Selective Nerve Root Block

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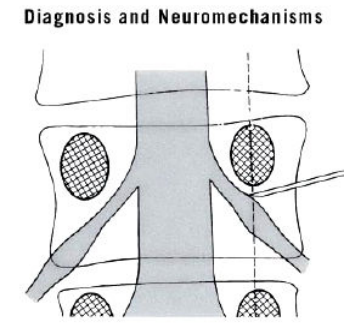
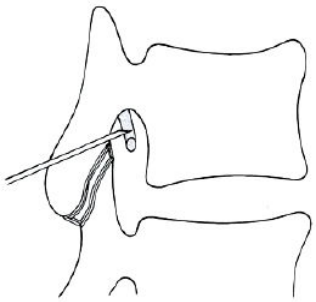
A selective nerve root block is used to both diagnose the exact source of a patient's leg pain and to obtain relief of the pain. When a nerve root becomes compressed and inflamed, it can produce leg pain. Occasionally, an imaging study (e.g. MRI) may not clearly show which nerve is causing the pain and a selective nerve root injection is performed to assist in isolating the source of pain. In addition to its diagnostic function, this type of injection can also be used as a treatment for relief of leg pain. A steroid (an anti-inflammatory medication) solution is often added to help in the reduction of the leg pain.

The nerve is approached at the level where it exits the foramen (the hole between the vertebral bodies). The injection is done using a combination of steroid and lidocaine/Marcaine (local anesthetics). Fluoroscopy (live x-ray) is used to ensure the medication is delivered to the correct location. If the patient's pain resolves after the injection, it can be assumed that the pain generator is the specific nerve root that has just been injected. Following the injection, the steroid also helps reduce inflammation around the nerve root. The procedure is done on an outpatient basis. It only takes a few minutes to perform. However, since sedation is used for the procedure, it is recommended that another individual drive the patient home after the procedure. Most people resume normal pre-injection activities within a few hours. Temporary numbness in the leg may occur due to the effect of the anesthetic. Once the anesthetic wears off, after a few hours, the pain may return over the involved site until the steroid begins to take effect. The relief of symptoms from this injection is variable and can last from days to months.

Success rate varies between individuals. Some nerve roots are very difficult to inject successfully due to their location and surrounding bone spurs. Typically, a nerve root can be injected no more than three times in a six-month period.



FRONT VIEW



SIDE VIEW