A discogram, also spelled diskogram, is a test used to evaluate back pain. A discogram might help your doctor determine if an abnormal disk in your spine is causing your back pain.

Spinal disks are spongelike cushions between the bones (vertebrae) of the spine. During a discogram, dye is injected into the soft center of one or more disks. The injection sometimes reproduces your back pain.

The dye also moves into any cracks in the disk's exterior, which can then be seen on an X-ray or CT scan. However, disks that show signs of wear and tear don't always cause symptoms, so the usefulness of a discogram is controversial.

Why it’s done

A discogram is an invasive test that generally isn't used for an initial evaluation of back pain. Your doctor might suggest a discogram if your back pain persists despite conservative treatments, such as medication and physical therapy.

Some doctors use a discogram before spinal fusion surgery to help identify which disks need to be removed. However, discograms are not always accurate in pinpointing which disks, if any, are causing back pain. Many doctors instead rely on other tests, such as MRI and CT scanning, to diagnose disk problems and guide treatment.

Risks

A discogram is generally safe. But as with any medical procedure, a discogram carries a risk of complications, including:

- Infection
- Worsening of chronic back pain
- Headache
- Injury to nerves or blood vessels in and around the spine
- Allergic reaction to the dye
How you prepare

You might need to avoid taking blood-thinning medications for a time before the procedure. Your doctor will tell you what medicines you can take. You will need to avoid food or drink the morning before the test.

What you can expect

A discogram is performed in a clinic or hospital room that has imaging equipment. You'll likely be there for up to three hours, although the test itself takes 30 to 60 minutes, depending on how many disks are tested.

Before the procedure

Although you're awake during the procedure, your doctor might give you a sedative through a vein to help you relax. You also might be given an antibiotic to help prevent infection.

During the procedure

You lie on a table on your abdomen or side. After cleaning your skin, your doctor may inject a numbing medicine to decrease pain caused by the insertion of the discogram needle.

Your doctor will use an imaging technique (fluoroscopy) to watch the needle enter your body. Fluoroscopy allows more precise and safer placement of the needle into the center of the disk to be examined. A contrast dye is then injected into the disk, and an X-ray or CT scan is taken to see if the dye spreads.

If the dye stays in the center of the disk, the disk is normal. If the dye spreads outside the center of the disk, the disk has undergone some wear-and-tear change. These changes might or might not be the cause of your pain.

Typically, if a disk is causing your back pain, you will feel pain during the injection that's similar to the back pain you have daily. If a disk is normal, there's little pain during the injection. During the discogram, you'll be asked to rate your pain.

After the procedure

You remain in the procedure room for approximately 30 to 60 minutes for observation. After that, you'll be able to go home, but you'll need someone to drive.

It's normal to have some pain at the injection site or in the low back for several hours after the procedure. Applying an ice pack to the area for 20 minutes at a time might help. You'll need to keep your back dry for 24 hours.

If you develop severe back pain or you develop a fever one to two weeks after the procedure, call your doctor right away.

Results

Your doctor will review the images and the information you provided about the pain you had during the procedure to help pinpoint the source of your back pain. Your doctor will
Doctors usually don't rely on the results of a discogram alone because a disk with wear-and-tear change might not cause pain. Also, pain responses during a discogram can vary widely.

Typically, results of a discogram are combined with results of other tests — such as an MRI or CT scan and physical examination — when determining a treatment plan for back pain.

By Mayo Clinic Staff

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