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Foraminotomy

Foraminotomy is surgery that widens the opening (the foramen) in your spine where nerve roots leave your spinal canal. You may have a narrowing of the nerve opening (foraminal stenosis).

Description

Foraminotomy takes pressure off the nerve coming out of your spinal column. This reduces any pain you were having. Foraminotomy can be performed on any level of the spine.

You will be asleep and feel no pain (general anesthesia).

During surgery:

- You usually lie on your belly or sit up on the operating table. A cut (incision) is made in the middle of the back of your spine. The length of the incision depends on how much of your spinal column will be operated on.
- Skin, muscles, and ligaments are moved to the side. Your surgeon may use a surgical microscope to see inside your back.
- Some bone is cut or shaved away to widen the nerve root opening (foramen). Any disk fragments are removed.
- Other bone may also be removed at the back of the vertebrae to make more room (laminotomy or laminectomy).
- The surgeon may do a spinal fusion to make sure your spinal column is stable after surgery.
- The muscles and other tissues are put back in place. The skin is sewn together.

Why the Procedure is Performed

A bundle of nerves (nerve root) leaves your spinal cord through openings in your spinal column. These openings are called the neural foramina. When the openings for the nerve root become narrow, it can put pressure on your nerve. This condition is called foraminal spinal stenosis.

This surgery may be considered if you have severe symptoms that interfere with your daily life. Symptoms include:

- Pain that may be felt in your thigh, calf, lower back, shoulder, arms or hands. The pain is often deep and steady.
- Pain when doing certain activities or moving your body a certain way.
- Numbness, tingling, and muscle weakness.

- Problems walking or holding things.

Risks

Risks of anesthesia and surgery in general are:

- Reactions to medicines or breathing problems
- Bleeding, blood clots, or infection

Risks of foraminotomy are:

- Infection in the wound or vertebral bones
- Damage to a spinal nerve, causing weakness, pain, or loss of feeling
- Instability of the spine that may require more surgery
- Partial or no relief from pain after surgery
- Return of back pain in the future

Before the Procedure

You will have an MRI or CT scan to make sure foraminal stenosis is causing your symptoms and to determine its exact location. You may also have an injection to the nerve to confirm the location of the compression.

Tell your surgeon or nurse if:

- You are or could be pregnant
- You are taking any medicines, including illicit drugs, supplements, or herbs you bought without a prescription
- You have been drinking a lot of alcohol, more than 1 or 2 drinks a day

Planning for your surgery:

- If you have diabetes, heart disease, or other medical conditions, your surgeon may ask you to see the provider who treats you for these conditions.
- If you smoke, it's important to cut back or quit. Smoking can slow healing and increase the risk for blood clots. Ask your provider for help quitting smoking.
- If needed, prepare your home to make it easier to recover after surgery.
- Ask your surgeon if you need to arrange to have someone drive you home after your surgery.

During the week before your surgery:

- You may be asked to temporarily stop taking medicines that keep your blood from clotting. These medicines are called blood thinners. This includes over-the-counter medicines and supplements such as aspirin, ibuprofen (Advil, Motrin), naproxen (Aleve, Naprosyn), and vitamin E. Many prescription medicines are also blood thinners.
- Ask your surgeon which medicines you should still take on the day of surgery.
- Let your surgeon know about any illness you may have before your surgery. This includes COVID-19, a cold, flu, fever, herpes breakout, or other illness. If you do get sick, your surgery may need to be postponed.

On the day of surgery:

- Follow instructions about when to stop eating and drinking.
- Take the medicines your surgeon told you to take with a small sip of water.
- Follow instructions on when to arrive at the hospital. Be sure to arrive on time.

After the Procedure

You will likely wear a soft neck collar afterward if the surgery was on your neck. Most people are able to get out of bed and sit up within 2 hours after surgery. You will need to move your neck carefully.

You should be able to leave the hospital the day after the surgery. At home, follow instructions on how to care for your wound and back.

You should be able to drive within a week or two and resume light work after 4 weeks.

Outlook (Prognosis)

Foraminotomy for spinal foraminal stenosis will often provide full or partial relief from symptoms.

Future spine problems are possible for people after spine surgery. If you had foraminotomy and spinal fusion, the spinal column above and below the fusion could have problems in the future.

You may have more of a chance of future problems if you needed more than one kind of procedure in addition to the foraminotomy (laminotomy, laminectomy, or spinal fusion).

Alternative Names

Intervertebral foramina; Spine surgery - foraminotomy; Back pain - foraminotomy; Stenosis - foraminotomy

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