



# Diagnostic Injections and Pain Management

## WHICH INJECTION PROCEDURE SHOULD I ORDER?

### SPINAL PROCEDURES AND INDICATIONS:

<b>DISCOGRAM (CERVICAL, THORACIC, LUMBAR)</b>	Discograms are useful in pre-surgical planning for those patients considering spinal fusion surgery. A discogram pinpoints the source of pain by deliberately provoking the symptoms. Patients who have not responded to medications and conservative treatments such as bed rest, traction or physical therapy, would be candidates for a discogram.
<b>EPIDURAL STEROID INJECTION (CERVICAL, THORACIC, LUMBAR)</b>	Epidural steroid injections (ESIs) provide treatment for pain associated with herniated or bulging discs, degeneration and spinal stenosis. This procedure may reduce inflammation, resulting in long-term pain relief and can provide valuable information on the source of pain. At CDI, ESIs may consist of a series of up to three injections within a six month period, which may be repeated after a minimum of three months at the referring provider's request.
<b>FACET JOINT INJECTION (CERVICAL, THORACIC, LUMBAR)</b>	A facet joint injection can be used for diagnostic purposes to identify the source of irritation in the small joints at each segment of the spine and may be used therapeutically to block the pain. The pain relief provided by this injection may enable the patient to undergo necessary conventional treatment, such as physical therapy for rehabilitation.
<b>MYELOGRAPHY</b>	Myelography is a diagnostic procedure performed on the spinal cord and/or nerves of patients with general back pain, previous surgery, implanted hardware or other reasons for not being able to have an MRI exam, including severe claustrophobia. Under fluoroscopic guidance, contrast is injected into the spinal canal. Immediately following, a CT scan is performed to capture images of the spinal canal and any associated spinal pathology.
<b>PIRIFORMIS INJECTION</b>	A piriformis injection, therapeutic procedure, utilizes a steroid medication, which is injected under fluoroscopy guidance, into the piriformis muscle. The steroid helps to reduce inflammation and relieve symptoms associated with piriformis syndrome, which may include sciatica, hip and low back pain, numbness, tingling or other symptoms.
<b>RADIOFREQUENCY (RF) RHIZOTOMY</b>	Radiofrequency rhizotomy is a therapeutic procedure designed to decrease or eliminate severe pain from degenerative facet nerves within the spine by applying highly localized heat to burn the nerve and therefore break the pain signal from the spine to the brain.
<b>SACROILIAC (SI) JOINT INJECTION</b>	Sacroiliac (SI) joint injections are used to confirm whether the SI joint is the source of a patient's pain. Indications include the diagnosis and/or treatment of pain arising from the SI joint. If a steroid is injected, this procedure may also help treat the pain by decreasing inflammation in the joint.
<b>TRIGGER POINT INJECTIONS</b>	Trigger point injections are used to detect if hardware implanted in the low back is the source of pain and should be removed.
<b>SELECTIVE NERVE ROOT BLOCK (CERVICAL, THORACIC, LUMBAR)</b>	Nerve root blocks are indicated for the diagnosis and/or treatment of pain originating from the spinal nerve roots. It is performed to determine if a specific spinal nerve root is the source of pain and/or inflammation around the nerve root. The procedure can help diagnose and/or treat back, neck, leg or arm pain.
<b>VERTEBROPLASTY</b>	A minimally invasive procedure, vertebroplasty provides relief for those with painful vertebral compression fractures, a common symptom and result of osteoporosis. Using image guidance, a special cement mixture is injected through a hollow needle into the fractured bone, providing stability and potentially restoring some height to the compressed vertebra.
<b>VERTEBRAL AUGMENTATION (KYPHOPLASTY)</b>	A minimally invasive procedure to help provide relief for those with painful vertebral compression fractures, a common symptom and result of osteoporosis. A cavity is created either with a balloon (inserted through a tube into the fractured vertebra where it is inflated to push the bone back to its normal height and shape) or with an instrument to restore the vertebra. Cement is then inserted into the cavity to help maintain the vertebral structure.

## MUSCULOSKELETAL PROCEDURES AND INDICATIONS:

<b>TROCHANTERIC BURSA INJECTION</b>	Trochanteric bursa injections can help relieve pain caused by an inflamed bursa sac resulting from chronic pressure or trauma to the area, leg-length abnormalities, obesity, rheumatoid arthritis, osteoarthritis or friction from a tight iliotibial band. Using fluoroscopic guidance, a combination of local anesthetic and steroid medication is injected into the trochanteric bursa.
<b>ISCHIAL TUBEROSITY INJECTION</b>	Ischial tuberosity injections are indicated when a chronic hamstring tendon origin injury was not responsive to conservative management or the ligament fibro-osseous junction is thought to be the cause of the pain. Using fluoroscopic guidance, a combination of local anesthetic and steroid medication is injected into this area to decrease inflammation and alleviate symptoms.
<b>BICEPS TENDON SHEATH INJECTION</b>	Biceps tendon sheath injections are indicated to reduce inflammation of the biceps tendon that may be causing pain and immobility. Using ultrasound guidance, a combination of local anesthetic and steroid medication is injected into this area.
<b>ILIOPSOAS TENDON SHEATH INJECTION</b>	Iliopsoas tendon sheath injections are indicated to reduce inflammation that may be causing groin pain. Using fluoroscopic guidance, a combination of local anesthetic and steroid medication is injected into the iliopsoas tendon sheath to decrease inflammation and alleviate symptoms.
<b>ILIOPSOAS BURSA INJECTION</b>	The iliopsoas bursa can become inflamed with various hip joint abnormalities, such as clinically suspected bursitis and/or tendinopathy of the native hip and post-arthroplasty hip, causing pain and limiting mobility. A combination of local anesthetic and steroid medication is injected into this area under fluoroscopic guidance to help decrease inflammation and alleviate symptoms.
<b>ARTHROGRAM (DIAGNOSTIC AND/OR THERAPEUTIC)</b>	A diagnostic arthrogram aids in the diagnosis of abnormalities or injuries to the cartilage, tendons and ligaments of the knee, shoulder, elbow, wrist, hip or ankle joint. Following the image-guided placement of the contrast agent into the joint, an MRI is completed to aid the radiologist in making an accurate diagnosis of the patient's condition. When MRI is contraindicated, a CT scan can be substituted. Therapeutic arthrograms are also image-guided joint injections that primarily treat joint pain. Intra-articular hip and shoulder injections are the most common.
<b>SUBACROMIAL BURSA INJECTIONS</b>	Subacromial bursa injections are done under fluoroscopy and used to treat pain associated with clinically suspected impingement syndrome, subacromial bursitis and rotator cuff tendinopathy.
<b>SYMPHYSIS PUBIS INJECTION</b>	A symphysis pubis injections involves the fluoroscopically guided injection of local anesthetic and steroid into the symphysis pubis joint for diagnostic and potentially therapeutic purposes for pain and dysfunction associated with clinically suspected osteitis pubis.
<b>STERNOCLAVICULAR JOINT</b>	An injection is done under fluoroscopic guidance using a local anesthetic-corticosteroid injectate to treat pain in the sternoclavicular (SC) joint, in an attempt to relieve symptoms associated with SC joint irritation or arthritis.
<b>SUPRASCAPULAR NERVE BLOCK</b>	Injection of anesthetic and steroid adjacent to the suprascapular nerve performed with CT-guidance. This injection can provide safe short- and medium-term relief from pain and disability in patients with chronic soft tissue shoulder pathologies who do not respond well to conservative treatment.
<b>SCAPULOTHORACIC BURSA INJECTION</b>	Fluoroscopically guided injection of anesthetic and steroid for subscapular pain and crepitus caused by scapulothoracic bursitis. This injection may also be used diagnostically to differentiate between other sources of posterior shoulder pain as well as to select patients for surgical or arthroscopic debridement.

To consult with one of our radiologists, call 888.541.SCAN (7226).

TO SCHEDULE, CALL **952.541.1840**, FAX **952.543.6524** OR ORDER ONLINE AT **INSIDECDI.COM**