

What causes 'sciatica'?

Sciatica is defined as leg pain caused by an injury or irritation of a spinal nerve in the low back. This is referred to as radiculopathy or radiculitis. Pain originates from either compression of the nerve from a herniated or protruding disc, or from an inflammatory process that follows from a herniated disc. Similar pain can also present in the neck or arm from nerve irritation in the cervical spine (neck).

This inflammatory process can be treated by directly injecting powerful anti-inflammatory medication (i.e. steroid). The body will most often **resorb** the herniated disc over time.

Comprehensive Care

Pain is best treated with a comprehensive plan that includes therapy, exercise prescription, medication, and integrative medicine techniques. No single injection will truly fix the situation. Rather, it is important to accurately diagnose the source of pain, prescribe the best treatment, and prevent recurrence. This approach requires a bit more time and participation, but offers long term improvement.



About our physicians

Matthew J. Smith, MD

Dr. Smith completed his residency in Physical Medicine and Rehabilitation at Stanford University. He then completed a fellowship in Interventional Spine and Sports Medicine through the University of Michigan. Dr. Smith is an instructor for the North American Spine Society's injection training series.

George J. Pasquarello, DO

Dr. Pasquarello completed his residency in Neuromusculoskeletal Medicine and Osteopathic Manipulative Medicine at the University of New England College of Osteopathic Medicine. He has completed courses in spinal injection techniques through the North American Spine Society. Dr. Pasquarello also lectures to physicians at the state, national and international level on conservative treatment approaches for acute and chronic musculoskeletal conditions.

David Bica, DO

Dr. Bica completed his residency in Family Medicine and fellowship in Sports Medicine at East Carolina University. He is a Clinical Assistant Professor of Family Medicine at Brown University Alpert School of Medicine. Additionally, Dr. Bica has been trained in epidural injections during fellowship and has completed a course for spinal injections through the North American Spine Society.



www.universityorthopedics.com

401-402-1033

1598 South County Trail
East Greenwich, RI 02818

X-Ray Guided Procedures



*Performed for many purposes, including the treatment of
and diagnosis of pain*

Recommended for:

Low Back Pain
Neck Pain
Arm Pain/Sciatica
Hip Pain



Why are x-rays used?

X-ray, or fluoroscopy, is used to help guide the physician in performing the procedure. X-rays allow the doctor to visualize the bony structures. A “picture” is taken at several angles to ensure proper needle placement. This increases patient safety and comfort.

Are x-rays safe?

Although x-rays are a form of radiation, research demonstrates that the amount of radiation a patient is exposed to during the procedures is minimal. Your doctor will make every attempt to make certain you receive the least amount of radiation while maintaining a clear image of the procedure.

Where are the injections performed?

Injections require a room designed especially for x-ray equipment, which provides for enhanced patient safety. All procedures are performed with a radiology technologist and registered nurse in the room to monitor the patient and assist the physician.

Will I be sedated?

All patients receive an IV as an added safety measure. Some patients prefer to receive a mild sedative through the IV to lessen anxiety and ease the pain of the injection. If you choose to have sedation, you will not be able to drive for 24 hours after the procedure.

Will the injection hurt?

Before the actual procedure begins, a small gauge needle injects a local anesthetic to numb the area. This causes a bee sting-like sensation that lasts for a short time, followed by a feeling of pressure. If necessary, your doctor can inject additional anesthetic to the deeper soft tissue.

You may feel some increased discomfort temporarily as the doctor injects the medication into the given region. Some patients describe this sensation as an inflating balloon. An electrical type feeling may be felt during certain procedures as well.

What are the risks involved?

As with any procedure, certain risks exist. Though rare, serious complications can occur and your doctor will address these prior to your procedure.

What procedures are performed?

Joint Injections: Peripheral joints such as the hip or shoulder may require the use of x-ray guidance to ensure proper placement.

Epidural Steroid Injections: Performed in the neck, mid back or low back using different techniques, this injection disrupts the inflammation at the proper spinal level.

Facet Joint/Sacroiliac Joint Injections: Inflammation within these joints is a common cause of low back pain.

Medial Branch Blocks: Diagnostic procedures to identify the cause of neck or back pain. Local anesthetic blocks the nerves responsible for pain around the facet joints.

Radiofrequency Ablation: If medial branch blocks provide temporary relief, then a slightly more invasive procedure may be performed to provide longer lasting pain relief. The doctor guides a needle to proper level along the spine and threads a small wire into the needle. The wire is then heated to treat the medial branch nerve.

Discography: A diagnostic procedure to determine if the cause of pain stems from the degenerated disc. Dye is injected into the disc and imaging studies as well as your responses are recorded.

