

## **Degenerative Disc Disease**

by maxliving.com

Degenerative disc disease isn't really a "disease." Rather, it often occurs when physical stressors and minor injuries that make your spinal discs weaken and lose water. Yet degenerative disc disease is a bigger problem than you might realize, and pain can actually be a good thing here.

"Simply put, degenerative disc disease refers to symptoms of back or neck pain caused by wear-and-tear on a spinal disc," says Brian J. McHugh, MD. "In some cases, degenerative disc disease also causes weakness, numbness, and hot, shooting pains in the arms or legs (radicular pain). Degenerative disc disease typically consists of a lowlevel chronic pain with intermittent episodes of more severe pain."

While they can happen in any area of your spine, McHugh says degenerative disc disease commonly happens in your neck (cervical spine) and lower back (lumbar spine). These areas of your spine <u>undergo the most motion and stress</u>, making them most susceptible to disc degeneration.

## Your Spinal Cord: Your Backbone (Literally) for Overall Health

Your spine is made of 33 individual bones or vertebrae — some of which fuse, naturally, such as the bones making up the sacrum — stacked one on top of the other that provides serious support for your entire body. Your spinal column helps you stand up, bend, twist, and otherwise move about.

Between each of those vertebrae is a disc, which separates and cushions your vertebrae so they don't rub together.

"Discs are designed like a radial car tire," <u>says the Mayfield Clinic</u>. "The outer ring, called the annulus, has criss-crossing fibrous bands, much like a tire tread. These bands attach between the bodies of each vertebra. Inside the disc is a gel-filled center called the nucleus, much like a tire tube."

A healthy, well-hydrated disc contains sufficient water that gives your spine cushioning and flexibility. Interestingly, <u>intervertebral discs show degenerative and aging changes</u> earlier than any other connective tissue in your body.

Those intervertebral discs serve several purposes. They hold your spine together, allow you to move, and absorb the impact of that movement. If you over-strain those discs, they can bulge and rupture or herniate.

Fluid keeps those discs nicely lubricated so that doesn't normally happen. But when those spinal discs gradually lose fluid, the rigid outer shell of the disc weakens and begin to collapse. That collapse can put pressure on your nerves in the spinal column.

When these discs degenerate, they can't fulfill their primary functions to cushion and provide mobility between the vertebrae. Instead, these <u>intervertebral discs become dehydrated</u>, lose elasticity, and collapse.

A strong core supports healthy spinal movement and alignment. Your body's "core" consists of lower back and abdominal muscles. When you're carrying groceries or doing squats with your trainer, these muscles stabilize your body. Without these muscles, you can't do even simple daily activities.

These abdominal and low back muscles work together to maintain the spine's proper alignment. When your spine's structure becomes compromised, your spinal cord struggles to communicate effectively with your body.

To understand this better, imagine your core as a cast for a broken arm. Once the bone becomes reset, your doctor puts a hard cast around your arm bone so it heals quickly and properly.

Without that cast, even a reset broken bone couldn't heal properly doing basic tasks like driving. Over time, that would create a painful structural deficiency that could limit mobility.

That's what happens when these discs can't function optimally. A herniated disc or bulging disc can become real problems, yet even without herniating, stressing your spinal discs limits mobility and potentially suppresses your immune system's ability to fight disease.

In fact, the slightest misalignment of spinal bones puts pressure on your spinal cord, impeding the ability of your brain and body to communicate. Spinal cord pressure can damage the function of any system or organ in your body.

When spinal bones lose proper alignment or movement — in a condition we refer to as the vertebral subluxation complex — they aggravate surrounding nerves and tissue that can disrupt basic organ function. When this type of subluxation occurs, symptoms occur including:

- Low back pain
- Sciatica
- Neck pain
- Tingling sensations
- Numbness
- Difficulty doing basic tasks like walking or unscrewing a jar

While these symptoms can be absolutely miserable, *not* having them becomes much worse. That's because symptoms like pain raise a red flag that something's wrong. Conditions like degenerative disc disease can develop silently for years without creating symptoms, and once those symptoms occur, they can be severe.

## What Causes Degenerative Disc Disease?

Age, for one, but gender, genetics, smoking, cardiovascular disease, obesity, physical inactivity, occupational factors (repetitive heavy lifting and vibration), spinal instability, and malalignment also contribute to degenerative disc disease.

In other words, <u>age and genetics can certainly contribute to disc degeneration</u>, but far subtler yet impactful are the daily wear-and-tear episodes — things like heavy lifting or forceful bending — that <u>weaken these discs</u>.

Let's consider how that might practically play out. You wake up feeling stiff, and while you're pouring that first cup of coffee, you notice your significant other left a gigantic bag of dog food by the kitchen door. You lift it incorrectly, putting strain on your lower back.

You then drive to work slumped over the steering wheel, arriving at your desk job where you slouch and hunch over your computer for hours.

Eventually, these seemingly minor or innocuous actions create neglected, weakened muscle tissue that your spine needs for support. When you neglect those muscles, eventually vertebrae can get stuck in an abnormal movement pattern, affecting the alignment of the entire spine. This strains your spinal discs and nerves, kick-starting the development of degenerative disc disease.

Who Gets Degenerative Disc Disease?

Degenerative disc disease is more common than you might think. About 30 percent (if not more) of 30–50-year-olds have some degree of disc space degeneration — from mild degenerative disc disease to severe degenerative disc disease — though that degeneration isn't always painful and many never receive a formal diagnosis.

Altogether, about <u>70–85 percent of people experience lumbar back pain</u> during their lifetime. Degenerative disc disease is one cause, but things like disc herniation, spondylolysis (stress fracture in the pars interarticularis of the vertebral arch), and spondylolisthesis (where one vertebrae slides forward over the vertebrae below it) can also create that pain. Isolating one cause can be a challenge, and for most people, <u>several factors contribute</u>.

Those repercussions can become costly. Low back pain that occurs from degenerative disc disease is the single most common cause for disability for people 45 years or younger, with national economic losses exceeding \$100 billion per year, mainly indirect due to reduced productivity.

Treating Degenerative Disc Disease

Mostly, <u>researchers aren't entirely sure what causes degenerative disc disease</u>, and without symptoms like pain to isolate where it comes from, understanding it can become a challenge.

Again, pain here is good. It helps your practitioner understand where disc degeneration occurs.

Researchers recommend being mindful about the timeline of pain, radiation of pain, prior episodes of trauma, and what might trigger those and other symptoms.

Many patients complain about pain radiating down both buttocks and lower extremities, and practitioners can determine whether the pain is localized to the lower back or if radiation occurs to the leg(s). After all, radiating pain as the main issue can help better treat this problem than having lower back pain that <u>potentially comes from muscle fatigue and strain</u>.

Treating degenerative disc disease often requires a multifactorial approach. Specific chiropractic adjustments improve the movement and alignment of your vertebrae, but you need to also do supplementary core exercises and maintain good posture for healthy spine alignment. While a strong core is helpful, it is not the antidote to degenerative disc disease.