, so immediate surgery was scheduled to remove the pressure and restore function.

"Our job as surgeons is to determine if surgery will dramatically alter a patient's quality of life. We examine X-rays and MRIs and try to correlate the images with symptoms. Deciding on a treatment plan is both an art and a science," says Dr. Zaidi.

" Many patients will qualify for a minimally invasive spinal surgery (MISS) that typically results in shorter stays in the hospital, fewer risks of complication, less pain and faster recovery. "

If surgery is the best option, try minimally invasive surgery

If a patient exhausts conservative measures, the various surgical procedures may include:

- [Spinal decompression](#)
- [Spinal fusion](#)
- [Scoliosis treatment](#)
- [Spinal stenosis treatment](#)

Many patients will qualify for a minimally invasive spinal surgery (MISS) that typically results in shorter stays in the hospital, fewer risks of complication, less pain and faster recovery.

[Andrew Simpson, MD](#), the Director of Minimally Invasive Orthopaedic Spine Surgery at the [Comprehensive Spine Center](#), treats spinal disorders with a minimally invasive approach, known as microendoscopic surgery.

Performed through a fiberoptic camera that is fed through tiny tubes, the innovative procedure produces less damage to soft tissues compared to traditional spine surgeries. The surgical incision is so small that it can be covered with a Band-Aid.

Can the natural course of disc degeneration be slowed?

Many factors accelerate the process of disc degeneration, including obesity and diabetes. Trauma can also speed up degenerative changes in spinal discs (e.g., manual labor, or lifting a heavy object with poor posture).

“ The best thing you can do to keep your spine healthy is to strengthen the core muscles that support your spine.”

Numerous studies have shown that smokers experience accelerated disc degeneration compared to non-smokers. As such, Dr. Kang and Dr. Zaidi strongly recommend quitting smoking, or registering for a [smoking cessation program](#).

The best thing you can do to keep your spine healthy is to strengthen the core muscles that support your spine.

“Building up your core muscles removes stress on the spinal discs and can slow down the natural wear-and-tear process within the spine,” says Dr. Zaidi.