

## **Epidural Steroid Injection**

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### **Policy Statement**

The appropriate use of epidural steroid injections can be described by the following components:

<u>Diagnostic use of epidural steroid injections</u> for back(leg) and neck(arm) pain is appropriate when <u>all</u> of the following criteria are met:

- 1. The patient has failed to improve after a minimum of six weeks of conservative care that includes (but is not limited to):
  - An appropriate duration trial of Physical therapy and/or chiropractic therapy
  - Appropriate medications taken for a sufficient period of time
  - Rest and modification of activity
- 2. The patient's pain is radicular in nature both in its presentation and in the dermatomal distribution of the pain. Also, the accompanying manifestations of weakness, numbness and pain are compatible with the underlying neuromuscular structures involved.
- 3. Other significant, important clinical explanations for the symptoms and presentation have been evaluated and not seen to require immediate clinical attention
- 4. Pseudoradicular or somatic referred pain either from facet joints and or myofascial /ligamentous structures associated with spine have been excluded. This pain type is distinguished from radicular pain by its quality, pattern, distribution and depth.

The diagnostic phase of patient care may consist of one or two injections at intervals of no sooner than two weeks. If the diagnostic phase is completed and unsuccessful because of insufficient expected clinical response to the intervention, no further epidural injections are necessary. Historically, epidural steroid injections have been administered in pre-planned groups of three injections at one-to-two-week intervals irrespective of interim clinical response from any particular injection. Although commonly proposed, this practice pattern is not supported by well-designed medical literature. Moreover, repeated indiscriminate use



of ESIs has been shown to cause epidural lipomatosis.

Current practice supports the use of fluoroscopic imaging to help assure the correct placement of the needle in the appropriate spinal level or foramen All approaches require fluoroscopic guidance with copies of images saved in AP and lateral views While suggested by some practitioners as a suitable alternative imaging guidance technique, ultrasound is not yet established as effective for this particular clinical circumstance.

<u>Therapeutic use of epidural steroid injections</u> is appropriate after the successful completion of a diagnostic trial and the documentation of sustained relief of the treated radicular symptoms. These requirements are met when <u>all</u> of the following are satisfied:

- 1. At least Ten weeks have elapsed (ideally much more) since the completion of the successful diagnostic trial of one or two injections.
- 2. The patient has reported experiencing at least 50% relief in the prior reported pain and symptoms for at least ten weeks after the injections

Furthermore, for ongoing care in the therapeutic phase, no more than four epidural (interlaminar or transforaminal) injection sessions per body region (e.g., cervical/thoracic or lumbar/sacral) will be allowed during a rolling 12-month period. To promote patient safety, it is very important that the provider make sure to take into consideration steroid injections by other providers for some or all of the following: trochanteric bursa, subacromial bursa, steroid trigger point injections, intra articular steroid injections for that rolling calendar year.

If they have received a total of 4 steroid injections by any route or a body part other than spine, this series of injections *may* be counted as a steroid injection in making the determination due to the systemic nature of the effects of such injections when performed as described.

\*\*A rolling calendar year is twelve months after an event, regardless of what month the initial event took place. If, for example, the first diagnostic injection is given in July 2010, the rolling calendar year would end with the same date in July 2011.

In addition to pain determined to be radicular in nature, pain unresponsive to conservative measures and related to cancer with nerve root infiltration, early stage of reflex sympathetic dystrophy (RSD/CRPS), or herpes zoster/post-herpetic neuralgia is appropriate for treatment with epidural steroid injections. For these specific conditions, except for early CRPS, the rolling twelve-month limit is four injections with each of the injections separated by at least 2 months. except for early stage CRPS in which it can be done once every week for 3 weeks assuming high dose oral steroids were not also given to the patient. If CRPS is diagnosed more than 6 weeks after the initial injury or if there is minimal hyperalgesia or allodynia or late stage, then epidurals are not generally indicated.

#### Non-Appropriate Use Of Epidural Steroid Injections

Non appropriate use of epidural steroid injections are those for any indications other than those listed above. Some of the more common non-appropriate situations include:

1. A pre-planned treatment program (e.g., a series of three injections) that does not involve reassessment of patient response after each individual injection and adjustment of the treatment plan if either excellent response is achieved with one or two injections or alternatively if little or no response is achieved after one or two injections. Repeat epidural



injections are not appropriate when significant improvement has occurred after the initial injection or any specific subsequent injections. Repeat injections should only be performed upon return of pain and associated deterioration in the functional status' and after expected period of relief.

- 2. Non-radicular pain (unless related to one of the specific diagnoses listed above (e.g., cancer, RSD, herpes zoster/post-herpetic neuralgias).
- 3. Therapeutic epidural injections in the absence of significant clinical improvement in pain and function after the initial two diagnostic injections
- 4. When other types of injections are performed on the same date of service [or a day or two immediately before or after this date], including but not limited to, facet injections, sacroiliac joint injections, sympathetic blocks and/or trigger point injections.
- 5. Chronic Lumbar degenerative disc disease without radicular features
- 6. Cervical or Lumbar central canal spinal stenosis without extremity symptoms
- 7. Cervical or Lumbar foraminal spinal stenosis without radicular features
- 8. Late stage CRPS or CRPS with minimal skin sensitivity

Technology/treatment is considered experimental/investigational or <u>NOT</u> medically necessary if it is not utilized in accordance with nationally recognized standards of medical practice and/or identified as safe, widely used, and generally accepted as effective for the proposed use as reported in nationally recognized peer-reviewed medical literature published in the English language,

It is not appropriate to use ultrasound guidance for needle placement for epidural injections as this technology is considered experimental/investigational as it is not identified as widely used and generally accepted for the proposed use as reported in nationally recognized peer- reviewed medical literature published in the English language.

It is not necessary to use monitored anesthesia care (MAC) or other similar therapies for epidural steroid injections as standard medical practice consists of local anesthesia and, if needed, slight sedation.

The use of epidural steroid injections may no longer be appropriate prior to the achievement of established goals in certain instances (these include but are not limited to):

- The patient or family (if relevant) declines to continue treatment.
- The patient is unable to continue to make progress towards goals secondary to medical or psychosocial complications.
- Objective clinical data demonstrates that the patient is not benefiting from skilled therapeutic
  intervention as evidenced by minimal or no significant measurable change in a reasonable
  time frame. This will be related to appropriate clinical measures that are patient and diagnosis
  specific.
- Following a reasonable period of appropriate therapeutic intervention, it is evident that a negative trend has occurred in some or all of the relevant objective functional data. Generally

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accepted standards of practice suggest that therapy be suspended at this time and appropriate medical re-evaluation performed.

- The member is significantly non-adherent with their specific therapeutic protocol. This includes, but is not limited to:
- Insufficient attendance at therapy sessions as outlined by the therapist's plan of care.
- Not appropriately involved during treatment.
- Non-compliance with therapist instructions related to:
  - i. Home exercise program.
  - Activity and environmental modification to prevent re-injury or reinflammation.
  - iii. Self-management of symptoms or acute episodes.

In addition to these general criteria, individual benefit plan contracts may vary. The member's specific contract language will govern all final determinations. Some common circumstances that are not eligible for benefit coverage under many plans include therapy to return to specific vocational and/or occupational activities.

### Purpose

This process document describes Optum\* by OptumHealth Care Solutions, LLC methodology and requirements for the appropriate and safe application of epidural steroid injections.

### Scope

All in and out of network programs where utilization review determinations are rendered. This policy also serves as a resource for peer-to-peer interactions in describing the position of Optum on the reporting of epidural steroid injection services.

### **Definitions**

### **Appropriateness:**

\*Optum's clinical criteria incorporate measures of function, range of motion, strength, pain, and other relevant factors (as described more fully below), which will be determined through utilization review that is based on the needs of the individual patient and the characteristics of the local delivery system.

A procedure will be determined to be appropriate for authorization for a patient based on his/her particular clinical history, current clinical status (including objective and subjective data) and the established nature of their diagnosed or presumed clinical condition(s).

Discharge criteria, where appropriate, will have been met [and as such no additional authorizations will be provided] when these measurements and key clinical information, taken as a whole, indicate the member is able to reasonably perform physical tasks related to self-care, home management, and basic activities of daily living, or has reached a plateau in making progress towards these goals. In some clinical



circumstances a maintenance or periodic plan of treatment is considered appropriate and may be authorized in accordance with the specifics of the criteria herein.

Unless specifically covered by the member's benefit, covered treatment goals exclude return to sport, recreational or vocational activities. As part of the treatment plan, it is the responsibility of the treating practitioners to instruct the member in the early part of the treatment program, and certainly prior to discharge, in a comprehensive home activity and exercise program, and to set the expectation for the patient's responsibility to perform their exercise or self-care regimen between treatments (when a series is performed) and to maintain an appropriate, post-discharge exercise and self-care/activity regimen. These criteria are derived from recognized professional standards that may include those from the American Medical Association, the American Pain Society, American Academy of Orthopedic Surgeons, the North American Spine Society, the Centers for Medicare and Medicaid Services, the American Physical Therapy Association, and other recognized clinical organizations.

### Background

Epidural injections are used to evaluate and treat pain that starts at the spine and radiates to an arm or leg (i.e., is radicular). The arm or leg pain often is due to the neurogenic inflammation and or membrane instability of a spinal nerve(s). On history there is subjective dermatomal sensory loss. On exam lower extremity radicular pain has the characteristics of a positive straight leg raise occurring below 30 degrees. This is because radicular pain originates from the dorsal (sensory) root or the DRG (dorsal root ganglion) of the spinal nerve.

These injections typically use both an anesthetic and a steroid medication. They are injected into the epidural space near the affected spinal nerve root. Fluoroscopic imaging (often with the injection of a small amount of contrast solution) is used to help assure the placement of the needle in the desired epidural location.

The initial injections (maximum of 2 by any combination (interlaminar or transforaminal) for a patient are intended to be diagnostic procedures. If there is substantial (or even complete) relief of the radicular symptoms, it is reasonable to conclude that the neurogenic inflammation was the principal, or a major source of the symptoms being evaluated and treated. Equally, should there be little relief experienced or the relief given not directly related to the symptoms under evaluation, then another source or location for the problem needs to be identified and evaluated/treated.

There are several approaches to injecting the epidural space. These are (1) transforaminal (2) interlaminar and (3) caudal. Similarly, all levels of the spine are potential locations for these injections, but the vast majorities are given at lumbar and cervical levels.

The goal of these injections is to reduce inflammation to relieve radicular pain or the sciatica episode. With relief of the symptoms, the injections will hopefully allow the patient to progress with their rehabilitation program. Studies report that a modest portion of patients, perhaps 10-30% in some papers, achieve relatively long-lasting relief from these injections. Other patients achieve modest, more short-term relief and yet others attain little apparent benefit from these injections.

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## Description

### **Indications for Coverage:**

- 1. Suspected radicular pain and/or
- 2. Neurogenic claudication and/or
- 3. Low back pain with one of the following: substantial imaging abnormalities such as a central disc herniation, severe degenerative disc disease or central spinal stenosis. For a patient with low back pain only, a simple disc bulge or annular tear/ fissure is insufficient to justify performance of a lumbar ESI, unless other indications in this section are present.
- 4. Documented Visual Analog Scale (VAS) for pain or Numeric Pain Rating Scale (NPRS) ≥ 3/10 (moderate to severe pain) with functional impairment in activities of daily living (ADLs).
- 5. Failure of six weeks of non-surgical, non-injection care. All appropriate non-surgical, non-injection treatments should be considered along with a rationale for interventional treatment. Exceptions to the 6 week wait, beginning at the onset of pain, before receiving a lumbar ESI exist, but should be documented. These would include, but are not limited to:
  - a. At least moderate pain with significant functional loss at work and/or home.
  - b. Severe pain unresponsive to outpatient medical management.
  - c. Inability to tolerate non-surgical, non-injection care due to co-existing medical condition(s)
  - d. Prior successful lumbar ESI for same specific condition.

#### **Imaging Requirements:**

- 1. Minimum criteria: Plain films to rule out red flag condition.
- 2. Advanced imaging (MRI, CT) may be appropriate prior to performing an ESI

#### **Contraindications:**

- 1. Major risk factors for cancer.
- New onset of LBP with history of cancer, multiple risk factors for cancer, or strong clinical suspicion for cancer.
  - a. The patient must be thoroughly evaluated and cancer ruled out as an etiology prior to a lumbar ESI.
  - b. If cancer is present, but the pain is clearly unrelated, an ESI may still be indicated if one of the "Indications" previously listed is present.
- 3. Risk factors for spinal infection including:
  - a. New onset of LBP with fever
  - b. History of intravenous drug use
  - c. History of recent bacterial or fungal infection
  - d. Immunosuppression

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- 4. Risk factors for, or signs of, cauda equina syndrome including:
  - a. New onset urine retention, fecal incontinence, or saddle anesthesia
  - b. Rapidly progressing (or other) neurological deficits
- 5. A co-existing medical condition that would preclude the safe performance of the procedure.
- 6. A co-existing medical or other condition that contraindicates the intervention, e.g., epidural hematoma, subarachnoid hemorrhage, epidural mass, spinal cord ischemia, trauma.
- 7. A co-existing medical or other condition that precludes the safe performance of the procedure, e.g., uncontrolled coagulopathy or active anti-coagulation therapy.
- 8. Potential presence of a CNS process resulting in the presenting symptoms, e.g., transverse myelitis, central demyelination.
  - a. The patient must be thoroughly evaluated, and a CNS process ruled out as the source of pain or neurologic deficit prior to an ESI.
  - b. If a CNS process is present, but the pain or neurologic deficit is clearly unrelated, an ESI may still be indicated if one of the above indications is present.
  - c. Numbness and/or weakness without paresthesia/dysesthesia or pain.

#### **Procedural Requirements:**

#### All Methods

- 1. All elective (non-emergent) ESIs should be done with image-guidance. Fluoroscopy and CT are the only two validated imaging methods.
- 2. Contrast medium should be injected during epidural injection procedures. Exceptions to the use of contrast include:
- a. Patients that have a significant history and/or are at high risk for an adverse event if contrast material is used e.g., contrast allergy. The reasons for not using contrast should be documented in the procedure report.
- 3. Films that adequately document final needle position and injectate flow must be retained and made available upon request.
- 4. For each session, no more than 80mg of triamcinolone, 80 mg of methylprednisolone, 12 mg of betamethasone, 15 mg of dexamethasone or equivalent corticosteroid dosing may be used.

### **Transforaminal Lumbar ESIs**

- 1. Diagnostic selective nerve root blocks (anesthetic only), performed in a manner similar to transforaminal ESIs, may be considered to further evaluate the anatomical level of radicular pain.
- 2. When a diagnostic spinal nerve block is performed, post-block assessment of percentage pain relief must be documented.
  - a. Any additional documentation such as post-injection focused neurologic exam to assess for nerve root anesthetization or myotomal weakness is optional but can be included in the physician's report.



#### **Associated Information**

#### **Utilization Levels per Session**

- 1. No more than two transforaminal injections may be performed at a single setting (e.g., single spinal level bilaterally or two spinal levels unilaterally)
- One cervical/thoracic or lumbar/caudal interlaminar injection per session and not in conjunction with a transforaminal injection.

### Frequency with criteria

- 1. No more than 2 epidural injections may be performed in the diagnostic phase per region cervico/thoracic region or lumbar/sacral region).
- 2. With documentation of at least 10 weeks of improvement with first 2 epidural injections in the diagnostic phase, therapeutic epidural injections may be performed not exceeding 4 per year with documentation of at least 10 weeks of pain relief greater than 50% with documentation of improvement in functional status (therapeutic phase starts with first therapeutic injection) for repeat injections.
- 3. For transforaminal epidural injections, a maximum of 2 levels will be reimbursed (e.g., single spinal level bilaterally or two spinal levels unilaterally), irrespective of the levels utilized and irrespective of the nerves blocked in one region.

#### **Sedation:**

- 1. Local anesthesia or minimal to moderate conscious sedation may be appropriate options.
- 2. Monitored anesthesia care may be considered on very rare occasions with clear documentation of the need for such sedation.

### **Documentation:**

All patients, new and/or established, should have a history and focused physical exam by the physician providing the service. This should take into account the procedure to be performed and any changes in the patient's medical status and/or new symptoms that may have developed since their last evaluation with the treating physician and/or their colleague or associate (if previously evaluated in that practice).

#### **Pre-Procedure History**

History sufficient to establish indication for ESI and exclude contra-indications.

#### **Pre-Procedure Physical Examination**

Basic musculoskeletal examination and focused neurological examination sufficient to establish indication for ESI and exclude contra-indications.

### **Pre-Procedure Imaging**

Prior imaging results. If an ESI is performed for LBP, substantial imaging abnormalities must be documented, as noted in "Indications for Coverage"

#### **Shared Decision Making / Informed Consent**



Patients receiving or considering an ESI should be informed of their options and the risks/benefits of each including, but not limited to medication management, awaiting natural history, exercise-based therapy and surgical interventions. However, there is no mandate to the use of any of these options post-injection. Patients receiving or considering an ESI should be informed of specific potential complications of the proposed approach.

### **Additional Suggested Procedural Considerations:**

- 1. There is no role for "series of three" ESIs. Response to each ESI should be determined prior to determining the value of a repeat ESI and the specific methods used for subsequent ESIs.
- 2. Sufficient contrast medium should be used to allow for identification of proper injectate flow and to exclude vascular, subarachnoid or subdural flow.
- 3. Methods to reduce risk of inadvertent vascular injection of particulate steroids with subsequent spinal cord ischemia exist for the performance of TFESIs. These methods should be understood and their use is strongly encouraged. Safety is enhanced if, at the L3 level and above, only non-particulate corticosteroids are injected when performing transforaminal injections.
- 4. If a diagnostic transforaminal injection is planned then baseline (pre-injection) identification of the patient's index pain, intensity of pain (via a visual analog scale or numeric pain rating), neurologic deficits (if they exist) and provocation maneuvers that exacerbate the patient's index pain should be performed.

The medical record must be made available upon request.

When the documentation does not meet the criteria for the service rendered, or the documentation does not establish the medical necessity for the services, such services will be denied as not reasonable and necessary.

#### **Functional Outcomes**

Improved functional outcomes are a key desired goal of these therapies. These outcomes will be affected by individual patient variables (age, anthropometric characteristics, and pre-morbid status) and the nature of the condition (previous history of injury or surgery to the affected region). Functional assessment will, therefore, be individually meaningful and measured, where relevant, using an appropriate, valid, and reliable assessment tool.

- a. Functional scales will be considered in utilization review, however, given the diverse nature of
  these scales, no arbitrary threshold can translate into an absolute endpoint for an episode of care.
  In general, regular, significant measurable changes should be seen in a reasonable time frame in
  relation to baseline performance.
- b. Given the above parameters describing pain, range of motion and function, some of the following activities may be demonstrated as applicable:
  - Basic ADLs such as positioning, mobility, self-maintenance tasks, communication
  - Instrumental ADLs such as home management, community living skills and occupational activities

A reasonable return, safely, efficiently, and at a maximum level of independence (with or without assistive devices) to customary basic ADL, as well as general suitability for common work activities.



\*\*\*\* Note: Pulsed Radiofrequency to the Dorsal Root Ganglion is considered investigational and not a covered service.

## **Coding Information**

Note: The Current Procedural Terminology (CPT) codes listed in this policy may not be all inclusive and are for reference purposes only. The listing of a service code in this policy does not imply that the service described by the code is a covered or non-covered health service. Coverage is determined by the member's benefit document.

Code	Description
62320	Injection(s), of diagnostic or therapeutic substance(s) (e.g., anesthetic, antispasmodic, opioid, steroid, other solution), not including neurolytic substances, including needle or catheter placement, interlaminar epidural or subarachnoid, cervical or thoracic; without imaging guidance
62321	Injection(s), of diagnostic or therapeutic substance(s) (e.g., anesthetic, antispasmodic, opioid, steroid, other solution), not including neurolytic substances, including needle or catheter placement, interlaminar epidural or subarachnoid, cervical or thoracic; with imaging guidance (i.e., fluoroscopy or CT)
62322	Injection(s), of diagnostic or therapeutic substance(s) (e.g., anesthetic, antispasmodic, opioid, steroid, other solution), not including neurolytic substances, including needle or catheter placement, interlaminar epidural or subarachnoid, lumbar or sacral (caudal); without imaging guidance
62323	Injection(s), of diagnostic or therapeutic substance(s) (e.g., anesthetic, antispasmodic, opioid, steroid, other solution), not including neurolytic substances, including needle or catheter placement, interlaminar epidural or subarachnoid, lumbar or sacral (caudal); with imaging guidance (i.e., fluoroscopy or CT)
64479	Injection(s), anesthetic agent and/or steroid, transforaminal epidural, with imaging guidance (fluoroscopy or CT); cervical or thoracic, single level
64480	Injection(s), anesthetic agent and/or steroid, transforaminal epidural, with imaging guidance (fluoroscopy or CT); cervical or thoracic, each additional level (List separately in addition to code for primary procedure)
64483	Injection(s), anesthetic agent and/or steroid, transforaminal epidural, with imaging guidance (fluoroscopy or CT); lumbar or sacral, single level
64484	Injection(s), anesthetic agent and/or steroid, transforaminal epidural, with imaging guidance (fluoroscopy or CT); lumbar or sacral, each additional level (List separately in addition to code for primary procedure)

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## **Policy History/Revision Information**

Date	Action/Description
4/27/2023	Quality Improvement Committee approved activation of the policy

### **Contact Information**

Please forward any commentary or feedback on Optum utilization management policies to: <a href="mailto:phpolicy">phpolicy</a> inquiry@optum.com with the word "Policy" in the subject line.

The services described in Optum\* by OptumHealth Care Solutions, LLC policies are subject to the terms, conditions and limitations of the Member's contract or certificate. Optum reserves the right, in its sole discretion, to modify policies as necessary without prior written notice unless otherwise required by Optum's administrative procedures.

Certain internal policies may not be applicable to self-funded members and certain insured products. Refer to the member's Summary Plan Description (SPD) or Certificate of Coverage (COC) to determine whether coverage is provided or if there are any exclusions or benefit limitations applicable to any of these policies. If there is a difference between any policy and the member's SPD or COC, the member's SPD or COC will govern.

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