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Notice of Independent Review Decision

DATE OF REVIEW: March 1, 2012

IRO CASE #:

DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE:

Injection, including catheter placement, continuous infusion or intermittent bolus, not including neurolytic substances, with or without contrast (for either localization or epidurography), of diagnosis (A 12th C5-6 ESI under fluoroscopy with IV sedation 62318, 77003)

A DESCRIPTION OF THE QUALIFICATIONS FOR EACH PHYSICIAN OR OTHER HEALTH CARE PROVIDER WHO REVIEWED THE DECISION:

This physician is Board Certified in Anesthesiology and Pain Management with over 40 years of experience.

REVIEW OUTCOME:

Upon independent review the reviewer finds that the previous adverse determination/adverse determinations should be:

Upheld (Agree)

Provide a description of the review outcome that clearly states whether or not medical necessity exists for each of the health care services in dispute.

INFORMATION PROVIDED TO THE IRO FOR REVIEW:

10/22/06: Right Shoulder X-rays, Cervical Spine X-rays, Thoracic Spine X-rays interpreted by
11/03/06: MRI of the Cervical Spine interpreted by
02/08/08: Initial Pain Evaluation at by
03/10/08: Follow-up Evaluation at by
04/10/08: Follow-up Evaluation at by
04/30/08: Operative Report by
05/12/08: Follow-up Evaluation at by
05/28/08: Operative Report by
06/19/08: Follow-up Evaluation at by
10/11/08: Peer Review Report by
11/10/08: Follow-up Evaluation at by

11/20/08: Initial Prospective Review by with
12/03/08: Operative Report by
02/04/09: Operative Report by
03/02/09: Follow-up Evaluation at by
04/01/09: Operative Report by
04/27/09: Follow-up Evaluation at by
05/06/09: Peer Review Report by
06/01/09: Follow-up Evaluation at by
06/12/09: Peer Review Report by
07/13/09: Follow-up Evaluation at by
07/22/09: Physician Review Recommendation by for
08/17/09: Follow-up Evaluation at by
08/27/09: Physician Review Recommendation by for
10/19/09: Follow-up Evaluation at by
10/26/09: Initial Prospective Review by with
12/07/09: Follow-up Evaluation at by
01/06/10: Operative Report by
02/08/10: Follow-up Evaluation at by
04/19/10: Follow-up Evaluation at by
05/17/10: Follow-up Evaluation at by
06/28/10: Follow-up Evaluation at by
07/28/10: Follow-up Evaluation at by
08/16/10: Follow-up Evaluation at by
10/20/10: Operative Report by
11/18/10: Follow-up Evaluation at by
12/06/10: Follow-up Evaluation at by
12/10/10: Utilization Review by
12/21/10: Follow-up Evaluation at by
01/05/11: Notice of Independent Review Decision
01/17/11: Follow-up Evaluation at by
01/31/11: EMG/NCV of the upper extremities performed by
02/21/11: Follow-up Evaluation at by
03/09/11: Operative Report by
03/14/11: Follow-up Evaluation at by
05/18/11: Operative Report by
09/06/11: Follow-up Evaluation at by
10/03/11: Operative Report by
11/14/11: Follow-up Evaluation at by
11/23/11: Utilization Review by
12/12/11: Follow-up Evaluation at by
12/21/11: UR performed by
01/04/12: Follow-up Evaluation at by
01/16/12: UR performed by
01/30/12: Follow-up Evaluation at by

PATIENT CLINICAL HISTORY [SUMMARY]:

The claimant is a female who was injured on xx/xx/xx while she was working.

10/22/06: X-rays of the cervical spine. Impression: 1. Straightening of the cervical spine, which may be related to muscle spasm. 2. Spondylosis.

11/03/06: MRI of the Cervical Spine interpreted by Impression: Two millimeter generalized bulging of the annulus fibrosis at the C5-6 level.

02/08/08: The claimant had an initial pain evaluation by for complaints of chronic, persistent neck, right shoulder, upper arm, and hand pain associated with numbness, weakness, and headaches. It was noted she had undergone an abundant amount of physical therapy and rehabilitative efforts, but her pain persisted. On physical examination she had moderate mid cervical interspinous tenderness. She had multiple areas of trigger point tenderness throughout the trapezius, interscapular, and rhomboid regions. Pinprick sensation was diminished in a non-segmental dermatomal fashion in the right arm and hand with some mild hyperesthesia and allodynia extending into the right forearm and distal digit. Multiple areas of trigger point tenderness in the thoracic and lower lumbar regions were also noted. Diagnosis: 1. Chronic neck pain syndrome consistent with cervical disk protrusion. 2. Myofascial pain syndrome of the cervical and thoracic spine. 3. Cannot rule out complex regional pain syndrome of the right upper extremity. 4. Myofascial pain syndrome of the right shoulder. Plan: Cymbalta 30 mg in the morning to be increased to 60 mg in the afternoon. Darvocet-N 100.

03/10/08: The claimant had a follow-up evaluation with who stated she was doing well with the current drug regimen and recommended a cervical epidural blockade.

04/10/08: The claimant had a follow-up evaluation with who added Neurontin 300 mg to her medicine regimen.

04/30/08: Operative Report by Postoperative Diagnoses: 1. Chronic back pain syndrome associated with cervical disc protrusion. 2. Cervical radiculopathy. 3. Complex regional pain syndrome of the arms and hands. Procedures: 1. Introduction of cervical epidural catheter under fluoroscopy. 2. Injection of contrast. 3. Injection of corticosteroid local anesthetic solution.

05/12/08: The claimant had a follow-up evaluation with who noted she was reporting more than 80% improvement of her arm and hand pain complaints. Recommendations were made for a second and third cervical epidural block.

05/28/08: Operative Report by Postoperative Diagnoses: 1. Chronic back pain syndrome. 2. Cervical radiculopathy. 3. Complex regional pain syndrome of the arms and hands. Procedures: 1. Introduction of cervical epidural catheter under fluoroscopy. 2. Injection of contrast. 3. Injection of corticosteroid local anesthetic solution.

06/19/08: The claimant had a follow-up evaluation with who reported she received more than 50% relief and is more functional and active. She was still taking Darvocet-N 100 for breakthrough pain.

10/11/08: Peer Review Report by who rendered the following opinions. The request for a cervical epidural with catheter approach, IV sedation under fluoroscopy associate CPT codes 62318 and 77003 is not medically necessary and appropriate. First, there is no physical exam to support this injection as of the last few notes. Second, the EMG has been negative and the MRI shows only disc bulges. For these reasons, another ESI is not clinically supported.

11/20/08: Initial Prospective Review by with. rendered the following opinion: This patient has had very good response to ESIs in the past. She has return of findings and worsening of pain, 5 months after the last ESI. It is reasonable to address this with another therapeutic ESI as ODG allows up to 4 of these per year.

12/03/08: Operative Report by Postoperative Diagnoses: 1. Chronic back pain syndrome associated with cervical disc protrusion. 2. Cervical radiculopathy. Procedures: 1. Introduction of cervical epidural catheter under fluoroscopy. 2. Injection of contrast with performance of epidurogram. 3. Injection of corticosteroid local anesthetic solution.

02/04/09: Operative Report by Postoperative Diagnoses: 1. Chronic back pain syndrome associated with cervical disc protrusion. 2. Cervical radiculopathy. Procedures: 1. Introduction of cervical epidural catheter under fluoroscopy. 2. Injection of contrast with performance of epidurogram. 3. Injection of corticosteroid local anesthetic solution.

03/02/09: The claimant had a follow-up evaluation with who reported she had more than 50% improvement of function and improved range of motion following the ESI.

04/01/09: Operative Report by. Postoperative Diagnoses: 1. Chronic back pain syndrome associated with cervical disc protrusion. 2. Cervical radiculopathy. Procedures: 1. Introduction of cervical epidural catheter under fluoroscopy. 2. Injection of contrast with performance of epidurogram. 3. Injection of corticosteroid local anesthetic solution.

04/27/09: The claimant had a follow-up evaluation with who reported she had more than 70% improvement of her neck pain following cervical ESI.

05/06/09: Peer Review Report by who rendered the following opinion: The claimant has a diagnosis of CRPS. No mechanism of injury was given. The claimant had one cervical ESI on 02/04/09 and a month later had findings of hyperesthesia. The next note 04/27/09 states she had 70% benefit but there is no physical examination. While the Attending Physician diagnosed CRPS, there are minimal findings to support this. The claimant had one ESI with benefit but there is no physical examination in either of

the two follow up notes to support doing this again. Therefore, the request for a cervical ESI was denied.

06/12/09: Peer Review Report by who rendered the following opinion: Treatment has included cervical ESI times two. The claimant had the first ESI on 02/04/09 with 50% relief and the second on 04/01/09 with 70% relief. Review of the available medical records indicates that the claimant carries the diagnosis of work related neck injury. The request for the third cervical ESI is not medically necessary, per ODG Guidelines. Specifically, the Guidelines do not recommend a "series of three" injections in either the diagnostic or therapeutic phase. The Guidelines recommend no more than 2 ESI injections.

07/13/09: The claimant had a follow-up evaluation with who reported that she wanted to go ahead with the third cervical ESI. She had received 70% relief from the prior injections, was more functional and using less medications. On physical examination her range of motion was nearly full, but she had some pain in the interspinous C5-6 regions with increased paraspinal tenderness.

07/22/09: Physician Review Recommendation by for. Rationale for Adverse Determination of Cervical Spine ESI: In this case, the patient had documented 70% relief from the 1st and 2nd cervical ESI, so the patient would qualify for a repeat cervical ESI. However, the ODG recommends the repeat block with acute exacerbation of pain or new onset of symptoms. The notes from the provider indicated ongoing 70% relief at this time without return of pain or new symptoms, and therefore, the repeat block would not be necessary at this time.

08/27/09: Physician Review Recommendation by for. Rationale for Adverse Determination of Cervical Spine ESI: The data submitted for review failed to provide any current evidence for radiculopathy by the examination. Furthermore, the same guideline sets out that "Current research does not support a "series-of-three" injections in either the diagnostic or therapeutic phase. We recommend no more than 2 ESI injections." Based upon all of the foregoing, the requested intervention cannot be recommended.

10/19/09: The claimant had a follow-up evaluation with who reported she was still having some "opretar" or tightness in her neck and upper back. He added some Zanaflex to her current drug regimen and was going to wean her from Neurontin, and continue Darvocet-N 100 and Celexa. She was encouraged to continue ROM and physical therapy modalities.

10/26/09: Initial Prospective Review by with who rendered the following opinion: The requested ESI is not medically necessary. There is no physical exam in the latest note to support any injection from a clinical perspective. The patient is having ongoing 70% relief per the notes, so doing another ESI at this time is not supported.

12/07/09: The claimant had a follow-up evaluation with who reported she was having spasms and her neck pain which was recurring.

01/06/10: Operative Report by. Operative Report by. Postoperative Diagnoses: 1. Chronic neck pain syndrome with cervical disc disruption. 2. Cervical radiculopathy. Procedures: 1. Introduction of cervical epidural catheter under fluoroscopy. 2. Injection of contrast with performance of epidurogram. 3. Injection of corticosteroid local anesthetic solution.

02/08/10: The claimant had a follow-up evaluation with who reported she had more than 70% improvement of her neck, shoulder, and arm pain complaints. She felt complete resolution for two weeks after her last injection. She was taking minimal supplemental medication, was more functional, and was working. On exam she had minimal tenderness in the trapezius areas bilaterally.

05/17/10: The claimant had a follow-up evaluation with who reported she was having decreased neck range of motion, stiffness, and burning pain into her left shoulder, arm, and hand. Neurologically, she did show some decreased pinprick sensation in the left C5-6 distribution. She had moderate mid cervical interspinous tenderness. Cervical epidural blockade was recommended.

08/16/10: The claimant had a follow-up evaluation with who reported she continued to have complaints of moderate to severe neck pain. ESI was recommended.

10/20/10: Operative Report by. Operative Report by. Operative Report by. Postoperative Diagnoses: 1. Chronic neck pain syndrome associated with cervical disc protrusion. 2. Cervical radiculopathy. Procedures: 1. Introduction of cervical epidural catheter under fluoroscopy. 2. Injection of contrast with performance of epidurogram. 3. Injection of corticosteroid local anesthetic solution.

11/18/10: The claimant had a follow-up evaluation with who reported she had more than 70% improvement of her neck, shoulder, and arm pain complaints. She was able to cut her medicine down to just one tablet of Vicodin twice a day. Now, weeks later, she did not receive her 2nd block in a timely manner, and her pain had come back at least 50% improved. A 2nd ESI was recommended.

12/06/10: The claimant had a follow-up evaluation with who reported on physical exam she had decreased neck ROM and increased paraspinal muscle tone.

12/10/10: Utilization Review by. Rationale for Adverse Determination of Second CESI: In this situation, while the patient did have 70% initial relief and 50% ongoing relief per the provider's 12/06/10 report and the cervical ESI may be appropriate, the request included a request for sedation. According to the guidelines, ESI with sedation is considered controversial. Also, there was no indication that the patient meets criteria for IV sedation including, needle phobia and/or anxiety, inability of the patient to maintain appropriate positioning, documented allergy to local anesthetics, and/or

technically difficult procedure resulting from anatomic variation or abnormal body habitus. I did make two successive calls over two consecutive days; unfortunately, I did not receive a call back. As I was unable to discuss a potential modification with the provider, the request cannot be recommended as medically necessary at this point.

12/21/10: The claimant had a follow-up evaluation with who reported she had near full range of motion, but still had moderate interspinous cervical tenderness with some radicular symptoms down her left arm. She was being maintained on Vicodin, Paxil, and Zanaflex.

01/05/11: Notice of Independent Review Decision: The patient does not demonstrate objective signs or symptoms of radiculopathy based on the documentation provided. She has symptoms essentially in the trapezius and shoulder, which is not radicular. There is no specific physical examination finding that objectively supports the diagnosis of radiculopathy at this time. Further, she has had significant initial phase relief and it is not clear that a second injection will improve her significantly. It is not stated that the patient meets the criteria for IV sedation, although she is noted to be medicated for anxiety. records do not demonstrate the inability of the patient to maintain appropriate positioning and does not indicate that this was or will be a technically difficult procedure resulting from anatomic variation, which are criteria in the ODG for sedation during ESI. Therefore, the requested second cervical ESI with sedation is not reasonable or necessary and the previous adverse determinations should be upheld.

01/17/11: The claimant had a follow-up evaluation with who recommended EMG nerve conduction testing to support the diagnosis of cervical radiculopathy.

01/31/11: EMG/NCV of the upper extremities performed by. Impression: 1. Bilateral cervical radiculopathy: Multi-level acute appearing denervation with most activity around C6. 2. No NCV evidence of generalized peripheral neuropathy, plexopathy or other entrapments.

02/21/11: The claimant had a follow-up evaluation with who reported she continued to have decreased neck range of motion. She had arm pain into her right arm and hand, numbness, and tingling. She had moderate mid cervical interspinous tenderness. A cervical ESI was recommended.

03/09/11: Operative Report by. Operative Report by. Operative Report by. Postoperative Diagnoses: 1. Chronic neck pain syndrome associated with bilateral cervical radiculopathy. 2. Herniated cervical disk. Procedures: 1. Introduction of cervical epidural catheter under fluoroscopy. 2. Injection of contrast with performance of epidurogram. 3. Injection of corticosteroid local anesthetic solution.

03/14/11: The claimant had a follow-up evaluation with who reported she had almost complete resolution of her neck, shoulder, and arm pain complaints following the ESI therapy. She was taking just 2 to 3 Hydrocodone per day. Her affect was improved

with Paxil 40 mg. She was encouraged to continue exercise and rehabilitative measures and a 2nd ESI was recommended.

05/18/11: Operative Report by. Operative Report by. Operative Report by.
Postoperative Diagnoses: 1. Chronic neck pain syndrome associated with bilateral cervical radiculopathy. 2. Herniated cervical disk. Procedures: 1. Introduction of cervical epidural catheter under fluoroscopy. 2. Injection of contrast with performance of epidurogram. 3. Injection of corticosteroid local anesthetic solution.

09/06/11: The claimant had a follow-up evaluation with who reported she had decreased neck ROM and had hyperesthesia in her right arm. She had decreased pinprick sensation in the C5-C6 distribution. She had failed conservative and rehabilitative efforts. A cervical ESI was recommended.

10/03/11: Operative Report by. Operative Report by. Operative Report by.
Postoperative Diagnoses: 1. Chronic neck pain syndrome associated with bilateral cervical radiculopathy. 2. Herniated cervical disk. Procedures: 1. Introduction of cervical epidural catheter under fluoroscopy. 2. Injection of contrast with performance of epidurogram. 3. Injection of corticosteroid local anesthetic solution.

11/14/11: The claimant had a follow-up evaluation with who reported more than 70% improvement of her neck, shoulder, and arm pain following the ESI. Her radicular component of her pain nearly completely resolved and she was down to just 1 or 2 Vicodin per day. She still required antidepressant support for reactive depression. She was switched from Paxil to Prozac 40 mg. She was having some decreased neck ROM as well as moderate pain four weeks after her first injection, therefore a 2nd ESI was recommended.

11/23/11: Utilization Review by. Rationale for Adverse Determination for cervical ESI: In this case, the patient has had four blocks from October 2010 to October 2011. By the 11/14/11 follow-up, the patient had only had four weeks response of 70%. The response was good, but there were also no physical findings to support a radiculopathy. There is corroboration from a 01/31/11 electrodiagnostic study, which showed bilateral C6 radiculopathy and there were no levels specified. Additionally, for the IV sedation, this is only recommended for patients with severe anxiety and there is no documentation of anxiety in this patient. However, the block has not been documented for medical necessity.

12/12/11: The claimant had a follow-up evaluation with who reported that the previous ESI helped her with more than 60% to 70% improvement of her neck pain complaints and her arm pain nearly completely resolved. On exam she had moderate mid cervical interspinous tenderness. She was reported to be exercising, but still had some mild pinprick sensation diminution in the C5-C6 distribution consistent with her diagnostic testing. A second ESI was recommended.

12/21/11: UR performed by. Rationale for Denial: Current guidelines indicate that in a therapeutic phase, repeat blocks should only be offered if there is at least 50% pain relief for 6 to 8 weeks with a good recommendation of not more than 4 blocks provided per year. Repeat injections should be based on continued objective documented pain and function response. Radiculopathy must be documented by physical exam and corroborated by imaging studies and/or electrodiagnostic testing. Medical records submitted for this review do not demonstrate current imaging studies demonstrating radiculopathy that can be correlated with the physical findings and do not demonstrate significant current electrodiagnostic studies demonstrating radiculopathy. As such, the request does not meet current Official Disability Guidelines.

01/04/12: The claimant had a follow-up evaluation with who reported she continues with 60% to 70% improvement. She was having moderate mid cervical interspinous tenderness consistent with the lesion she suffered while at work. It was recommended she continue her current drug regimen including Vicodin, Zanaflex, and Prozac.

01/16/12: UR performed by. Rationale for Denial: The Official Disability Guidelines indicate that radiculopathy must be documented and corroborated by imaging studies, the patient must be initially unresponsive to conservative treatment, and that repeat injections should be based on continued objective documented pain and functional response. It is also noted that repeat block should only be offered if there is at least a 50% pain relief for 6-8 weeks with no more than 4 blocks per region per year. The documentation submitted for review notes that the patient has had ongoing neck, shoulder, and arm pain complaints. The patient was noted to have an EMG study which corroborates the findings of radiculopathy in the upper extremities. However, there is no documentation submitted for review noting that the patient has been unresponsive to conservative treatment such as physical therapy, home exercise program, and the adherence to the currently prescribed medication regimen. It is noted the patient has had approximately 3 cervical injections at the C5-6 in the past year with 70% improvement in symptomatology. However, there is no documentation submitted noting that the patient has had at least 6-8 weeks of relief from the pain symptoms. Furthermore, it is indicated that the cervical epidural steroid injections do not provide long-term pain relief beyond 3 months, and there is insufficient evidence to make any recommendation for the use of epidural steroid injections to treat radicular cervical pain.

01/30/12: The claimant had a follow-up evaluation with stated the ESI therapy has continued to provided 60% to 70% relief and has helped the claimant to be more functional and more active, take less medications, and avoid surgical intervention. Currently she had to take Hydrocodone 5 mg twice daily, Prozac in the morning for myofascial pain and Zanaflex at night. She was also using Neurontin for neuropathic pain down her arms and hands. On physical exam she had decreased neck ROM and decreased pinprick sensation in the C6 distribution. continued to recommend ESI.

ANALYSIS AND EXPLANATION OF THE DECISION INCLUDE CLINICAL BASIS, FINDINGS AND CONCLUSIONS USED TO SUPPORT THE DECISION:

The previous adverse determinations have been upheld. The chart has been extensively reviewed and I find that the data supplied does not meet the ODG Guidelines for continuation of the cervical epidural steroid injections. I concur that one should not perform more than 4 of these injections per year. Plus, each injection should be individually warranted per the ODG. That is not the case in this instance. Poor documentation exists for cervical radiculopathy, as there are no distinct measurements of atrophy or definitive clinical measurements that would warrant such a diagnosis. Electrodiagnostic studies alone are not sufficient to establish that diagnosis.

There have been three Utilization Reviews performed on 11/23/2011 by, 12/21/2011 by, and 01/06/2012 by, all of whom have extensively documented the same conclusion that the ODG does not warrant performing additional cervical epidural blocks. Their explanations will not be repeated here. Suffice it to say, I concur with the above explanations and assessments that the requested injection, including catheter placement, continuous infusion or intermittent bolus, not including neurolytic substances, with or without contrast (for either localization or epidurography), of diagnosis (A 12th C5-6 ESI under fluoroscopy with IV sedation 62318, 77003) should be DENIED.

ODG:

Epidural steroid injection (ESI)

Recommended as an option for treatment of radicular pain (defined as pain in dermatomal distribution with corroborative findings of radiculopathy). See specific criteria for use below. In a recent Cochrane review, there was one study that reported improvement in pain and function at four weeks and also one year in individuals with chronic neck pain with radiation. ([Peloso-Cochrane, 2006](#)) ([Peloso, 2005](#)) Other reviews have reported moderate short-term and long-term evidence of success in managing cervical radiculopathy with interlaminar ESIs. ([Stav, 1993](#)) ([Castagnera, 1994](#)) Some have also reported moderate evidence of management of cervical nerve root pain using a transforaminal approach. ([Bush, 1996](#)) ([Cyteval, 2004](#)) A recent retrospective review of interlaminar cervical ESIs found that approximately two-thirds of patients with symptomatic cervical radiculopathy from disc herniation were able to avoid surgery for up to 1 year with treatment. Success rate was improved with earlier injection (< 100 days from diagnosis). ([Lin, 2006](#)) There have been recent case reports of cerebellar infarct and brainstem herniation as well as spinal cord infarction after cervical transforaminal injection. ([Beckman, 2006](#)) ([Ludwig, 2005](#)) Quadriplegia with a cervical ESI at C6-7 has also been noted ([Bose, 2005](#)) and the American Society of Anesthesiologists Closed Claims Project database revealed 9 deaths or cases of brain injury after cervical ESI (1970-1999). ([Fitzgibbon, 2004](#)) These reports were in contrast to a retrospective review of 1,036 injections that showed that there were no catastrophic complications with the procedure. ([Ma, 2005](#)) The American Academy of Neurology recently concluded that epidural steroid injections may lead to an improvement in radicular lumbosacral pain between 2 and 6 weeks following the injection, but they do not affect impairment of function or the need for surgery and do not provide long-term pain relief beyond 3 months, and there is insufficient evidence to make any recommendation for the use of epidural steroid injections to treat radicular cervical pain. ([Armon, 2007](#)) There is evidence for short-term symptomatic improvement of radicular symptoms with epidural or selective root injections with corticosteroids, but these treatments did not appear to decrease the rate of open surgery. ([Haldeman, 2008](#)) ([Benyamin, 2009](#)) See the [Low Back Chapter](#) for more information and references.

Criteria for the use of Epidural steroid injections, therapeutic:

Note: The purpose of ESI is to reduce pain and inflammation, thereby facilitating progress in more active treatment programs, and avoiding surgery, but this treatment alone offers no significant long-term functional benefit.

- (1) Radiculopathy must be documented by physical examination and corroborated by imaging studies and/or electrodiagnostic testing.
- (2) Initially unresponsive to conservative treatment (exercises, physical methods, NSAIDs and muscle relaxants).
- (3) Injections should be performed using fluoroscopy (live x-ray) for guidance
- (4) If used for diagnostic purposes, a maximum of two injections should be performed. A second block is not recommended if there is inadequate response to the first block. Diagnostic blocks should be at an interval of at least one to two weeks between injections.

- (5) No more than two nerve root levels should be injected using transforaminal blocks.
- (6) No more than one interlaminar level should be injected at one session.
- (7) In the therapeutic phase, repeat blocks should only be offered if there is at least 50% pain relief for six to eight weeks, with a general recommendation of no more than 4 blocks per region per year.
- (8) Repeat injections should be based on continued objective documented pain and function response.
- (9) Current research does not support a “series-of-three” injections in either the diagnostic or therapeutic phase. We recommend no more than 2 ESI injections.
- (10) It is currently not recommended to perform epidural blocks on the same day of treatment as facet blocks or stellate ganglion blocks or sympathetic blocks or trigger point injections as this may lead to improper diagnosis or unnecessary treatment.
- (11) Cervical and lumbar epidural steroid injection should not be performed on the same day.

Criteria for the use of Epidural steroid injections, diagnostic:

To determine the level of radicular pain, in cases where diagnostic imaging is ambiguous, including the examples below:

- (1) To help to evaluate a pain generator when physical signs and symptoms differ from that found on imaging studies;
- (2) To help to determine pain generators when there is evidence of multi-level nerve root compression;
- (3) To help to determine pain generators when clinical findings are suggestive of radiculopathy (e.g. dermatomal distribution), and imaging studies have suggestive cause for symptoms but are inconclusive;
- (4) To help to identify the origin of pain in patients who have had previous spinal surgery.

A DESCRIPTION AND THE SOURCE OF THE SCREENING CRITERIA OR OTHER CLINICAL BASIS USED TO MAKE THE DECISION:

- ACOEM- AMERICAN COLLEGE OF OCCUPATIONAL & ENVIRONMENTAL MEDICINE UM KNOWLEDGEBASE**
- AHCPR- AGENCY FOR HEALTHCARE RESEARCH & QUALITY GUIDELINES**
- DWC- DIVISION OF WORKERS COMPENSATION POLICIES OR GUIDELINES**
- EUROPEAN GUIDELINES FOR MANAGEMENT OF CHRONIC LOW BACK PAIN**
- INTERQUAL CRITERIA**
- MEDICAL JUDGEMENT, CLINICAL EXPERIENCE AND EXPERTISE IN ACCORDANCE WITH ACCEPTED MEDICAL STANDARDS**
- MERCY CENTER CONSENSUS CONFERENCE GUIDELINES**
- MILLIMAN CARE GUIDELINES**
- ODG- OFFICIAL DISABILITY GUIDELINES & TREATMENT GUIDELINES**
- PRESSLEY REED, THE MEDICAL DISABILITY ADVISOR**
- TEXAS GUIDELINES FOR CHIROPRACTIC QUALITY ASSURANCE & PRACTICE PARAMETERS**
- TEXAS TACADA GUIDELINES**
- TMF SCREENING CRITERIA MANUAL**
- PEER REVIEWED NATIONALLY ACCEPTED MEDICAL LITERATURE (PROVIDE A DESCRIPTION)**
- OTHER EVIDENCE BASED, SCIENTIFICALLY VALID, OUTCOME FOCUSED GUIDELINES (PROVIDE A DESCRIPTION)**