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# INTERVENTIONAL PAIN MANAGEMENT PRACTICE POLICIES

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Interventional pain management practice policies are statements developed to assist physician and patient decisions about appropriate health care related to chronic pain. These policies are professionally derived recommendations for practices in the diagnosis and treatment of chronic or persistent pain. They were developed utilizing a combination of evidence- and consensus-based techniques to increase patient access to treatment, improve outcomes and appropriateness of care, and optimize cost effectiveness.

These practice policies do not constitute inflexible treatment recommendations. It is recommended that a provider establish a plan of care on a case-by-case basis, taking into account an individual patient's medical condition, and the physician's experience. Based on an individual patient's needs, treatment different from that outlined here may be warranted.

## PURPOSES

The purposes of these policies are to:

1. Improve quality of care,
2. Improve patient access,
3. Improve patient outcomes,
4. Improve appropriateness of care,
5. Improve efficiency and effectiveness, and
6. Achieve cost containment by improving the cost-benefit ratio.

The most compelling single reason for the development of these practice policies is to improve the quality of care and life for patients suffering from painful disorders. Available evidence documents a wide degree of variance in the practice of interventional pain management and pain medicine

for even the most commonly performed procedures and treated condition(s). These policies also address the issue of systematic evaluation and ongoing care of chronic or persistent pain and provide information about the scientific basis of the procedures, thus potentially increasing compliance; dispelling misconceptions among providers and patients; managing patient expectations reasonably; and forming the basis of a therapeutic partnership among the patient, the provider, and the payer.

## SCOPE OF THE PROBLEM OF CHRONIC PAIN

In spite of the best efforts of the public, providers and the government, pain continues to be a problem of epidemic proportions. In addition, inadequate treatment of pain also continues to be a public health problem that is also reaching epidemic proportions in the United States and around the world. The knowledge and understanding of this complex entity, including diagnosis and treatment, are in their infancy, in spite of modern developments in medicine. Providers, patients, and the government all understand the devastating nature of chronic pain which destroys the quality of life by eroding the will to live, disturbing sleep and appetite, creating fatigue, and impairing recovery from illness or injury. In elderly patients it may make the difference between life and death by resulting in vocational, social, and family discord.

Among the chronic pain problems, spinal pain, which includes pain emanating from cervical, thoracic and lumbosacral regions, constitutes the majority of the problems. It is estimated that episodes of low back pain that are frequent or persistent have been reported in 15% of the US population, with a lifetime prevalence of 65% to 80%. The prevalence of neck pain, though not as common as that of low back pain, is

estimated at 35% to 40%, of which 30% of patients will develop chronic symptoms. In contrast, the epidemiological data in relation to thoracic pain support the view that the thoracic spine is less commonly involved. The prevalence of spinal pain has been estimated in the general population at 66%, with only 15% of those reporting thoracic pain; in comparison to 56% to 44% for the lumbar and cervical regions, respectively. The study of the prevalence of chronic low back pain and its impact on general health in the Canadian population showed an 84% lifetime prevalence, with 47% of the patients reporting grade I pain (low pain intensity and low disability), 12% grade II pain (high pain intensity and low disability), 13% grade III (high pain intensity/moderate disability) and grade IV (high pain intensity/severe disability). They also reported that grade I low back pain was more common in the younger population, while older age groups reported higher incidence of grade III/IV pain. Thus, a total 13% of the population suffers with high pain intensity with moderate or severe disability, whereas an additional 12% suffer with high pain intensity but with low disability. A similar study evaluating neck pain and its related disability reported that, overall, 39% of the sample experienced grade I neck pain; whereas 9% experienced grade II neck pain, and 5% had grade III and IV neck pain. Almost 16% of the respondents reported having previously injured the neck in a motor vehicle collision.

Duration of back pain and its chronicity have been a topic of controversy. It is believed that most of these episodes will be short-lived, with 80% to 90% of attacks resolving in about 6 weeks irrespective of the administration or type of treatment; and 5% to 10% of patients developing persistent back pain. However, this concept has been questioned, as the condition tends to relapse, so most patients will experience multiple episodes. Prevalence of low back pain has ranged from 35% to 79% at 3 months and 35% to 75% at 12 months in recent studies. The studies evaluating the chronicity of low back pain estimated the average of age-related prevalence of persistent low back pain as 12% in children and adolescents, 15% in adults, and 27% in the elderly.

## EVALUATION

Appropriate history, physical examination, and medical decision making comprise the initial evaluation of a patient's presenting symptoms. A patient's evaluation should not only meet all the required medical criteria but also meet the regulatory requirements. The guidelines of the Centers for Medicare and Medicaid, formerly the Health Care Financing Administration provide various criteria for five levels of services. The three crucial components of evaluation and management services are: history, physical examination, and medical decision making. Other components include: counseling, coordination of care, nature of presenting problem, and time.

## HISTORY

The history includes:

- ◆ Chief complaint;
- ◆ History of present illness;
- ◆ Review of systems; and
- ◆ Past, family, and/or social history.

### Chief Complaint

The chief complaint is a concise statement describing the symptom, problem, condition, diagnosis, or other factor that is the reason for the encounter, usually stated in the patient's words.

### History of Present Illness

The history of present illness is a chronological description of the development of the patient's present illness from the first sign and/or symptom. It includes the following elements:

- ◆ Location,
- ◆ Quality,
- ◆ Severity,
- ◆ Duration,
- ◆ Timing,
- ◆ Context,
- ◆ Modifying factors, and
- ◆ Associated signs and symptoms.

### Review of Systems

The review of systems is an inventory of body systems obtained through a series of questions seeking to identify signs and/or symptoms that the patient may be experiencing or has experienced.

### Past, Family, and/or Social History

The past, family, and/or social history consists of a review of the past history of the patient including past experiences, illnesses, operations, injuries, and treatment; family history, including a review of medical events in the patient's family, hereditary diseases, and other factors; and social history appropriate for age reflecting past and current activities.

Past history in interventional pain medicine includes history of past pain problems and motor vehicle, occupational, or nonoccupational injuries; history of headache, neck pain, upper-extremity pain, pain in the upper or mid back or chest wall, pain in the lower back or lower extremities, and pain in joints; and disorders such as arthritis, fibromyalgia, or systemic lupus erythematosus.

Family history includes history of pain problems in the

family, degenerative disorders, familial disorders, drug dependency, alcoholism, or drug abuse; and psychological disorders such as depression, anxiety, schizophrenia, and suicidal tendencies, etc. Family history of medical problems is also important.

Social history includes environmental information, education, marital status, children, habits, hobbies, and occupational history, whenever available.

### Physical Examination

Physical examination in interventional pain medicine involves general, musculoskeletal, and neurological examination.

Examination of other systems, specifically cardiovascular, lymphatic, skin, eyes, and cranial nerves is recommended, based on the presenting symptomatology.

### Medical Decision Making

Medical decision making refers to the complexity of establishing a diagnosis and/or selecting a management option as measured by three components, including;

1. Diagnosis/management options with a number of possible diagnoses and/or the number of management options;
2. Review of records/investigations, with number and/or complexity of medical records, diagnostic tests, and other information that must be obtained, reviewed, and analyzed; and
3. Risk(s) of significant complications, morbidity and mortality, as well as comorbidities associated with the patient’s presenting problem(s), the diagnostic procedure(s), and/or the possible management options.

Psychological evaluation, laboratory evaluation, imaging techniques, electromyography and nerve conduction and somatosensory evoked potentials are also an extension of the evaluation process. It is beyond the scope of these guidelines to discuss these techniques of assessment.

Appropriate history and physical examination with the assistance of other evaluations should direct a physician to formulate a provisional diagnosis. A suggested algorithm for comprehensive evaluation and management of chronic pain is illustrated in Fig. 1.

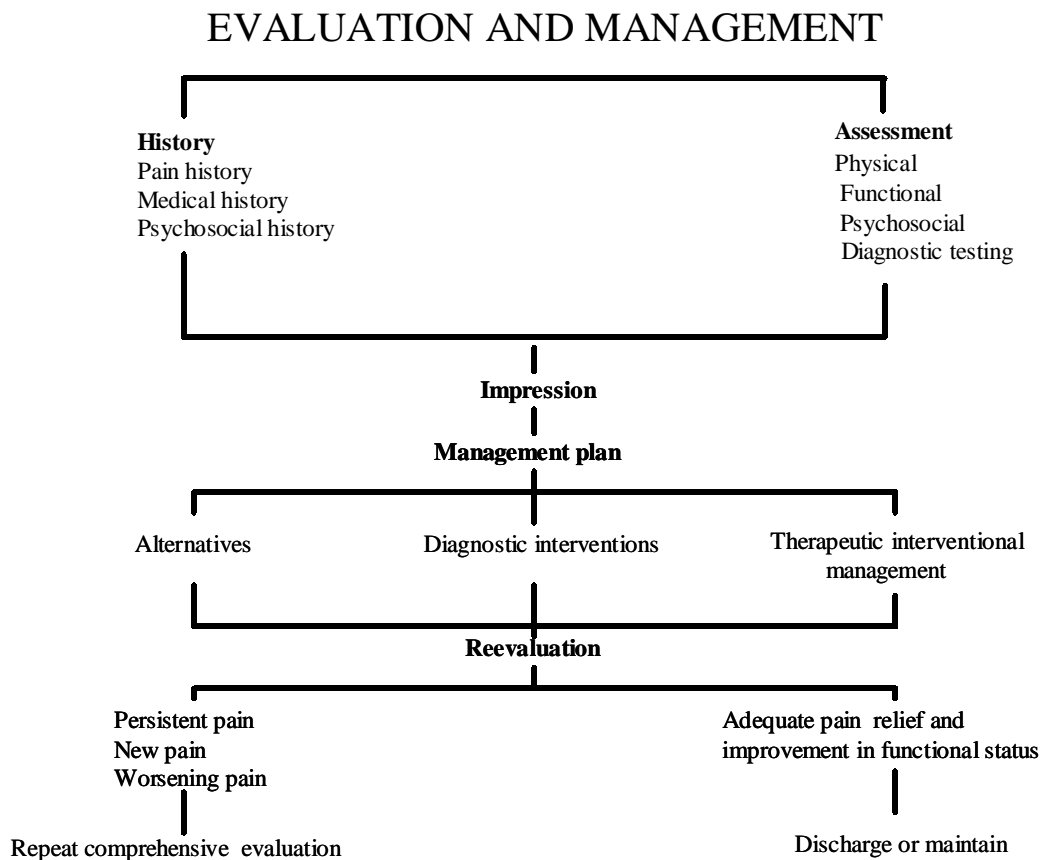


Fig 1. Suggested algorithm for comprehensive evaluation and management of chronic pain

In summary, the following criteria should be considered carefully in performing interventional techniques:

1. Complete initial evaluation, including history and physical examination;
2. Physiological and functional assessment, as necessary and feasible;
3. Definition of indications and medical necessity, as follows:
  - Suspected organic problem;
  - Nonresponsiveness to less invasive modalities of treatment except in acute situations such as acute disc herniation, herpes zoster and postherpetic neuralgia, reflex sympathetic dystrophy, and intractable pain secondary to carcinoma;
  - Pain and disability of moderate-to-severe degree;
  - No evidence of contraindications such as severe spinal stenosis resulting in intraspinal obstruction, infection, or predominantly psychogenic pain;
  - Responsiveness to prior interventions with improvement in physical and functional status for repeat blocks or other interventions;
  - Repeating interventions only upon return of pain and deterioration in functional status.

## INTERVENTIONAL TECHNIQUES

The overall benefit of various types of injection techniques includes pain relief outlasting by days, weeks, or months the relatively short duration of pharmacologic action of the local anesthetics and other agents used. Clear-cut explanations for these benefits are not currently available. It is believed that neural blockade alters or interrupts nociceptive input, reflex mechanisms of the afferent limb, self-sustaining activity of the neuron pools and neuraxis, and the pattern of central neuronal activities. The explanations are based in part on the pharmacological and physical actions of local anesthetics, corticosteroids, and other agents. It is also believed that local anesthetics interrupt the pain-spasm cycle and reverberating nociceptor transmission, whereas corticosteroids reduce inflammation either by inhibiting the synthesis or release of a number of pro-inflammatory substances. Various modes of action of corticosteroids include membrane stabilization; inhibition of neural peptide synthesis or action; blockade of phospholipase A<sub>2</sub> activity; prolonged suppression of ongoing neuronal discharge; suppression of sensitization of dorsal horn neurons; and reversible local anesthetic effect. In addition, local anesthetics have been shown to produce prolonged dampening of C-fiber activity. Physical effects include clearing adhesions or inflammatory exudates from the vicinity of the nerve root sleeve. The scientific basis of some of these concepts, at least in part, is proven for spinal pain management with epidural injections of betamethasone, and intravenous (IV) methylprednisolone.

## DIAGNOSTIC INTERVENTIONAL TECHNIQUES

Diagnostic blockade of a structure with a nerve supply which can generate pain can be performed to test the hypothesis that the target structure is a source of the patient's pain. Testing the hypothesis by provoking pain in any structure is an unreliable criterion except in provocative discography. Although neurodiagnostics of the involved nerve pathways have proven valuable, the relief of pain is the essential criterion in almost all structures, including analgesic discography in the cervical spine, the only deviation being lumbar discs. If the pain is not relieved, the source may be in another structural component of the spine similar to the one tested such as a different facet joint or a different nerve root or some other structure. Thus, precision diagnostic injections directed towards specific spinal pathology are potentially powerful tools for diagnosis of chronic spinal pain, but often technically challenging. Identifying the specific pathology responsible for pain is often difficult, leading to frustrated patients and clinicians. Nevertheless, these injections may be safely performed by properly trained anesthesiologists, physiatrists, neurologists, radiologists, spine surgeons and physicians from other related specialties who take the time to learn the basis for and perfect the application of these techniques.

When the source of pain is more than one structure or multiple levels, it is not expected that all the pain will be relieved. For example, there may be painful facet joints bilaterally at a given segmental level, in which case anesthetizing the left joint should relieve the left side, but not the right side; there may be pain from two consecutive joints on one side, in which case anesthetizing the lower joint alone may relieve only the lower half of the pain; or there may be more than one structure involved, such as pain contributed by discs and facet joints or facet joints and nerves.

True positive responses are secured by performing controlled blocks. Ideally, this should be in the form of placebo injections of normal saline; but logistical and/or ethical considerations prohibit the use of normal saline in conventional practice.

## Rationale

The rationale for diagnostic neural blockade in the management of spinal pain stems from the fact that clinical features and imaging or neurophysiologic studies do not permit the accurate diagnosis of the causation of spinal pain in the majority of patients in the absence of disc herniation and neurological deficit. Further rationale is based on the recurring facts showing the overall rate of inaccurate or incomplete diagnosis in patients referred to pain treatment centers as ranging from 40% to 67%, the incidence of psychogenic pain to be only 1 in 3,000 patients, and the presence of organic origin of the pain mistakenly branded as psychosomatic in

98% of cases. Finally, chronic low back pain is a diagnostic dilemma in 85% of patients, even in experienced hands with all the available technology. It has been determined that utilizing alternative means of diagnosis including precision diagnostic blocks in cases where there is a lack of definitive

diagnostic radiologic or electrophysiologic criteria can enable an examiner to identify the source of pain in the majority of patients, thus reducing the proportion of patients who cannot be given a definite diagnosis from 85% to 30% or even as low as 15%.

## THERAPEUTIC INTERVENTIONAL TECHNIQUES

### Rationale

The rationale for therapeutic interventional techniques in the spine is based upon several considerations: the cardinal source of chronic spinal pain, namely discs and joints, is accessible to neural blockade; removal or correction of structural abnormalities of the spine may fail to cure and may even worsen painful conditions; degenerative processes of the spine and the origin of spinal pain are complex; and the effectiveness of a large variety of therapeutic interventions in managing chronic spinal pain has not been demonstrated conclusively. It has been shown that there is no conclusive evidence supporting the effectiveness of numerous conservative modalities used in managing chronic low back pain, including drug therapy, manipulation, back schools, electromyographic biofeedback therapy, exercise therapy, traction and orthoses, behavioral/cognitive/relaxation therapy, and transcutaneous electrical nerve stimulation. There are a multitude of interventional techniques in the management of chronic pain, including not only neural blockade but also minimally invasive surgical procedures such as peripheral nerve blocks, trigger-point injections, epidural injections, facet joint injections, sympathetic blocks, neuroablation techniques, intradiscal thermal therapy, disc decompression, morphine pump implantation, and spinal cord stimulation.

### EPIDURAL INJECTIONS

#### Description

Spinal pain generates from multiple structures in the spine with a nerve supply capable of causing pain similar to that seen in clinically normal volunteers, and which are susceptible to diseases or injuries that are known to be painful. Certain conditions may not be detectable using currently available technology or biochemical studies. However, for a structure to be implicated, it should have been shown to be a source of pain in patients, using diagnostic techniques of known reliability and validity. The structures responsible for pain in the spine include the intervertebral discs, spinal cord, nerve roots, facet joints, ligaments, muscles, atlanto-occipital joints, atlanto-axial joints, and sacroiliac joints.

One of the most common structures responsible for pain in the spine is the intervertebral disc. Even though disc herniation is seen only in a small number of patients, degeneration of the disc resulting in primary discogenic pain is seen much more commonly. In contrast to a ruptured disc with pain arising from the nerve root, in discogenic pain a disc with or without internal disruption is implicated rather than the nerve root.

Postlaminectomy syndrome or pain following operative procedures of the spine, sometimes known as failed manage-

ment syndrome, is becoming a common entity in modern medicine. It is estimated that 20% to 30% of spinal surgeries, occasionally up to as high as 60%, may not be successful as a result of either the surgery being inadequate, incorrect, or unnecessary; but also it may result following a well-indicated and well-performed surgical procedure. Even in cases of successful surgery, pain and subsequent disability have returned after variable periods of 6 months to 20 years. However, surgical results are extremely poor in patients after a failed surgical procedure. Other spinal conditions include various degenerative disorders such as spinal stenosis, spondylolysis, spondylolisthesis, degenerative scoliosis, idiopathic vertebral sclerosis, diffuse idiopathic spinal hyperostosis, and segmental instability. Degenerative conditions other than disc disruption and facet arthritis may contribute to approximately 5% to 10% of spinal pain.

#### CPT Code(s)

- ◆ 62310 – Injection, single, not including neurolytic substances, with or without contrast of diagnostic or therapeutic substance(s), epidural or subarachnoid; cervical or thoracic
- ◆ 62311 – Injection, single, not including neurolytic substances, with or without contrast of diagnostic or therapeutic substance(s), epidural or subarachnoid; lumbar, sacral (caudal)
- ◆ 62318 – catheter placement, continuous infusion for intermittent bolus; epidural or subarachnoid; cervical or thoracic
- ◆ 62319 – catheter placement, continuous infusion for intermittent bolus; epidural, lumbar, sacral (caudal)
- ◆ 64479 – cervical/thoracic transforaminal epidural, single level
- ◆ 64480 – cervical/thoracic transforaminal epidural, each additional level
- ◆ 64483 – transforaminal epidural; lumbar or sacral, single level
- ◆ 64484 – transforaminal epidural; lumbar or sacral, each additional level
- ◆ 72275 – Epidurography, radiological supervision and interpretation
- ◆ 76005 – fluoroscopic guidance and needle localization

#### Indications and Medical Necessity

The following criteria should be considered carefully in performing epidural injections:

1. Complete initial evaluation including history and physical examination;
2. Physiological and functional assessment, as necessary and feasible;
3. Definition of indications and medical necessity, as follows:

- Suspected organic problem;
- Nonresponsiveness to conservative modalities of treatment except in acute situations such as acute disc herniation, herpes zoster and postherpetic neuralgia, reflex sympathetic dystrophy, and intractable pain secondary to carcinoma;
- Pain and disability of moderate-to-severe degree;
- No evidence of contraindications such as severe spinal stenosis resulting in intraspinal obstruction, infection, or predominantly psychogenic pain;
- Responsiveness to prior interventions with improvement in physical and functional status for repeat blocks or other interventions;
- Repeating interventions only upon return of pain and deterioration in functional status.

## Approaches to Epidural Space

Approaches available to access the epidural space are the interlaminar (cervical, thoracic, and lumbar), transforaminal (cervical, thoracic, lumbar, and sacral), and caudal. The perceived advantages of each of the three approaches include:

1. The interlaminar entry is directed more closely to the assumed site of pathology, facilitating delivery of the injectate directly to its target and requiring less volume.
2. The caudal entry is relatively easily achieved, with minimal risk of inadvertent dural puncture.
3. The transforaminal approach is target specific in fulfilling the aim of reaching the primary site of pathology.

The disadvantages of each of the three approaches include:

1. With caudal entry:
  - The necessity of injection of a substantial volume of fluid;
  - Unrecognized placement of the needle outside the epidural space in a substantial number of cases;
2. With interlaminar entry, at the cervical, thoracic, or lumbar levels:
  - Extradural placement of the needle that may go unrecognized without fluoroscopic guidance;
  - The possibility of erroneously missing the targeted interspace by one or two levels without fluoroscopic guidance, specifically in the thoracic and lumbar regions;
  - The necessity of positioning the needle one level below the site of suspected pathology due to preferential cranial flow of solutions in the epidural space;
  - The potential for deviation of the needle toward the nondependent side, and difficulty that may be encountered with placement of injectate below L5 for S1 nerve root involvement;
  - The trauma of the needle to the spinal cord is becoming a major issue in the cervical, thoracic, and

upper lumbar regions;

- Potential risk of dural puncture, and postdural puncture headache, as well as total spinal block;
3. With transforaminal entry:
    - Potential risk of intraneural injection and neural trauma.

## ICD-9 Codes That Support Medical Necessity

1. Postlaminectomy syndrome
  - 722.81 cervical, 722.82 thoracic, 722.83, lumbosacral
2. Disc displacement without myelopathy (disc herniation, radiculitis, disc extrusion, disc protrusion, disc prolapse, discogenic syndrome).
  - 722.0 cervical, 722.11 thoracic, 722.10 lumbosacral
3. Disc displacement with myelopathy
  - 722.71 cervical, 722.72 thoracic, 722.73 lumbosacral
4. Degeneration of intervertebral disc (includes narrowing of disc space)
  - 722.4 cervical, 722.51 thoracic, 722.52 lumbosacral
5. Radiculitis
  - 723.4 cervical, 724.4 thoracic, 724.4 lumbosacral
6. Spinal stenosis
  - 723.0 cervical, 724.04 thoracic, 724.02 lumbosacral
7. Spondylosis with myelopathy
  - 721.1 cervical, 721.41 thoracic, 721.42 lumbosacral
8. Closed fracture of spine
  - 805.0 cervical, 805.2 thoracic, 805.4 lumbar, 805.6 sacral
9. Congenital spondylolysis
  - 756.11 cervical, 756.11 thoracic, 756.11 lumbosacral
10. Acquired/degenerative spondylolysis or acquired spondylolisthesis
  - 738.4 cervical, 738.4 thoracic, 738.4 lumbosacral
11. Congenital spondylolisthesis
  - 756.12 cervical, 756.12 thoracic, 756.12 lumbosacral
12. Coccygodynia 724.79
13. Sciatica 724.3
14. Complex regional pain syndrome (Type I or reflex sympathetic dystrophy)
  - 337.20 reflex sympathetic dystrophy unspecified, 337.21 reflex sympathetic dystrophy upper limb, 337.22 reflex sympathetic dystrophy lower limb, 337.29 reflex sympathetic dystrophy other unspecified site
15. Complex regional pain syndrome (Type II or causalgia)
  - 355.9 causalgia, 354.4 causalgia upper limb, 355.71 causalgia lower limb
16. Peripheral neuropathy
  - 356.4 idiopathic, 356.0 hereditary, 357.2 diabetic, 357.5 alcoholic, 357.6 due to drug
17. Limb pain
  - 353.6 phantom limb pain, 997.60 stump pain, 997.61 neuroma of amputation stump, 342.0 hemiplegia – flaccid, 342.1 hemiplegia – spastic
18. Postherpetic neuralgia
  - 053.10 with unspecified nerve system complication

- 053.13 postherpetic polyneuropathy
- 19. Pain syndromes secondary to neoplasm 141.0 - 239.9
- 20. Vascular ischemic pain 440.22

## Frequency and Number of Injections or Interventions

- ◆ In the diagnostic phase, a patient may receive injections at intervals of no sooner than 1 week or preferably, 2 weeks, except for blockade in cancer pain or when a continuous administration of local anesthetic is employed for reflex sympathetic dystrophy.
- ◆ In the therapeutic phase (after the diagnostic phase is completed), the frequency of interventional techniques should be 2 months or longer between each injection, provided that at least >50% relief is obtained for 6 to 8 weeks. However, if the neural blockade is applied for different regions, it can be performed at intervals of no sooner than 1 week and preferably 2 weeks for most type of blocks. The therapeutic frequency must remain at least 2 months for each region. It is further suggested that all regions be treated at the same time, provided all procedures are performed safely.
- ◆ In the diagnostic phase, the number of injections should be limited to no more than four times except for reflex sympathetic dystrophy, in which case six times should be reasonable.
- ◆ In the treatment or therapeutic phase, the interventional procedures should be repeated only as necessary judging by the medical necessity criteria, and these should be limited to a maximum of six times.
- ◆ Under unusual circumstances with a recurrent injury, carcinoma, or reflex sympathetic dystrophy, blocks may be repeated at intervals of 6 weeks after diagnosis/stabilization in the treatment phase.

## Combinations of Blocks/Interventions

It may be essential to combine, in certain circumstances, more than one block. This may include an epidural for the cervical region and facet-joint blocks for the lumbar region; or epidural and facet-joint blocks for the same region in the case of identification of pain generators from both sources.

## Number Per Setting

It is recommended that a physician should consider a patient in totality and treat multiple regions of the patient in the same setting, as long as it is safe and feasible. Attempts to treat one particular organ at a different time are not an absolute necessity.

Multiple blocks are only provided with proper evaluation to determine pain generator(s). Once a structure is proven to be negative, no interventions must be directed at that structure.

However, no more than five procedures (different procedures and/or multiples of different procedures - or total line items or procedures) may be billed in one setting when the procedures are performed in multiple regions. For treatment of a single region with only epidurals (only lumbosacral spine or cervical spine, a maximum of two procedures should be billed.) If combined with others with medical necessity, a maximum of four procedures may be billed for one region. Procedure billing excludes CPT 76005, which may be added in addition to the above.

## Documentation Requirements

The patient's medical record must contain documentation that fully supports the medical necessity for epidural injections.

Documentation must also support the frequency and the appropriateness of this procedure, as opposed to alternate forms of therapy.

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## FACET JOINT BLOCKS

### Description

Spinal pain generates from multiple structures in the spine with a nerve supply capable of causing pain similar to that seen in clinically normal volunteers, and which are susceptible to diseases or injuries that are known to be painful. Certain conditions may not be detectable using currently available technology or biochemical studies. However, for a structure to be implicated, it should have been shown to be a source of pain in patients, using diagnostic techniques of known reliability and validity. The structures responsible for pain in the spine include the intervertebral discs, spinal cord, nerve roots, facet joints, ligaments, and muscles.

Even though disc herniation, strained muscles, and torn ligaments have been attributed in the past to be the cause of most spinal pain either in the neck and upper extremities, upper and mid back, or low back and lower extremities; disorders of the spinal joints, which include facet joints, have been implicated more commonly than disc herniation, attributing some 50% of spinal pain to these joints. Facet joints were described as a potential source of low back pain as early as 1911, 20 years earlier than ruptured discs. The existence of lumbar facet joint pain is supported by a preponderance of scientific evidence, even though a few detractors have disputed this. The prevalence of facet joint pain in patients with chronic spinal pain has been established as 15% to 50% in low back pain, and 54% to 60% in neck pain, utilizing controlled diagnostic blocks, based on type of setting and population studied.

Postlaminectomy syndrome or pain following operative procedures of the spine is estimated to occur following 20% to 30% of spinal surgeries and occasionally up to as high as 40%. Surgery may not be successful as a result of either the surgery being inadequate, incorrect, or unnecessary; but also it may be unsuccessful following a well-indicated and well-performed surgical procedure. Even in cases of successful surgery, pain and subsequent disability have returned after variable periods of from 6 months to 20 years. In these cases, destabilization of the spinal joints, scar tissue development, and recurrent or repeat disc herniation may be responsible for continued pain problems. However, surgical results are extremely poor in patients after a failed surgical procedure. Facet joints are involved in approximately 30% of the patients in this phase.

In managing low back pain, local anesthetic injection into the facet joints or interruption of the nerve supply to the facet joints has been accepted as the standard for diagnosis of facet joint pain. Since a single joint is innervated by at least two medial branches, two adjacent levels should always be blocked.

If the pain is relieved, the joint may be considered to be the source of pain. However, false-positive responses must be

ruled out, which may be seen in almost 47% of the patients.

- ◆ All the patient's pain need not be relieved, for it is possible that a patient may have several sources of pain.
- ◆ Comparative local anesthetic blocks, should be administered so that the same joint is anesthetized on two separate occasions, but using local anesthetics with different durations of action or placebo blocks.
- ◆ A true positive response confirms that the joint is the source of the pain, with a confidence of 85%.

It is recognized that it may be necessary to provide additional blocks such as transforaminal epidural blocks and disc injections in conjunction with facet-joint blocks. It is also recognized that multiple levels of facet-joint blocks may be performed in one setting, either in the same region or in multiple regions, more commonly than not.

Multiple blocks are only provided with proper evaluation to determine pain generator(s). Once a structure is proven to be negative, no interventions must be directed at that structure.

Therapeutic facet joint blocks are based on the outcome of a diagnostic facet-joint block, with the patient obtaining sufficient relief for a meaningful period of time; but when pain recurs, a repeat block utilizing a small dose of local anesthetic and steroid provides longer-lasting relief (4 to 8 weeks).

If facet joint pain is present in conjunction with radiculopathy, both ailments should be managed.

### CPT Code(s)

- ◆ 64470 – Cervical paravertebral facet joint nerve block, single level
- ◆ 64472 – Injection, cervical facet joint nerve block, each additional level
- ◆ 64475 - Injection, lumbar facet joint nerve block, single level
- ◆ 64476 - Injection, lumbar facet joint nerve block, each additional level
- ◆ 76005 – Fluoroscopic guidance and needle localization

### Indications and Medical Necessity

The following criteria should be considered carefully in performing facet blocks:

- 1 Complete initial evaluation, including history and physical examination;
- 2 Physiological and functional assessment, as necessary and feasible;
- 3 Definition of indications and medical necessity, as follows:
  - Suspected organic problem;

- Nonresponsiveness to conservative modalities of treatments;
- Pain and disability of moderate-to-severe degree;
- No evidence of contraindications such as severe spinal stenosis resulting in intraspinal obstruction, infection, or predominantly psychogenic pain;
- Responsiveness to prior interventions with improvement in physical and functional status for repeat blocks or other interventions;
- Repeating interventions only upon return of pain and deterioration in functional status.

## ICD-9 Codes That Support Medical Necessity

1. Spondylosis without myelopathy, dorsal arthritis, osteoarthritis, and spondyloarthritis (facet-joint arthropathy)
  - 721.0 cervical, 721.2 thoracic, 721.3 lumbar, and 721.7 traumatic spondylopathy
2. Postlaminectomy syndrome
  - 722.81 cervical; 722.82 thoracic; 722.83 lumbar
3. Spondylolysis
  - 756.11 congenital, 738.4 acquired
4. Spondylolisthesis
  - 756.12 congenital, 738.4 acquired

It is the responsibility of the provider to code to the highest level specified in the ICD-9-CM eg, to the fourth or fifth digit. The service must be reasonable and necessary in the specific case and must meet criteria specified in the policy.

## Noncovered ICD-9 Codes

Any code not listed in the “ICD-9 Codes That Support Medical Necessity” section of this policy may not be covered, unless specific additional information is provided.

## Frequency and Number of Injections or Interventions

- ◆ In the diagnostic phase, a patient may receive injections at intervals of no sooner than 1 week or, preferably, 2 weeks.
- ◆ In the therapeutic phase (after the stabilization is completed), the frequency should be 2 months or longer between each injection, provided that at least > 50% relief is obtained for 6 weeks. However, if the neural blockade is applied for different regions, it can be performed at intervals of no sooner than 1 week or preferably 2 weeks for most type of blocks. The therapeutic frequency must remain at 2 months for each region. It is further suggested that all regions be treated at the same time, provided all procedures are performed safely. Administar Federal of Kentucky and Indiana limits to a total of six blocks

per year, per region.

- ◆ In the diagnostic or stabilization phase, the number of injections should be limited to no more than four times per year.
- ◆ In the treatment or therapeutic phase, the interventional procedures should be repeated only as necessary judging by the medical necessity criteria, and these should be limited to a maximum of six times for local anesthetic and steroid blocks for a period of 1 year.
- ◆ Under unusual circumstances with a recurrent injury or cervicogenic headache, blocks may be repeated at intervals of 6 weeks after stabilization in the treatment phase.

## Number Per Setting

It is recommended that a physician should consider a patient in totality and treat multiple regions of the patient in the same setting, as long as it is safe and feasible. Attempts to treat one particular organ at a different time are not an absolute necessity.

However, no more than five procedures (different procedures and/or multiples of one procedure – or total line items or procedures) must be billed in one setting for any of the following: the procedures are performed in different regions or a combination of procedures in multiple regions. For treatment of a single region, eg, only lumbosacral spine or cervical spine, a maximum of four procedures (different procedures and/or multiple of one procedure – or total line items or procedures) should be billed. Procedure billing excludes CPT 76005, which may be added in addition to the above.

## Documentation Requirements

The patient’s medical record must contain documentation that fully supports the medical necessity for facet joint injections and neurolytic blocks as it is covered by Medicare as described above.

Documentation must also support the frequency and the appropriateness of this procedure, as opposed to alternate forms of therapy.

## Sources of Information

1. Manchikanti L, Singh V, Kloth D et al. Interventional techniques in the management of chronic pain: Part 2.0. *Pain Physician* 2001; 4:24-96.
2. Bogduk N. International Spinal Injection Society guidelines for the performance of spinal injection procedures. Part 1: Zygapophyseal joint blocks. *Clin J Pain* 1997; 13:285-302.
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  15. Manchikanti L. Facet joint pain and the role of neural blockade in its management. *Cur Rev Pain* 1999; 3:348-358.
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  20. Manchikanti L, Singh V, Pampati V et al. Evaluation of the prevalence of facet joint pain in chronic thoracic pain. *Pain Physician* 2002; 5:354-359.
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  24. Manchikanti L, Singh V. Review of chronic low back pain of facet joint origin. *Pain Physician* 2002; 5:83-101.

## FACET JOINT NEUROLYTIC BLOCKS

### Description

Spinal pain generates from multiple structures in the spine with a nerve supply capable of causing pain similar to that seen in clinically normal volunteers, and which are susceptible to diseases or injuries that are known to be painful. Certain conditions may not be detectable using currently available technology or biochemical studies. However, for a structure to be implicated, it should have been shown to be a source of pain in patients, using diagnostic techniques of known reliability and validity. The structures responsible for pain in the spine include the intervertebral discs, spinal cord, nerve roots, facet joints, ligaments, and muscles.

Even though disc herniation, strained muscles, and torn ligaments have been attributed in the past to be the cause of most spinal pain either in the neck and upper extremities, upper and mid back, or low back and lower extremities; disorders of the spinal joints, which include facet joints, have been implicated more commonly than disc herniation, attributing some 50% of spinal pain to these joints. Facet joints were described as a potential source of low back pain as early as 1911, 20 years earlier than ruptured discs. The existence of lumbar facet joint pain is supported by a preponderance of scientific evidence, even though a few detractors have disputed this. The prevalence of facet joint pain in patients with chronic spinal pain has been established as 15% to 45% in low back pain, and 54% to 60% in neck pain utilizing controlled diagnostic blocks.

Facet joint denervation is based on the outcome of a diagnostic facet-joint block, with the patient obtaining sufficient relief for a meaningful period of time; but, when pain recurs, a repeat block utilizing a small dose of local anesthetic and steroid does not provide longer-lasting relief. This is performed either by injecting neurolytic substance or by denervation utilizing radiofrequency thermoneurolysis or cryoneurolysis.

If facet joint pain is present in conjunction with radiculopathy, both ailments should be managed.

### CPT Code(s)

- ◆ 64626 – destruction by neurolytic agent, paravertebral facet joint nerve; cervical or thoracic, single level
- ◆ 64627 - destruction by neurolytic agent, paravertebral facet joint nerve; cervical or thoracic, each additional level
- ◆ 64622 - destruction by neurolytic agent, paravertebral facet joint nerve; lumbar or sacral, single level
- ◆ 64623 – destruction by neurolytic agent, paravertebral facet joint nerve; lumbar or sacral, each addi-

tional level

- ◆ 76005 – fluoroscopy code

### Indications and Medical Necessity

The following criteria should be considered carefully in performing facet neurolytic blocks:

1. Complete initial evaluation including history and physical examination;
2. Physiological and functional assessment, as necessary and feasible;
3. Definition of indications and medical necessity, as follows:
  - Suspected organic problem;
  - Nonresponsiveness to conservative modalities of treatments;
  - Pain and disability of moderate-to-severe degree;
  - No evidence of contraindications such as severe spinal stenosis resulting in intraspinal obstruction, infection, or predominantly psychogenic pain;
  - Responsiveness to prior interventions with improvement in physical and functional status for repeat blocks or other interventions.
  - Repeating interventions only upon return of pain and deterioration in functional status.
4. Confirmation of facet joint pain with double diagnostic blocks.

### ICD-9 Codes That Support Medical Necessity

1. Spondylosis without myelopathy, dorsal arthritis, osteoarthritis, and spondyloarthritis (facet-joint arthropathy)
  - 721.0 cervical, 721.2 thoracic, 721.3 lumbar, and 721.7 traumatic spondylopathy
2. Postlaminectomy syndrome
  - 722.81 cervical; 722.82 thoracic; 722.83 lumbar
3. Spondylolysis
  - 756.11 congenital, 738.4 acquired
4. Spondylolisthesis
  - 756.12 congenital, 738.4 acquired

It is the responsibility of the provider to code to the highest level specified in the ICD-9-CM, eg, to the fourth or fifth digit. The service must be reasonable and necessary in the specific case and must meet criteria specified in the policy.

### Noncovered ICD-9 Codes

Any code not listed in the “ICD-9 Codes That Support Medical Necessity” section of this policy may not be covered, unless specific additional information is provided.

## Frequency and Number of Injections or Interventions

- ◆ The frequency should be 3 months or longer between each neurolytic procedure, provided that at least > 50% relief is obtained for 10 to 12 weeks. However, if the neural blockade is applied for different regions, it can be performed at intervals of no sooner than 1 week or, preferably, 2 weeks for most type of blocks. The therapeutic frequency for neurolytic blocks must remain at least at 3 months for each region. It is further suggested that all regions be treated at the same time, provided all procedures are performed safely.
- ◆ Under unusual circumstances with a recurrent injury or cervicogenic headache, blocks may be repeated at intervals of 2 months after stabilization in the treatment phase.

## Number Per Setting

It is recommended that a physician should consider a patient in totality and treat multiple regions of the patient in the same setting, as long as it is safe and feasible. Attempts to treat one particular organ at a different time are not an absolute necessity.

However, no more than five procedures (different procedures and/or multiples of one procedure – or total line items or procedures) must be billed in one setting for any of the following: the procedures are performed in different regions or a combination of procedures is performed in multiple regions. For treatment of a single region, eg, only lumbosacral spine or cervical spine, a maximum of four procedures (different procedures and/or multiple of one procedure – or total line items or procedures) should be billed. Procedure billing excludes CPT

76005, which may be added in addition to the above.

## Documentation Requirements

The patient's medical record must contain documentation that fully supports the medical necessity for facet joint injections and neurolytic blocks.

Documentation must also support the frequency and the appropriateness of this procedure, as opposed to alternate forms of therapy.

## Sources of Information

1. Manchikanti L, Singh V, Kloth D et al. Interventional techniques in the management of chronic pain: Part 2.0. *Pain Physician* 2001; 4:24-96.
2. Manchikanti L, Singh V, Vilims B et al. Medial branch neurotomy in management of chronic spinal pain: Systematic review of the evidence. *Pain Physician* 2002; 5:405-418.
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## PERCUTANEOUS LYSIS OF EPIDURAL ADHESIONS

### Description

Postlaminectomy syndrome or pain following operative procedures of the spine, sometimes known as failed management syndrome, is becoming a common entity in modern medicine. It is estimated that 20% to 30% of spinal surgeries, occasionally up to as high as 40%, may not be successful as a result of either the surgery being inadequate, incorrect, or unnecessary; but also it may result following a well-indicated and well-performed surgical procedure. Even in cases of successful surgery, pain and subsequent disability have returned after variable periods of from 6 months to 20 years. In these cases, scar tissue development, destabilization of the spinal joints, and recurrent or repeat disc herniation may be responsible for continued pain problems. However, surgical results are extremely poor in patients after a failed surgical procedure. Other spinal conditions producing chronic low back pain include disc displacement, internal disc disruption, facet arthropathy, and various other degenerative disorders such as spinal stenosis, spondylolysis, spondylolisthesis, degenerative scoliosis, idiopathic vertebro-genic sclerosis, diffuse idiopathic spinal hyperostosis, segmental instability; and multiple myofascial syndromes with involvement of muscles and ligaments.

Percutaneous nonendoscopic adhesiolysis and injection of hypertonic saline in the lumbar spine, its utilization and its studies have been reasonable and acceptable. This modality of treatment appears to be reasonable in the management of refractory low back pain secondary to failed back surgery, disc disruption, and multilevel degenerative arthritis, even though there are a few detractors.

Percutaneous epidural adhesiolysis is also indicated for patients suffering with refractory low back pain secondary to a multitude of causes, including postlumbar laminectomy syndrome, lumbar epidural fibrosis, and multilevel disc disruption, or multilevel degenerative arthritis. However, this should only be used after the failure of the conservative modalities of treatment, including caudal and transforaminal epidural injections.

### CPT Code(s)

- ◆ 62263 – Percutaneous lysis of epidural adhesions using solution injection, eg, hypertonic saline, enzyme, or mechanical means including radiologic localization (includes contrast when administered), multiple adhesiolysis sessions; 2 or more days
- ◆ 62264 – Percutaneous lysis of epidural adhesions

using solution injection, eg, hypertonic saline, enzyme, or mechanical means including radiologic localization (includes contrast when administered), 1 day.

### Indications and Medical Necessity

The following criteria should be considered carefully in performing lysis of epidural adhesions:

1. Complete initial evaluation including history and physical examination;
2. Physiological and functional assessment, as necessary and feasible;
3. Definition of indications and medical necessity, as follows:
  - Suspected organic problem;
  - Nonresponsiveness to conservative modalities of treatment and other invasive modalities, including fluoroscopically directed epidural steroid injections;
  - Pain and disability of moderate-to-severe degree;
  - No evidence of contraindications such as severe spinal stenosis resulting in intraspinal obstruction, infection, or predominantly psychogenic pain;
  - Responsiveness to prior interventions with improvement in physical and functional status for repeat blocks or other interventions;
  - Repeating interventions only upon return of pain and deterioration in functional status.

### ICD-9 Codes That Support Medical Necessity

1. 722.83 lumbosacral postlaminectomy syndrome
2. 349.2 lumbar epidural fibrosis
3. 722.73 lumbosacral disc displacement with myelopathy
4. 722.10 lumbosacral disc displacement without myelopathy (disc herniation, radiculitis, disc extrusion, disc protrusion, disc prolapse, discogenic syndrome).
5. 722.52 lumbosacral degeneration of intervertebral disc (includes narrowing of disc space)

It is the responsibility of the provider to code to the highest level specified in the *ICD-9-CM* eg, to the fourth or fifth digit. The service must be reasonable and necessary in the specific case and must meet the criteria specified in the policy.

### Noncovered ICD-9 Codes

Any code not listed in the “ICD-9 Codes That Support Medical Necessity” section of this policy may not be covered, unless specific additional information is provided.

## Frequency and Number of Injections or Interventions

- ◆ In the diagnostic or stabilization phase, a patient may receive injections at intervals of no sooner than 4 weeks, to a maximum of 2 interventions.
- ◆ In the treatment or therapeutic phase, the number of injections should be limited to:
  - With a 3-day protocol, two interventions per year,
  - With a 1-day protocol, a maximum of four interventions per year.

## Documentation Requirements

The patient's medical record must contain documentation that fully supports the medical necessity for lysis of epidural adhesions.

Documentation must also support the frequency and the appropriateness of this procedure, as opposed to alternate forms of therapy.

## Sources of Information

1. Manchikanti L, Singh V, Kloth D et al. Interventional techniques in the management of chronic pain: Part 2.0. *Pain Physician* 2001; 4:24-96.
2. Lou L, Racz GB, Heavner JE. Percutaneous epidural neuroplasty. In

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## SPINAL ENDOSCOPY

### Description

Spinal endoscopy with epidural adhesiolysis is an invasive but important treatment modality in managing chronic low back pain that is nonresponsive to other modalities of treatment, including percutaneous spring guided adhesiolysis and transforaminal epidural injection.

Low back pain is the most common ailment in the modern era, burdening approximately 15% to 39% of the population with serious financial and social consequences, and ranking first among musculoskeletal disorders. Multiple investigators have shown that as many as 79% of patients continue to suffer with chronic or recurrent low back pain 1 year after its onset. Among various causes of low back pain, postlumbar laminectomy syndrome is increasingly recognized as a cause. It is estimated that 5% to 40% of lumbar surgeries result in failed back surgery syndrome, with some statistics showing failure rates reaching as high as 68%. Postlumbar laminectomy syndrome may result from surgery that may have been inadequate, incorrect, or unnecessary; but it may also result following a well-indicated and well-performed surgical intervention. Endoscopic adhesiolysis is based on the premise that the three-dimensional visualization of the contents of the epidural space provides the operator with the ability to steer the catheter toward structures of interest, allowing the examination of a specific nerve root and its pathology, lysis of adhesions, and target-specific injection of a drug(s).

The purpose of spinal or epidural endoscopy is to directly visualize the contents of the epidural space, lyse the adhesions, and directly apply drugs, thus assuring delivery of high concentrations of injected drugs to the target areas. Thus, spinal endoscopy with lysis of adhesions incorporates multiple therapeutic goals into one treatment, similar to percutaneous lysis of adhesions with a spring guided catheter, with added advantages of direct visualization of the epidural space and its contents, a three-dimensional view, and increased steerability of endoscopic equipment with a fiberoptic catheter. Nomenclature used to describe this procedure includes *spinal canal endoscopy*, *spinal epiduroscopy*, *myeloscopy*, *spinal or lumbar epiduroscopy*, and *endoscopic adhesiolysis*.

Percutaneous epidural endoscopic adhesiolysis is indicated for patients suffering with refractory low back pain secondary to a multitude of causes, including postlumbar laminectomy syndrome, lumbar epidural fibrosis, and multilevel disc disruption, or multilevel degenerative arthritis. However, this should only be used after the failure of the conservative modalities of treatments, as well as other interventional procedures, including caudal and transforaminal epidural steroid injections and percutaneous lysis of adhesions.

### CPT Code(s)

- ◆ 0027T – Endoscopic lysis of epidural adhesions with direct visualization using mechanical means, eg, spinal endoscopic catheter system, or solution injection, eg, normal saline, including radiologic localization and epidurography.

### Indications and Medical Necessity

The following criteria should be considered carefully in performing lysis of epidural adhesions:

1. Complete initial evaluation, including history and physical examination;
2. Physiological and functional assessment, as necessary and feasible;
3. Definition of indications and medical necessity:
  - Suspected organic problem;
  - Nonresponsiveness to conservative modalities of treatment and other invasive modalities, including fluoroscopically directed epidural steroid injections and percutaneous lysis of epidural adhesions;
  - Pain and disability of moderate-to-severe degree;
  - No evidence of contraindications such as severe spinal stenosis resulting in intraspinal obstruction, infection, or predominantly psychogenic pain;
  - Responsiveness to prior interventions with improvement in physical and functional status for repeat blocks or other interventions;
  - Repeating interventions only upon return of pain and deterioration in functional status.
4. Responsiveness to prior spinal endoscopy and epidural adhesiolysis with improvement in physical and functional status;
5. Repeating the procedure only upon return of pain and deterioration and functional status; however, no sooner than 6 months after the prior endoscopic procedure.

### ICD-9 Codes That Support Medical Necessity

1. 722.83 lumbosacral Postlaminectomy syndrome
2. 349.2 lumbar epidural fibrosis
3. 722.73 lumbosacral Disc displacement with myelopathy
4. 722.10, lumbosacral disc displacement without myelopathy (disc herniation, radiculitis, disc extrusion, disc protrusion, disc prolapse, discogenic syndrome).
5. 722.52 lumbosacral degeneration of intervertebral disc (includes narrowing of disc space)

It is the responsibility of the provider to code to the highest level specified in the *ICD-9-CM* eg, to the fourth or fifth digit.

The service must be reasonable and necessary in the specific case and must meet the criteria specified in the policy.

## Noncovered ICD-9 Codes

Any code not listed in the “ICD-9 Codes That Support Medical Necessity” section of this policy may not be covered, unless specific additional information is provided.

## Frequency and Number of Injections or Interventions

- ◆ Spinal endoscopy with adhesiolysis may not be repeated within 6 months after the procedure.

## Documentation Requirements

The patient’s medical record must contain documentation that fully supports the medical necessity for lysis of epidural adhesions.

Documentation must also support the frequency and the appropriateness of this procedure, as opposed to alternate forms of therapy.

## Sources of Information

1. Manchikanti L, Singh V, Kloth D et al. Interventional techniques in the management of chronic pain: Part 2.0. *Pain Physician* 2001; 4:24-96.
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## DISCOGRAPHY

### Description

Disc herniation, strained muscles, and torn ligaments have been attributed in the past to be the cause of most spinal pain, either in the neck and upper extremities, upper and mid back, or low back and lower extremities. However, disc herniation is seen only in a small number of patients; whereas degeneration of the disc resulting in primary discogenic pain is seen much more commonly. In contrast to a ruptured disc having pain arising from the nerve root, in discogenic pain a disc with or without internal disruption is implicated rather than the nerve root.

Even though riddled with controversy, disc stimulation is used quite frequently for diagnosis of discogenic syndrome, as well as a precursor to surgical intervention such as fusion. Stringent standards of practice have been established to ensure that the results of discography are not polluted by false-positive responses.

### CPT Code(s)

- ◆ 62290 - injection procedure for discography, each level; lumbar
- ◆ 62291 - injection procedure for discography, each level; cervical or thoracic
- ◆ 72285 – diskography, cervical or thoracic, radiological supervision and interpretation
- ◆ 72295 – diskography, lumbar, radiological supervision and interpretation

### Indications and Medical Necessity

The following criteria should be considered carefully in performing disc interventions:

1. Complete initial evaluation, including history and physical examination;
2. Physiological and functional assessment, as necessary and feasible;
3. Definition of indications and medical necessity as follows:
  - Suspected organic problem;
  - Nonresponsiveness to conservative modalities of treatments;
  - Pain and disability of moderate-to-severe degree;
  - No evidence of contraindications such as severe spinal stenosis resulting in intraspinal obstruction, infection, or predominantly psychogenic pain
4. Candidacy for discography

According to the position statement on discography by the Executive Committee of the North American Spine Society,

Discography is indicated in the evaluation of patients with unremitting spinal pain, with or without

extremity pain, of greater than 4 months' duration, when the pain has been unresponsive to all appropriate methods of conservative therapy. Before discography, the patients should have undergone investigation with other modalities which have failed to explain the source of pain; such modalities should include, but not be limited to, either computed tomography (CT) scanning, MRI scanning and/or myelography. In these circumstances, discography, especially when followed by CT scanning, may be the only study capable of providing a diagnosis or permitting a precise description of the internal anatomy of the disc and the detailed determination of the integrity of the disc substructures. Additionally, the anatomic observations may be complicated by the critical physiological induction of pain, which is recognized by the patient as similar to or identical with his/her complaint. By including multiple levels in the study, the patient acts as his/her own control for evaluation of the reliability of the pain response.

Other indications for discography include: (1) ruling out secondary internal disc disruption or recurrent herniation in the postoperative patient; (2) exploring pseudarthrosis; (3) determining the number of levels to include in a spine fusion; and (4) identifying the primary symptom-producing level when annular denervation (via thermocoagulation with an intradiscal catheter or a radiofrequency probe) is contemplated.

### ICD-9 Codes That Support Medical Necessity

1. Disc displacement without myelopathy (disc herniation, radiculitis, extrusion, protrusion, prolapse, discogenic syndrome)
  - 722.0 cervical, 722.11 thoracic, 722.10 lumbosacral
2. Degeneration of intervertebral disc including narrowing of disc space
  - 722.4 cervical, 722.51, thoracic, 722.52 lumbosacral

It is the responsibility of the provider to code to the highest level specified in the *ICD-9-CM* eg, to the fourth or fifth digit. The service must be reasonable and necessary in the specific case and must meet the criteria specified in the policy.

### Noncovered ICD-9 Codes

Any code not listed in the “ICD-9 Codes That Support Medical Necessity” section of this policy may not be covered, unless specific additional information is provided.

### Sources of Information

1. Manchikanti L, Singh V, Kloth D et al. Interventional techniques in the management of chronic pain: Part 2.0. *Pain Physician* 2001; 4:24-96.
2. Bogduk N. The argument for discography. *Neurosurgery Quarterly*

- 1996; 6:152-153.
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4. Fortin JD. Precision diagnostic disc injections. *Pain Physician* 2000; 3:271-288.
5. Manchikanti L, Singh V, Pampati V et al. Evaluation of the relative contributions of various structures in chronic low back pain. *Pain Physician* 2001; 4:308-316.
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## INTRADISCAL THERMAL ANNULOPLASTY

### Description

The structures responsible for pain in the low back include the vertebrae, intervertebral discs, nerve roots, facet joints, ligaments, and muscles. Although, disc disorders are common, disc herniation is seen in a very small number of patients, ranging from 2% to 6%. In contrast to the disc herniation, the degeneration of the disc resulting in primary discogenic pain is seen commonly with or without internal disc disruption in 26% to 39% of patients.

Intradiscal electrothermal annuloplasty is a minimally invasive treatment for chronic discogenic low back pain that is an alternative to interbody fusion surgery. Application of thermal energy to the disc alters collagen structure and may perform a functional deafferentation on the disc. The technique of Intradiscal electrothermal annuloplasty utilizes this principle to treat patients with intractable low back pain.

### CPT Codes

- ◆ 62287 - Aspiration or decompression procedure, percutaneous, of nucleus pulposus of intervertebral disc, any method, single or multiple levels; or
- ◆ 22899 - Unlisted, spine procedure; or
- ◆ 64999 - unlisted, spine procedure

### Indications and Medical Necessity

The following criteria should be considered carefully in performing intradiscal electrothermal annuloplasty: complete initial evaluation, and physiologic function when feasible; suspected organic problem; abnormalities noted on MRI responding to clinical symptomatology or provocative discography with low volume and low pressure generally limited to one or two levels and with a negative control disc; nonresponsiveness to conservative modalities of treatments and other invasive modalities, including fluoroscopically directed epidural steroid injections; facet joint and sacroiliac joint pain, ruling out evidence of contraindication such as severe spinal stenosis spondylolysis, spondylolisthesis, on severely degenerated disc.

## ICD-9 Codes That Support Medical Necessity

1. 722.10 lumbosacral disc displacement without myelopathy (disc herniation, radiculitis, extrusion, protrusion, prolapse, discogenic syndrome)
2. 722.52 lumbosacral degeneration of intervertebral disc, including narrowing of disc space

It is the responsibility of the provider to code to the highest level specified in the *ICD-9-CM* eg, to the fourth or fifth digit. The service must be reasonable and necessary in the specific case and must meet the criteria specified in the policy.

### Noncovered ICD-9 Codes

Any code not listed in the “ICD-9 Codes That Support Medical Necessity” section of this policy may not be covered, unless specific additional information is provided.

### Sources of Information

1. Manchikanti L, Singh V, Kloth D et al. Interventional techniques in the management of chronic pain: Part 2.0. *Pain Physician* 2001; 4:24-96.
2. Fortin JD. Precision diagnostic disc injections. *Pain Physician* 2000; 3:271-288.
3. Schwarzer AC, Aprill CN, Derby R et al. The prevalence and clinical features of internal disc disruption in patients with chronic low back pain. *Spine* 1995; 20:1878-1883.
4. Manchikanti L, Singh V, Pampati VS et al. Evaluation of the relative contributions of various structures in chronic low back pain. *Pain Physician* 2001; 4:308-316.
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## PERCUTANEOUS DISC DECOMPRESSION

Percutaneous disc decompression or nucleoplasty is a minimally invasive treatment for chronic discogenic low back pain that is an alternative to intradiscal electrothermal annuloplasty and also in a few cases laser discectomy. Coblation-assisted nucleoplasty delivers radiofrequency energy to molecularly disintegrate tissue there by debulking a pressure-sensitive disc. Bipolar radiofrequency coagulation further denatures proteoglycans, altering the internal milieu of the affected nucleus. This technique purports to treat axial and radicular pain (contained lumbar discs) and is currently undergoing clinical trials.

Percutaneous disc decompression or nucleoplasty must be performed only in patients with discogenic low back pain existing for 6 months or longer who have failed an exhaustive, conservative treatment regimen including fluoroscopically directed injection therapy. The ideal candidates for this procedure are patients with any segmental disease or a single affected disc level as determined by MRI or provocative discography with low volume, low pressure with a normal control disc.

### CPT Code

- ◆ CPT 62287 aspiration or decompression procedure, percutaneous, of nucleus pulposus of intervertebral disc, any method, single or multiple levels, lumbar, eg, manual or automated percutaneous discectomy, percutaneous laser discectomy

### Indications and Medical Necessity

The following criteria should be considered carefully when performing intradiscal electrothermal annuloplasty: complete initial evaluation, physiologic function when feasible; suspected organic problem; abnormalities noted on MRI responding to clinical symptomatology or provocative discography with low volume and low pressure, generally limited to one or two levels and with a negative control disc; nonresponsiveness to conservative modalities of treatment and other invasive modalities, including fluoroscopically di-

rected epidural steroid injections; and facet joint and sacroiliac joint pain, ruling out evidence of contraindication such as severe spinal stenosis spondylolysis, spondylolisthesis, and severely degenerated disc.

### ICD-9 Codes That Support Medical Necessity

1. 722.10 lumbosacral disc displacement without myelopathy (disc herniation, radiculitis, extrusion, protrusion, prolapse, discogenic syndrome)
2. 722.52 lumbosacral degeneration of intervertebral disc, including narrowing of disc space

It is the responsibility of the provider to code to the highest level specified in the *ICD-9-CM* eg, to the fourth or fifth digit. The service must be reasonable and necessary in the specific case and must meet the criteria specified in the policy.

### Noncovered ICD-9 Codes

Any code not listed in the “ICD-9 Codes That Support Medical Necessity” section of this policy may not be covered, unless specific additional information is provided.

### Source of Information

1. Manchikanti L, Singh V, Kloth D et al. Interventional techniques in the management of chronic pain: Part 2.0. *Pain Physician* 2001; 4:24-96.
2. Fortin JD. Precision diagnostic disc injections. *Pain Physician* 2000; 3:271-288.
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## SYMPATHETIC BLOCKS

### Description

The evolution of the nomenclature, conceptual understanding, and management of complex regional pain syndrome, formerly known as reflex sympathetic dystrophy and causalgia, has been dynamic. *Reflex sympathetic dystrophy, causalgia, sympathetically maintained pain, sympathetically independent pain, and complex regional pain syndrome* encompass some of the commonly utilized nomenclature. As per the International Association for the Study of Pain Committee on Taxonomy, to satisfy the diagnosis of complex regional pain syndrome Type I (reflex sympathetic dystrophy), the clinical findings include regional pain, sensory changes, eg, allodynia, abnormalities of temperature, abnormal pseudomotor activity, edema, and an abnormal skin color that occurs after a noxious event. Complex regional pain syndrome Type II, or causalgia, includes all of the above-described features, in addition to a peripheral nerve lesion. However, the pathophysiology of these syndromes is poorly understood.

Sympathetically maintained pain, by definition, is eliminated by an anesthetic blockade of the sympathetic efferents that serve the painful area. Similarly, neuropathic pain which is similar to reflex sympathetic dystrophy, however, represents various heterogeneous conditions, which neither can be explained by one single etiology, nor by a particular anatomical lesion.

Visceral pain also may be caused by sympathetic overactivity. Temporary relief of abdominal visceral pain can therefore be obtained by blockade of the celiac plexus or lumbar or thoracic sympathetic chain.

In addition to the above conditions, sympathetic blockade may also be used for treatment of other painful conditions, including vascular ischemic pain, phantom limb pain, herpes zoster, postherpetic neuralgia, facial pain of unknown origin, neuropathic pain, pain secondary to carcinoma, headache, and other painful conditions which may not be differentiated.

Numerous modalities of treatments include sympathetic ganglion blocks, intervenous regional blocks, physical therapy, administration of a host of pharmacological agents, behavioral interventions, and surgical interventions with either sympathetomy or radiofrequency neurotomy.

### CPT Code(s)

#### A. Local anesthetic blocks

- ◆ 64505 sphenopalatine ganglion block
- ◆ 64510 injection, anesthetic agent; stellate ganglion (cervical sympathetic)
- ◆ 64520 injection, anesthetic agent; lumbar or thoracic

(paravertebral sympathetic)

- ◆ 64530 injection, anesthetic agent; celiac plexus, with or without radiological monitoring

#### B. Neurolytic blocks

- ◆ 64680 celiac plexus neurolytic block
- ◆ A physician may use modifier 22 for:
- ◆ Sphenopalatine ganglion
- ◆ Stellate ganglion
- ◆ Thoracic or lumbar paravertebral sympathetic

### Indications and Medical Necessity

Sympathetic blocks are indicated and are considered appropriate to confirm the diagnosis of sympathetically maintained pain. The following criteria should be considered carefully in performing sympathetic blocks:

1. Complete initial evaluation, including history and physical examination;
2. Physiological and functional assessment, as necessary and feasible;
3. Definition of indications and medical necessity as follows:
  - Suspected organic problem;
  - Nonresponsiveness to conservative modalities of treatment. However, in certain cases with intractable pain in complex regional pain syndrome I, complex regional pain syndrome II, herpes zoster, postherpetic neuralgia, and neuropathic pain secondary to carcinoma; sympathetic blocks may be initiated in conjunction with conservative treatment with drugs and physical therapy;
  - Pain and disability of moderate-to-severe degree;
  - No evidence of contraindications such as infection or predominant pain of psychogenic origin;
  - Responsiveness to prior interventions, with improvement in physical and functional status for repeat blocks or other interventions;
  - Repeating interventions only upon return of pain and deterioration in functional status.

### Frequency and Number of Injections or Interventions

- ◆ In the diagnostic or stabilization phase, a patient may receive injections at intervals of no sooner than 1 week or, preferably, 2 weeks except for cancer pain or when a continuous administration of local anesthetic for sympathetic block is employed. However, the total number of injections in the stabilization phase should be limited to four to six per year.
- ◆ In the treatment or therapeutic phase, that is, after the stabilization phase, the frequency of sympathetic

blocks should be limited to 6 weeks or longer between each injection, provided that at least >50% relief is obtained for 4 to 6 weeks.

## ICD-9 CODES THAT SUPPORT MEDICAL NECESSITY

1. Complex regional pain syndrome Type I reflex sympathetic dystrophy, Type II (causalgia)
  - 337.20 reflex sympathetic dystrophy unspecified, 337.21 RSD upper limb, 337.22 reflex sympathetic dystrophy lower limb, 337.29 reflex sympathetic dystrophy other unspecified site
  - 355.9 causalgia, 354.4 causalgia upper limb, 355.71 causalgia lower limb
2. Peripheral neuropathy
  - 356.4 idiopathic, 356.0 hereditary, 357.2 diabetic, 357.5 alcoholic, 357.6 due to drug
3. Limb pain
  - 353.6 phantom limb pain, 997.60 stump pain, 997.61 neuroma of amputation stump, 342.0 hemiplegia - flaccid, 342.1 hemiplegia - spastic
4. Plexus lesions
  - 353.0 thoracic outlet syndrome, 353.1 lumbar plexus lesions
5. Postherpetic neuralgia
  - 053.10 with unspecified nerve system complication, 053.11 geniculate herpes zoster, 053.12 postherpetic trigeminal neuralgia, 053.13 postherpetic polyneuropathy, 053.19 other, 053.12 herpes zoster dermatitis of upper eyelid, 053.21 herpes zoster keratoconjunctivitis, 053.22 herpes zoster iridocyclitis, 053.29 other ophthalmic complications
6. Pain syndromes secondary to neoplasm 141.0 - 239.9
7. Vascular ischemic pain
8. Headache
  - 346.01 intractable migraine with aura, 346.11 intractable migraine without aura, 346.21 intractable cluster, 346.20 nonintractable cluster, 346.9 unspecified migraine

It is the responsibility of the provider to code to the highest level specified in the *ICD-9-CM* eg, to the fourth or fifth digit. The service must be reasonable and necessary in the specific

case and must meet the criteria specified in the policy.

## Noncovered ICD-9 Codes

Any code not listed in the “ICD-9 Codes That Support Medical Necessity” section of this policy may not be covered, unless specific additional information is provided.

## Documentation Requirements

The patient’s medical record must contain documentation that fully supports the medical necessity for sympathetic blocks.

Documentation must also support the frequency and the appropriateness of this procedure, as opposed to alternate forms of therapy.

## Sources of Information

1. Manchikanti L, Singh V, Kloth D et al. Interventional techniques in the management of chronic pain: Part 2.0. *Pain Physician* 2001; 4:24-96.
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7. Manchikanti L. The role of radiofrequency in managing complex regional pain syndrome. *Cur Rev Pain* 2000 4:437-444.
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## INTERCOSTAL NERVE BLOCKS AND NEUROLYSIS

### Description

Intercostal/chest wall pain usually results from irritation or inflammation of the intercostal nerve, which may result from, but is not limited to: trauma, rib fracture, cancer, injury from a thoracotomy incision, osteoarthritis or degenerative arthritis of the thoracic spine, herpes zoster or postherpetic neuralgia, compression fracture of vertebrae, sternal fracture, injury to the nerve trunk, compression of nerves, or nerve-root lesions. This type of pain can be managed with either an intercostal nerve block or neurolysis (via radiofrequency ablation, cryoablation, or injection of a neurolytic agent such as phenol).

### CPT Code(s)

- ◆ 64420 - injection, anesthetic agent; intercostal nerve, single
- ◆ 64421 - intercostal nerves, multiple, regional block
- ◆ 64620 - destruction by neurolytic agent; intercostal nerve

### Indications and Medical Necessity

The following criteria should be considered carefully when performing either intercostal nerve blocks or intercostal neurolysis:

1. Complete initial evaluation including history and physical examination;
2. Physiological and functional assessment, as necessary and feasible;
3. Definition of indications and medical necessity as follows:
  - Suspected organic problem;
  - Nonresponsiveness to conservative modalities of treatments;
  - Pain and disability of moderate-to-severe degree;
  - No evidence of contraindications such as infection or pain of predominantly psychogenic origin;
  - Responsiveness to prior interventions, with improvement in physical and functional status for repeat blocks or other interventions;
  - Repeating interventions only upon return of pain and deterioration in functional status.

### ICD-9 Codes That Support Medical Necessity

1. Herpes zoster, with unspecified nervous system complication - 053.10
2. Postherpetic polyneuropathy - 053.13
3. Pain syndromes secondary to neoplasm - 114.02 – 239.9
4. Malignant neoplasm of ribs, sternum, and clavicle - 170.3

5. Secondary malignant neoplasm of other specified sites, bone and bone marrow - 198.5
6. Benign neoplasm of ribs, sternum, and clavicle - 213.3
7. Thoracic root lesions, not elsewhere classified (intercostal neuritis) - 353.3
8. Other nerve root and plexus disorders - 353.8
9. Unspecified nerve root and plexus disorder - 353.9
10. Pathologic fracture of other specified site - 733.19
11. Fracture of rib(s) closed - 807.00
12. Or rib(s) open - 807.1
13. Of sternum, closed - 807.2
14. Of sternum, open - 807.3
15. Flail chest - 807.4
16. Injury to other nerve(s) of trunk, excluding shoulder and pelvis girdles, other specified nerve(s) of trunk - 954.8

It is the responsibility of the provider to code to the highest level specified in the ICD-9-CM eg, to the fourth or fifth digit. The service must be reasonable and necessary in the specific case and must meet the criteria specified in the policy.

### Frequency and Number of Injections or Interventions

- ◆ In the diagnostic or stabilization phase, a patient may receive injections at intervals of no sooner than 1 week or, preferably, 2 weeks.
- ◆ In the treatment or therapeutic phase (after the stabilization is completed), the frequency should be 2 months or longer between each injection, provided that at least >50% relief is obtained for 6 weeks. However, if the neural blockade is applied for different regions, it can be performed at intervals of no sooner than 1 week or, preferably, 2 weeks for most type of blocks. The therapeutic frequency must remain at 2 months for each region. It is further suggested that all regions be treated at the same time, provided all procedures are performed safely.
- ◆ In the diagnostic or stabilization phase, the number of injections should be limited to no more than four times per year.
- ◆ In the treatment or therapeutic phase, the interventional procedures should be repeated only as necessary judging by the medical necessity criteria, and these should be limited to a maximum of six times for local anesthetic and steroid blocks and four times for interventions such as radiofrequency thermoneurolysis, and cryoneurolysis for a period of 1 year.

### Noncovered ICD-9 Codes

Any code not listed in the “ICD-9 Codes That Support Medical Necessity” section of this policy may not be covered, unless specific additional information is provided.

## Coding Guidelines

For multiple levels of neurolytic blocks for additional levels, CPT 64620-51 may be used.

## Documentation Requirements

The patient's medical record must contain documentation that fully supports the medical necessity for intercostal nerve blocks and neurolysis.

Documentation must also support the frequency and the appropriateness of this procedure, as opposed to alternate forms of therapy.

## Sources of Information

1. Manchikanti L, Singh V, Kloth D et al. Interventional techniques in the management of chronic pain: Part 2.0. *Pain Physician* 2001; 4:24-96.
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## SACROILIAC JOINT INJECTIONS

### Description

The sacroiliac joint is a joint with a joint capsule, synovial fluid, and hyaline cartilage on the sacral side and fibrocartilage on the iliac side. The sacroiliac joint possesses widespread neural innervation, anatomic variability, and unique biomechanical properties. Now there is evidence that the sacroiliac joint is a source of mechanical low back and lower extremity pain. Provocative injections and arthrography have described sacroiliac joint pain referral patterns in asymptomatic volunteers, predicted symptomatic sacroiliac joints in patients with suspected lumbar discogenic or facet joint pain, described morphologic features of sacroiliac joint capsule, and defined contrast extravasation patterns on sacroiliac joint arthrography and post-arthrography – CT in subjects with low back or groin pain.

Sacroiliac joint block may be diagnostic or therapeutic. In the diagnostic sacroiliac joint block, anesthetic agent is introduced into the sacroiliac joint under fluoroscopic guidance. At least 75% resolution of the patient's pain over the ipsilateral SI joint is considered diagnostic of pain emanating from the sacroiliac joint. Incidence of sacroiliac joint pain has been highly variable.

### CPT Code(s)

- ◆ 27096 – Injection procedure for sacroiliac joint, arthrography, and/or anesthetic/steroid
- ◆ 73542 – Radiologic examination, sacroiliac joint arthrography, radiological supervision and interpretation
- ◆ 76005 – fluoroscopy code

\* 27096 is used only with fluoroscopy.

### Indications and Medical Necessity

The following criteria should be considered carefully in performing SI joint blocks:

1. Complete initial evaluation including history and physical examination;
2. Physiological and functional assessment, as necessary and feasible;
3. Definition of indications and medical necessity as follows:
  - Suspected organic problem;
  - Nonresponsiveness to conservative modalities of treatments;
  - Pain and disability of moderate-to-severe degree;
  - No evidence of contraindications such as infection, or predominantly psychogenic pain;
  - Responsiveness to prior interventions with improvement in physical and functional status for repeat

blocks or other interventions;

- Repeating interventions only upon return of pain and deterioration in functional status;

### ICD-9 CODES THAT SUPPORT MEDICAL NECESSITY

- ◆ Sacroiliitis - 720.2

It is the responsibility of the provider to code to the highest level specified in the *ICD-9-CM*, eg, to the fourth or fifth digit. The service must be reasonable and necessary in the specific case and must meet criteria specified in the policy.

- ◆ Noncovered ICD-9 Codes

Any code not listed in the “ICD-9 Codes That Support Medical Necessity” section of this policy may not be covered, unless specific additional information is provided.

Frequency and Number of Injections or Interventions:

- ◆ In the diagnostic or stabilization phase, a patient may receive injections at intervals of no sooner than 1 week or, preferably, 2 weeks.
- ◆ In the treatment or therapeutic phase (after the stabilization is completed), the frequency should be 2 months or longer between each injection, provided that at least > 50% relief is obtained for 6 weeks. However, if the neural blockade is applied for different regions, it can be performed at intervals of no sooner than 1 week or, preferably, 2 weeks for most type of blocks. The therapeutic frequency must remain at 2 months for each region. It is further suggested that all regions be treated at the same time, provided all procedures are performed safely.
- ◆ In the diagnostic or stabilization phase, the number of injections should be limited to no more than four times per year.
- ◆ In the treatment or therapeutic phase, the interventional procedures should be repeated only as necessary judging by the medical necessity criteria, and these should be limited to a maximum of six times for local anesthetic and steroid blocks for a period of 1 year.

### Number Per Setting

It is recommended that a physician should consider a patient in totality and treat multiple regions of the patient in the same setting, as long as it is safe and feasible. Attempts to treat one particular organ at a different time are not an absolute necessity.

However, no more than five procedures (different procedures and/or multiples of one procedure – or total line items or proce-

dures) must be billed in one setting for any of the following: the procedures are performed in different regions or a combination of procedures is performed in multiple regions. For treatment of a single region, eg, only lumbosacral spine or cervical spine, a maximum of four procedures (different procedures and/or multiple of one procedure – or total line items or procedures) should be billed. Procedure billing excludes CPT 76005, which may be added in addition to the above.

Use modifier -50, bilateral.

## Documentation Requirements

The patient's medical record must contain documentation that fully supports the medical necessity for sacroiliac joint injections.

Documentation must also support the frequency and the appropriateness of this procedure, as opposed to alternate forms of therapy.

## Sources of Information

1. Manchikanti L, Singh V, Kloth D et al. Interventional techniques in the management of chronic pain: Part 2.0. *Pain Physician* 2001; 4:24-96.
2. Fortin JD. The sacroiliac joint: A new perspective. *J Back Musculoskeletal Rehabil* 1993; 3:31-43.
3. Fortin JD, Dwyer A, West S et al. Sacroiliac joint pain referral patterns upon application of a new injection/arthrography technique. Part I: Asymptomatic volunteers. *Spine* 1994; 19:1475-1482.
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## TRIGGER POINT INJECTIONS

### Description

Myofascial pain syndrome, which is a regional muscle pain disorder accompanied by trigger points, appears to be a common phenomenon in multiple regions, specifically in the cervical spine. In the head and neck region, it is believed that myofascial pain syndrome can manifest not only with mechanical symptoms in the neck, but as a headache, tinnitus, shoulder pain, temporomandibular joint pain, eye symptoms, and torticollis. However, there is absolutely no epidemiologic data on the prevalence of myofascial pain in the neck. The authors exploring the role of trigger points and myofascial pain in whiplash injuries believe that the theory of trigger points lacks demonstrated internal validity. Formal studies also have shown that myofascial experts have difficulty in agreeing on the presence of a trigger point, which is the cardinal feature of regional myofascial pain syndrome. In addition to this, it has been shown that, topographically, trigger points of the neck overlay the cervical facet joints; and it has been reported that pain patterns of cervical trigger points are identical to those of referred pain from the facet joints.

Similar to the cervical spine, the most common diagnosis for low back pain is acute or chronic lumbosacral strain or sprain; however, the scientific evidence for low back pain of muscle origin is not overwhelming.

Myofascial trigger points are self-sustaining, hyper-irritative foci that may occur in any skeletal muscle in response to strain produced by acute or chronic overload. Classically these trigger points produce a referred-pain pattern characteristic for that individual muscle. Thus, each pattern becomes part of a single muscle myofascial pain syndrome. To successfully treat chronic myofascial pain syndrome, each single muscle syndrome needs to be identified, along with every perpetuating factor.

Since there is no laboratory or imaging test available for establishing or confirming the diagnosis of trigger points, it mainly depends upon detailed history and specific musculoskeletal examination. Some of the cardinal features of trigger points are as follows:

1. Distribution pattern of the pain consistent with the referral pattern of trigger points that are described in the literature;
2. The presence of trigger points with focal tenderness with a specific referral pattern of pain;
3. A palpable taut band of muscle in which the trigger point is located;
4. Reproduction of referred-pain pattern upon stimulation of the trigger point.

### CPT Code(s)

- ◆ 20550 Injection, tendon sheath, ligament
- ◆ 20552 Injection, single or multiple trigger point(s), one or two muscle(s)
- ◆ 20553 Injection, single or multiple trigger point(s), three or more muscle(s)

### Indications and Medical Necessity

The following criteria should be considered carefully in performing trigger point injections:

1. Complete initial evaluation, including history and physical examination;
2. Physiological and functional assessment, as necessary and feasible;
3. Definition of indications and medical necessity as follows:
  - Suspected organic problem;
  - Nonresponsiveness to conservative modalities of treatments;
  - Pain and disability of moderate-to-severe degree;
  - No evidence of contraindications such as infection or pain of predominantly psychogenic origin;
  - Responsiveness to prior interventions with improvement in physical and functional status for repeat blocks or other interventions;
  - Repeating interventions only upon return of pain and deterioration in functional status.

### ICD-9 Codes That Support Medical Necessity

1. Myalgia and myositis, unspecified - 729.1
2. Rheumatism, unspecified and fibrositis - 729.0

It is the responsibility of the provider to code to the highest level specified in the *ICD-9-CM* eg, to the fourth or fifth digit. The service must be reasonable and necessary in the specific case and must meet the criteria specified in the policy.

### Frequency and Number of Injections or Interventions

- ◆ In the diagnostic phase, a patient may receive injections at intervals of no sooner than 1 week or, preferably, 2 weeks.
- ◆ In the therapeutic phase (after the stabilization is completed), the frequency should be 2 months or longer between each injection, provided that at least >50% relief is obtained for 6 weeks. However, if the neural blockade and/or injections are applied for different regions, it/they can be performed at intervals of no sooner than 1 week or, preferably, 2 weeks for most type of blocks. The therapeutic frequency must remain at 2 months for each region. It is fur-

ther suggested that all regions be treated at the same time provided all procedures are performed safely.

- ◆ In the diagnostic or stabilization phase, the number of trigger point injections should be limited to no more than four times per year.
- ◆ In the treatment or therapeutic phase, the trigger point injections should be repeated only as necessary judging by the medical necessity criteria, and these should be limited to a maximum of six times for local anesthetic and steroid blocks.
- ◆ Trigger point injections are limited to a maximum of 6 injections per region during one year period.

### Noncovered ICD-9 Codes

Any code not listed in the “ICD-9 Codes That Support Medical Necessity” section of this policy.

### Documentation Requirements

The patient’s medical record must contain documentation that fully supports the medical necessity for trigger point injections.

Documentation must also support the frequency and the

appropriateness of this procedure, as opposed to alternate forms of therapy.

### Sources of Information

1. Manchikanti L, Singh V, Kloth D et al. Interventional techniques in the management of chronic pain: Part 2.0. *Pain Physician* 2001; 4:24-96.
2. Manchikanti, L. Neural blockade in cervical pain syndromes. *Pain Physician* 1999; 2:65-84.
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8. Bogduk N, Simons DG. Neck pain: Joint pain or trigger points. In Vaeroy H and Merskey J (eds). *Progress in Fibromyalgia and Myofascial Pain*, Elsevier, Amsterdam, 1993; pp 267-273.
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10. Rauck RL. Myofascial pain syndrome and fibromyalgia. *Pain* 1996; 41:53.
11. Harden RN, Bruehl SP, Gass S et al. Signs and symptoms of the myofascial pain syndrome: A national survey of pain management providers. *Clin J Pain* 2000; 16:64-72.

## SPINAL CORD STIMULATORS

### Description

Spinal cord or epidural stimulation involves an electric field, and a specified waveform, pulse width, and rate, and is reported to diminish pain intensity in select cases of chronic neurogenic pain. In spinal cord stimulation used to treat chronic neurogenic pain, most typically, the dorsal or sensory fibers of the spinal cord are stimulated. Spinal cord stimulation is indicated for the treatment of a number of conditions that are intractable and nonresponsive to many of the other modalities of treatments. The neurostimulator electrodes used for this purpose are implanted percutaneously in the epidural space through a special needle. Some patients may need an open procedure requiring a laminectomy to place the electrodes.

Prior to placement of the permanent electrodes, trial electrodes are placed and stimulation is carried out with an external stimulator. The trial period may be extended up to 4 weeks if necessary. If during the trial period, it is determined that the spinal cord stimulation is not effective or is not acceptable to the patient, the electrodes may be removed. However, if the trial has been successful, a spinal neurostimulator and pulse generator are inserted subcutaneously and connected to the electrodes already in place or to new electrodes.

In some cases, neurostimulator electrodes migrate or move from the area which needed to be stimulated, in which case these electrodes require realignment. Additionally, in very few cases, electrodes may need to be removed. If the patient cannot tolerate the electrodes, the spinal cord stimulation becomes ineffective after a period of time, and the leads and/or the impulse generator become infected.

### CPT Code(s)

- ◆ 63650 - Percutaneous implantation of neurostimulator electrodes; epidural
- ◆ 63655 - Laminectomy for implantation of neurostimulator electrodes; epidural
- ◆ 63685 - Incision and subcutaneous placement of spinal neurostimulator pulse generator or receiver, direct or inductive coupling.
- ◆ 63660 - Revision or removal of spinal neurostimulator electrodes
- ◆ 63688 - Revision or removal of implanted spinal neurostimulator pulse generator or receiver

### Indications and Medical Necessity

The following criteria should be considered carefully in performing spinal cord stimulation procedures:

1. Complete initial evaluation, including history and

- physical examination;
2. Physiological and functional assessment, as necessary and feasible;
3. Psychological evaluation as necessary;
4. Definition of indications and medical necessity as follows:
  - Suspected organic problem;
  - Nonresponsiveness to almost all conservative modalities of treatments, including fluoroscopically directed epidural injections;
  - Pain and disability of severe degree;
  - No evidence of contraindications such as severe spinal stenosis resulting in intraspinal obstruction, infection, or predominantly psychogenic pain;
5. Implantation of the spinal cord stimulator used only as a choice of last resort and after other treatment modalities including medical management and, where applicable, other invasive procedures like appropriate nerve blocks, including fluoroscopically directed epidural injections, have been tried and did not prove to be satisfactory, or these have been judged to be unsuitable or contraindicated for the given patient.
6. In addition to the physical, functional and psychological assessment, which is basic, careful screening and evaluation by a multidisciplinary team prior to implantation, which should include physical and functional as well as psychological evaluation.
7. Prior to implantation of the permanent electrodes, demonstrated relief of pain with a temporarily implanted electrode, without any deleterious effects.

### ICD-9 Codes That Support Medical Necessity

1. Postlaminectomy syndrome
  - 722.81 cervical, 722.82 thoracic, 722.83, lumbosacral
2. Disc displacement without myelopathy (disc herniation, radiculitis, disc extrusion, disc protrusion, disc prolapse, discogenic syndrome).
  - 722.0 cervical, 722.11 thoracic, 722.10 lumbosacral
3. Disc displacement with myelopathy
  - 722.71 cervical, 722.72 thoracic, 722.73 lumbosacral
4. Epidural fibrosis
  - 349.2 cervical, 349.2 thoracic, 349.2 lumbosacral
5. Complex regional pain syndrome (Type I or reflex sympathetic dystrophy)
  - 337.20 reflex sympathetic dystrophy unspecified,

- 337.21 reflex sympathetic dystrophy upper limb, 337.22 reflex sympathetic dystrophy lower limb, 337.29 reflex sympathetic dystrophy other unspecified site
6. Complex regional pain syndrome (Type II or causalgia)
    - 355.9 causalgia, 354.4 causalgia upper limb, 355.71 causalgia lower limb
  7. Limb pain
    - 353.6 phantom limb pain, 997.60 stump pain, 997.61 neuroma of amputation stump, 342.0 hemiplegia – flaccid, 342.1 hemiplegia – spastic
  8. Postherpetic neuralgia
    - 053.10 with unspecified nerve system complication
    - 053.13 postherpetic polyneuropathy
  9. Cauda equina injury 952.4
  10. Chronic arachnoiditis 322.2
  11. Arthrosclerosis of extremities with wrist pain 440.22
  12. Mechanical complications of nervous system device implanted graft 996.2 (to be used to indicate intolerance of the device by the patient or failure of equipment/loss of effectiveness).
  13. Infection and inflammatory reaction due to internal prosthetic device, implant and graft; due to nervous system device, implant and graft 996.63

It is the responsibility of the provider to code to the highest level specified in the *ICD-9-CM* (eg, to the fourth or fifth digit). The service must be reasonable and necessary in the specific case and must meet the criteria specified in the policy.

## Non Covered ICD-9 Code(s)

All ICD-9-CM codes not listed as covered in this policy may not be covered. Individual consideration can be given when the claim is submitted with a special report detailing the reason for performing the procedure for any other condition.

## Sources of Information

1. Manchikanti L, Singh V, Kloth D et al. Interventional techniques in the management of chronic pain: Part 2.0. *Pain Physician* 2001; 4:24-96.
2. Wetzel FT, Hassenbusch S, Oakley JC et al. Treatment of chronic pain in failed back surgery patients with spinal cord stimulation: A review of current literature and proposal for future investigation. *Neuromodulation* 2000;3:59-74
3. May RJ, Volker S. Chronic pain management and spinal cord stimulation: Patient-screening guidelines to improve treatment outcome. *Pain Digest* 1999; 9:353-363.
4. Neilson KD, Adams Je, Hosobuchi Y. Experience with dorsal column stimulation for relief of chronic intractable pain:1968-1973. *Surg Neurol* 1975;4:148-152.
5. Pineda A. Dorsal column stimulation and its prospects. *SurgNeurol* 1975;4:157-63
6. Richardson RR, Siqueira EB, Cerullo LJ. Spinal epidural neurostimulation for treatment of acute and chronic intractable pain: Initial and long term results. *Neurosurgery* 1979; 5:344-348.
7. Kumar K, Nath R, Wyant GM. Treatment of chronic pain by epidural spinal cord stimulation.: A 10-year experience. *J Neurosurg* 1991; 75:402-407.
8. North RB, Ewend MG, Lawton MT et al. Failed back surgery syndrome: 5-year follow- up after spinal cord stimulator implantation. *Neurosurgery* 1991; 28:692-699.
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19. Kemler MA. Spinal cord stimulation in patients with chronic reflex sympathetic dystrophy. *N Engl J Med* 2000; 343:618-624.
20. Kumar K, Nath R, Toth C. Spinal cord stimulation is effective in the management of reflex sympathetic dystrophy. *Neurosurgery* 1997; 3:503-508.
21. North R, Kidd D, Lee M et al. A prospective randomized study of spinal cord stimulation versus reoperation for failed back surgery syndrome: Initial results. *Stereotact Funct Neurosurg* 1994; 267-272.
22. Devulder J, De Colvenaer L, Rolly G et al. Spinal cod stimulation in chronic pain therapy. *Clin J Pain* 1990; 6:51-56.
23. Burchiel KJ, Anderson VC, Wilson BJ et al. Prognostic factors of spinal cord stimulation for chronic back pain. *Neurosurgery* 1995; 36:1101-1110.
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31. Van Buyten JP, Van Zundert J, Milbouw G. Treatment of failed back surgery syndrome patients with low back and leg pain: A pilot study of a new dual lead spinal cord stimulation system. *Neuromodulation* 1999; 2: 258-265.



## INTRATHECAL PUMPS

### Description

Chronic opioid therapy in the treatment of persistent pain of noncancer origin has gained broad acceptance. The multiple routes of administration available to the practitioner are the oral, transdermal, epidural, and intrathecal. This policy will address intrathecal administration of opioids and other drugs. Opioid agonists produce analgesia at the spinal cord level when administered in the intrathecal or epidural space. This technique may be used for the management of chronic intractable pain when it is not controlled by less invasive techniques, as well as oral narcotics. Intrathecal baclofen is used for the treatment of intractable spasticity of the spine or brain etiology. For intrathecal administration of drugs, a reservoir is inserted subcutaneously; and it is attached to the proximal portion of the catheter, which is tunneled beneath the skin.

With the epidural catheterization, preservative-free morphine sulfate, hydromorphone hydrochloride (Dilaudid®), Fentanyl or baclofen can be administered every 8 to 12 hours in the epidural space through an indwelling catheter, which can be placed percutaneously.

### CPT Code(s)

- ◆ 62350 Implantation, revision or repositioning of intrathecal or epidural catheter, for implantable reservoir or implantable infusion pump, without laminectomy
- ◆ 62351 with laminectomy
- ◆ 62355 Removal of previously implanted intrathecal or epidural catheter
- ◆ 62360 Implantation or replacement of device for intrathecal or epidural drug infusion; subcutaneous reservoir
- ◆ 62361 Nonprogrammable pump
- ◆ 62362 Programmable pump, including preparation or pump, with or without programming
- ◆ 62365 Removal of subcutaneous reservoir or pump previously implanted for intrathecal or epidural infusion
- ◆ 62367 Electronic analysis of programmable, implanted pump for intrathecal or epidural drug infusion (includes evaluation of reservoir status, alarm status, drug prescription status); without reprogramming.
- ◆ 62368 With reprogramming
- ◆ 62310 Injection, single, epidural or subarachnoid; cervical or thoracic
- ◆ 62311 Lumbar, sacral (caudal)
- ◆ 62318 Catheter placement, continuous infusion or intermittent bolus; epidural or subarachnoid; cervical or thoracic
- ◆ 62319 Lumbar, sacral (caudal)
- ◆ 96530 Refilling or maintenance of implantable pump

or reservoir

### Indications and Medical Necessity

The following criteria should be considered carefully in performing intrathecal pump placements:

1. Complete initial evaluation, including history and physical examination;
2. Physiological and functional assessment, as necessary and feasible;
3. Psychological evaluation as necessary;
4. Definition of indications and medical necessity as follows:
  - Suspected organic problem;
  - Nonresponsiveness to almost all conservative modalities of treatments, including fluoroscopically directed epidural injections;
  - Pain and disability of severe degree;
  - No evidence of contraindications such as severe spinal stenosis resulting in intraspinal obstruction, infection, or predominantly psychogenic pain.
5. Implantation of the morphine pump or epidural catheterization for long-term purposes used only as a choice of last resort and after other treatment modalities including medical management and, where applicable, other invasive procedures like appropriate nerve blocks, including fluoroscopically directed epidural injections, have been tried and did not prove to be satisfactory; or these have been judged to be unsuitable or contraindicated for the given patient.
6. In addition to the physical, functional and psychological assessment, which is basic, careful screening and evaluation by a multidisciplinary team prior to implantation, which should include physical and functional, as well as psychological, evaluation.
7. Prior to implantation of the pump, demonstrated relief of pain with subarachnoid or epidural injections of morphine reliably on at least two occasions, without any deleterious effects.
8. A patient with the diagnosis of cancer with a likely life expectancy of at least 3 months and unresponsiveness to less invasive medical therapy or that may no longer be the choice of therapy.

### ICD-9 Codes That Support Medical Necessity

For implantation of catheter/pump services:

1. Postherpetic trigeminal neuralgia - 053.12
2. Postherpetic polyneuropathy - 053.13
3. Carcinomas - 141.0-239.9
4. Chronic arachnoiditis - 322.2

5. Reflex Sympathetic Dystrophy - 337.20-337.29
6. Unspecified disease of spinal cord - 336.9  
(To be used only for the diagnosis of myelopathy)
7. Phantom limb pain - 353.6
8. Causalgia of upper limb - 354.4
9. Causalgia of lower limb - 355.71
10. Postlaminectomy syndrome, cervical region - 722.81
11. Postlaminectomy syndrome, thoracic region - 722.82
12. Postlaminectomy syndrome, lumbar region - 722.83

For removal/revision of catheter/pump services:

1. Other complications of internal (biological) (synthetic) 996.70 due to unspecified device, implant, and graft

It is the responsibility of the provider to code to the highest level specified in the *ICD-9-CM* eg, to the fourth or fifth digit. The service must be reasonable and necessary in the specific case and must meet the criteria specified in the policy.

### Noncovered ICD-9 Codes

Any code not listed in the “ICD-9 Codes That Support Medical Necessity” section of this policy may not be covered, unless specific additional information is provided.

### Documentation Requirements

The patient’s medical record must contain documentation that fully supports the medical necessity for pump implantation and administration of drugs.

Documentation must also support the frequency and the appropriateness of this procedure, as opposed to alternate forms of therapy.

### Sources of Information

1. Manchikanti L, Singh V, Kloth D et al. Interventional techniques in the management of chronic pain: Part 2.0. *Pain Physician* 2001; 4:24-96.
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