Selective Nerve Root Block (SNRB)

You have nerves running all along your spine. Each one of these nerves branches off from its nerve root. These nerve roots are made up of bundles of fibers situated at the spinal column that then extends to other parts of your body. Their job is to send sensation and motor signals to your brain.

But when nerve roots become irritated or pinched, they can be very painful. This type of nerve compression can happen because of degeneration or damage in the spine, such as herniated discs or spinal stenosis. Depending on which nerve is affected, this can cause pain in your back, neck, arms, or legs.

A **Selective Nerve Root Block (SNRB)** diagnostic test helps determine if a specific spinal nerve root is the pain source. A SNRB helps your doctor diagnose cervical (neck) or lumbar (lower back) radiculopathy (irritation and inflammation of a nerve root). The injection reduces the inflammation and pain caused by pressure on the nerve. It can also be used as a diagnostic tool to help doctors determine whether the nerve is irritated by "numbing" the nerve. One of the most common conditions to benefit from selective nerve root injections is a herniated disc that causes low back and leg pain (sciatica).

A selective nerve root block is an injection into the precise area of your spine where the nerve root is causing pain. Medicine containing an anesthetic and a steroid is injected near the painful nerve root. This "blocks" the nerve root from relaying pain signals to your brain.

What to Expect During the Procedure

Under fluoroscopic guidance, steroid medication (a strong anti-inflammatory) is injected at a specific nerve root. If the injection reduces symptoms, the pain source is identified. A needle is inserted into the area and the medication and an anesthetic are injected. The injection takes just several minutes. After the injection, the patient is monitored for 15-20 minutes and then released. Most patients start noticing pain relief after the third to seventh day, which can last weeks or months. If the first injection fails to relieve pain symptoms in one to two weeks, the doctor may recommend another injection. In a 12-month period, doctors usually limit injections to three.

The selective nerve root block procedure is performed in our surgery center and is an outpatient appointment.

When you come in for your visit, you'll change into a gown and lie on a treatment table. We'll clean the area to be treated and give you a local anesthetic at the injection spot.

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Using x-ray or ultrasound guidance for precision, your doctor will insert a needle into the nerve root area, then inject the pain-blocking medication.

You may feel momentary pressure during the injection, but it's quite brief. After the procedure, we'll monitor you for a short time before you go home.

It's best to avoid strenuous exercise for the first day or so, and then you can resume normal activities after that.

We'll follow up with you to discuss how effective the procedure was and, depending on your level of pain relief, recommend further treatment based on your results.

Possible Complications

Like other medical procedures, a selective nerve root block may present risks. Complications include a very low risk of infection, temporary blood pressure changes, headache, and a small risk of injury to nerve tissue.

Patient Restrictions

Some patients should not undergo SNRB. Contraindications (precautions) include:

Allergy to the contrast medium and/or drugs to be injected

Anemia

Significant asthma

Bleeding problems

Infection

Kidney disease

Pregnant or breast-feeding

Severe spinal abnormality