

Herniated Disc Surgery:

Between each of the bones in your spine (the vertebrae) is a disc. These discs' act as shock absorbers and help cushion your bones. A herniated disc is one that extends beyond the capsule containing it and pushes into the spinal canal. You can have a herniated disc anywhere along your spine, even in your neck, but it's most likely to occur in the lower back (lumbar vertebrae).

You might develop a herniated disc from lifting something the wrong way or from suddenly twisting your spine. Other causes include being overweight and experiencing degeneration due to disease or aging.

A herniated disc doesn't always cause pain or discomfort, but if it pushes against a nerve in your lower back, you may have pain in the back or legs (sciatica). If a herniated disc occurs in your neck, you may have pain in your neck, shoulders, and arms. Besides pain, a herniated disc can lead to numbness, tingling, and weakness.

Surgery involving the spine is typically not recommended until you've tried all other options. These may include:

- nonsteroidal anti-inflammatories
- pain relievers
- exercise or physical therapy
- steroid injections
- rest

If these are ineffective and you have persistent pain that is interfering with your quality of life, there are several surgical options.

Before surgery

When considering surgery, make sure you see a qualified spine (orthopedic or neurosurgical) surgeon, and get a second opinion. Before recommending one surgical procedure over another, your surgeon will likely order imaging tests, which may include:

- X-ray: An X-ray produces clear pictures of your vertebrae and joints.
- Computed tomography (CT/CAT scan): These scans provide more detailed images of the spinal canal and surrounding structures.
- Magnetic resonance imaging (MRI): An MRI produces 3-D images of the spinal cord and nerve roots, as well as the discs themselves.
- Electromyography or nerve conduction studies (EMG/NCS): These measure electrical impulses along nerves and muscles.

These tests will help your surgeon determine the best type of surgery for you. Other important factors in the decision include the location of your herniated disc, your age, and your overall health.

Types of surgery for herniated disc

After gathering all the information they can, your surgeon may recommend one of these surgeries. In some cases, a person may require a combination of surgeries.

Laminectomy/laminectomy

In a laminectomy, a surgeon makes an opening in the vertebral arch (lamina) to relieve pressure on your nerve roots. This procedure is performed through a small incision, sometimes with the aid of a microscope. If necessary, the lamina can be removed. This is called a laminectomy.

Discectomy/micro discectomy

Discectomy is the most common surgery used for herniated disc in the lumbar region. In this procedure, the portion of the disc that is causing the pressure on your nerve root is removed. In some cases, the entire disc is removed.

The surgeon will access the disc through an incision in your back (or neck). When possible, your surgeon will use a smaller incision and special instruments to achieve the same results. This newer, less invasive procedure is called micro discectomy. In some cases, these procedures can be performed on an outpatient basis.

Spinal fusion

General anesthesia is required for spinal fusion. In this procedure, two or more vertebrae are permanently fused together. This may be accomplished with bone grafts from another part of your body or from a donor. It may also involve metal or plastic screws and rods designed to provide additional support. This will permanently immobilize that portion of your spine.

Spinal fusion usually requires a hospital stay of several days.

Why it's done

A discectomy is done to relieve the pressure a herniated disk (also called a slipped, ruptured or bulging disk or disk prolapse) places on a spinal nerve. A herniated disk occurs when some of the softer material inside the disk pushes out through a crack in the outer lining of the disk.

A health care provider might recommend discectomy if:

- Nerve weakness causes trouble standing or walking
- Conservative treatment, such as physical therapy or steroid injections, fails to improve symptoms after 6 to 12 weeks
- Pain travels into the buttocks, legs, arms or chest and becomes too much to manage

Risks

Discectomy is considered safe. But as with any surgery, discectomy carries a risk of complications. Potential complications include:

- Bleeding
- Infection
- Leaking spinal fluid
- Injury to blood vessels or nerves in and around the spine

How you prepare

You'll likely need to avoid eating and drinking for a certain amount of time before surgery. If you take blood-thinning medications, you may need to adjust how much you take before surgery. Your health care provider will give you specific instructions.

What you can expect

During discectomy

Surgeons usually perform discectomy using general anesthesia, so you're not awake during the procedure. Ideally, just the piece of disk that's compressing the nerve is removed. However, small amounts of spinal bone and ligament might need to be removed to get to the herniated disk.

If the whole disk must be taken out, your surgeon may need to fill the space with a piece of bone — taken from a deceased donor or from your own pelvis — or a synthetic bone substitute. The adjoining vertebrae are then fused together with metal instrumentation.

After discectomy

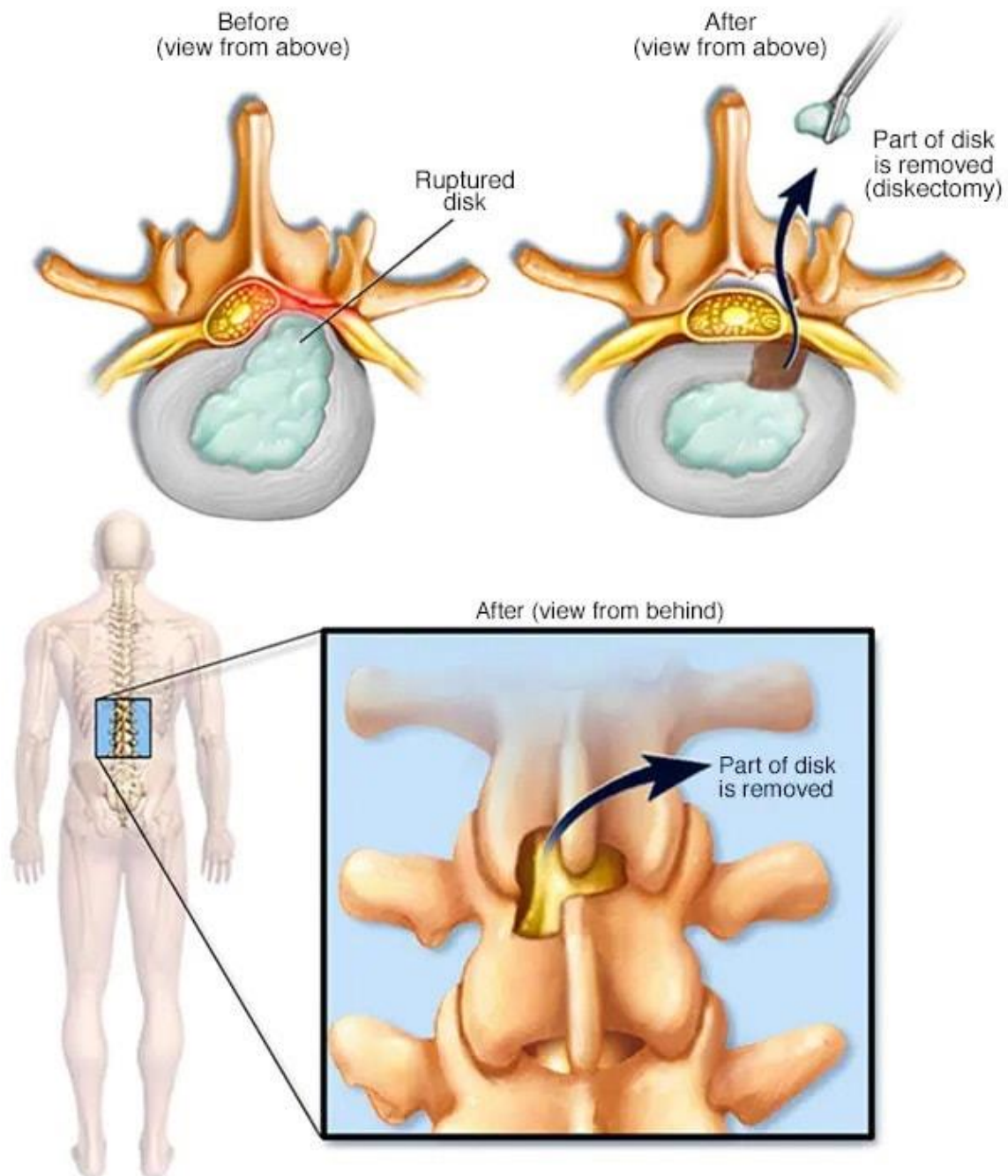
After surgery, you're moved to a recovery room where the health care team watches for complications from the surgery and anesthesia. You might be able to go home the day of surgery. But a short hospital stay might be needed — particularly for those who have serious medical conditions.

Depending on the amount of lifting, walking and sitting your job involves, you may be able to return to work in 2 to 6 weeks. If you have a job that includes heavy lifting or operating heavy machinery, you might have to wait 6 to 8 weeks before returning to work.

Results

Discectomy reduces herniated disk symptoms in most people who have clear signs of a compressed nerve, such as pain that travels down the legs. However, relief from a discectomy might not last a lifetime because it doesn't cure the cause of the disk becoming injured or herniated in the first place.

To help prevent re-injury of the spine, it might help to attain and keep a healthy weight, eat a healthy diet, do low-impact exercises and limit activities that involve repeated bending, twisting or lifting.



Risks and what to expect after surgery

All surgeries have some risk, including infection, bleeding, and nerve damage. If the disc isn't removed, it can rupture again. If you suffer from degenerative disc disease, you may develop problems with other discs.

Following spinal fusion surgery, a certain amount of stiffness is to be expected. This may be permanent.

After your surgery, you'll be given specific discharge instructions regarding when to resume normal activity and when to begin exercising. In some cases, physical therapy may be necessary. It is very important to follow your doctor's recommendations.

Most people recover well after disc surgery, but each case is unique. Your individual outlook depends on:

- the details of your surgery
- any complications you may have encountered
- your general state of health

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Preventing problems

To help prevent future problems with your back, try to maintain a healthy weight. Always use proper lifting techniques. Strong abdominal and back muscles help support your spine, so be sure to exercise them regularly. Your doctor or physical therapist can recommend exercises designed for that purpose.