

REVIEWED

By Chris at 3:35 pm, May 21, 2020



Exams and Tests for Degenerative Disc Disease

Degenerative disc disease can cause a disc to bulge or herniate that may lead to painful nerve compression.

Written by [Jason M. Highsmith, MD](#) ([author/2316/highsmith](#))

It can be difficult to diagnose degenerative disc disease (DDD) because it develops so gradually and can have a multitude of related problems (spinal stenosis, herniated disc, etc). For example, your doctor may be able to quickly diagnose you with a herniated disc, but it's more challenging to diagnose that it's a herniated disc caused by degenerative disc disease.

If you have back or neck pain that comes on suddenly, or if you have pain that persists, call your primary care doctor who can refer you to a spine specialist, such as a neurosurgeon or orthopaedic spine surgeon. Your spine specialist will try to find the cause of your pain so that he or she can develop an accurate treatment plan for you—a way to manage your pain and other symptoms of DDD and to help you recover.



(https://www.spineuniverse.com/sites/default/files/imagecache/gallery-large/wysiwyg_imageupload/3998/2016/02/09/computer_interface_29734534_M.jpg)

X-rays, CT scans and MRIs are types of diagnostic imaging studies often performed to help your spine specialist confirm his diagnosis of your back or neck pain-related degenerative disc disease. Photo Source: 123RF.com.

As your spine specialist (eg, surgeon) works toward a diagnosis, your he or she will ask about your current symptoms, what remedies you've already tried, and their effectiveness.

Typical Degenerative Disc Disease Diagnostic Questions

- When did the back or neck pain start?
- What activities did you recently do?
- What have you done for your pain?
- Does the pain radiate or travel to other parts of your body?
- Does anything lessen the pain or make it worse?

Physical and Neurological Examinations

Your spine surgeon will also perform physical and [neurological exams \(/exams-tests/neurology-basics-neurological-exams\)](#). In the [physical exam \(/exams-tests/diagnosing-back-or-neck-pain-physical-examination\)](#), he or she will observe your posture, range of motion (how well and how far you can move certain joints), and physical condition, noting any movement that causes you pain. The surgeon will feel your spine, note its curvature and alignment, and feel for muscle spasms.

During the neurological exam, he or she will test your reflexes, muscle strength, other nerve changes, and pain spread (that is—does your pain travel from your back and into other parts of your body?). The neurological exam is especially important in degenerative disc disease because it can affect your nerves or even your spinal cord.

Spinal Imaging

To diagnose DDD, you may need to have some imaging tests. You may have an x-ray, which can help your surgeon "see" the bones in your spine. X-rays are effective at showing narrowed spinal channels (spinal stenosis), fractures, bone spurs (osteophytes), or osteoarthritis. Your surgeon may refer to these as "plain films." By that, he or she means that you'll have several standard x-ray views done. You'll have one taken from the side; that's called a **lateral view**. You'll also have a "straight on" shot, and it can be done from the front or the back. An x-ray taken from the front is called an **anteroposterior (AP) view**; from the back, it's called a **posteroanterior (PA) view**. On the plain films, your surgeon will be looking for vertebral alignment, scoliosis, and fracture—other spinal issues that can come along with DDD.

Your surgeon may also order **flexion and extension x-rays (/exams-tests)** to evaluate the stability of your spine and your range of motion (how well your joints move). You'll be asked to bend forward (flexion) and backwards (extension) during these x-rays.

A computerized tomography (CT) scan or or a magnetic resonance imaging (MRI) test may be required. These tests are more effective than x-rays at showing the soft tissues in your spine and can help to identify problems such as a bulging disc or a herniated disc. A CT scan is useful because it's easier to see the bones and nerves on it, so the surgeon can more easily spot if a bone spur is pressing on a nerve.

If the surgeon suspects nerve damage from degenerative changes in your spine, he or she may order a special test called an electromyography (EMG) to measure how quickly your nerves respond.

Making a degenerative disc disease diagnosis can require additional tests.

- **Bone scan:** To help your surgeon detect spinal problems such as osteoarthritis, fractures, or infections (which can all be related to DDD), you may have a bone scan. You will have a very small amount of radioactive material injected into a blood vessel. That will travel through your bloodstream and be absorbed by your bones. More radioactive material will be absorbed by an area where there is abnormal activity, such as an inflammation. A scanner can detect the amount of radiation in all your bones and show the "hot spots" (the areas with more radioactive material) to help your surgeon figure out where the problem is.
- **Discogram or [discography \(/exams-tests/cervical-thoracic-lumbar-discography-information\)](#):** This is a procedure that confirms or denies the disc(s) as the source of your pain. You will have a harmless dye injected into one of your discs. If there's a problem with your disc—like it's herniated—the dye will leak out of the disc. The surgeon will be able to see that on an x-ray, and that will show him/her that there's something wrong with your disc.
- **Myelogram (/exams-tests/myelography-myelogram):** To see if you have a spinal canal or spinal cord disorder—perhaps nerve compression causing pain and weakness—you may have a myelogram. In this test, you'll have a special dye injected into the area around your spinal cord and nerves. (Before that happens, the area will be numbed.) Then you'll have an x-ray or a CT scan. The image will provide a detailed anatomic picture of your spine, especially of the bones, that will help your spine surgeon to identify any abnormalities.

Updated on: 09/04/19

[Continue Reading](#)

◉ [Exams and Tests Center](#)

Related Articles

[Drugs, Medications, and Spinal Injections for Degenerative Disc Disease \(/conditions/degenerative-disc/drugs-medications-spinal-injections-degenerative-disc-disease\)](#)

[Surgery for Degenerative Disc Disease \(/conditions/degenerative-disc/surgery-degenerative-disc-disease\)](#)

[Alternative Treatments for Degenerative Disc Disease \(/conditions/degenerative-disc/alternative-treatments-degenerative-disc-disease\)](#)

[Physical Therapy for Degenerative Disc Disease \(/conditions/degenerative-disc/physical-therapy-degenerative-disc-disease\)](#)

You May Also Like...

VIDEO



[Video Series: Exercises for Lumbar Degenerative Disc Disease \(/conditions/degenerative-disc/video-series-exercises-lumbar-degenerative-disc\)](#)

SLIDESHOW



[5 Treatments for Degenerative Disc Disease \(/conditions/degenerative-disc/5-treatments-degenerative-disc-disease\)](#)

VIDEO



[Degenerative Disc Disease Video Series \(/conditions/degenerative-disc/degenerative-disc-disease-video-series\)](#)

VIDEO



[Video Series: Exercises for Cervical Spine Degenerative Disc Disease \(/conditions/degenerative-disc/video-series-exercises-cervical-spine-degenerative\)](#)