



**CLAIMS EVAL**

*Utilization Review and  
Peer Review Services*

Notice of Independent Review Decision-WC

**CLAIMS EVAL REVIEWER REPORT - WC**

**DATE OF REVIEW: 8-18-09**

**IRO CASE #:**

**DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE**

Epidural steroid injection for treatment of lumbar spine, outpatient #62311, #77275m, #77003

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

American Board of Anesthesiology and Pain Medicine

**REVIEW OUTCOME**

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

- Upheld (Agree)
- Overturned (Disagree)
- Partially Overturned (Agree in part/Disagree in part)

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**

- Unreadable date, an MRI of the lumbar spine.
- 4-21-09 EMG/NCS performed by , MD.
- , MD., office visits from 5-6-09 through 7-6-09.
- 5-6-09 X-rays of the lumbar spine.
- 7-8-09 , DO., performed a Utilization Review.
- 7-21-09 , MD., performed a Utilization Review.

### **PATIENT CLINICAL HISTORY [SUMMARY]:**

Unreadable date, an MRI of the lumbar spine shows at L4-L5, a 2-3 mm disc protrusion with mild central canal stenosis and mild right foraminal narrowing. At L5-S1, there is a 4 mm disc protrusion with mild central cord stenosis and S1 nerve impingement.

EMG/NCS dated 4-21-09 performed by , MD., was unremarkable.

Follow-up visit with Dr. S dated 5-6-09 notes the claimant has low back pain, which extends to the left more so than the right leg. His onset of injury was xx/xx/xx. The claimant reported he was working as a and while lifting, twisting, bending, he experienced sudden onset of right leg giving way and lower back pain. This was followed by intermittent numbness in both great toes and sometimes in the right kneecap. Initially, he was at where Hydrocodone and Flexeril were prescribed. He was not accepted back at work because of restrictions. He has just been started on Medrol Dosepack, Hydrocodone 4 per day, Lyrica 2 per day, and Cymbalta. At the present time, lower back pain is constant and it is made worse by sitting and better by changing position and sometimes by walking around. On exam, he has good alignment. Range of motion is decreased. SLR is positive at 50 degrees on the left with positive sciatic nerve stretch test. Foraminal compression test is positive on the left. Femoral nerve stretch test is negative bilaterally. Motor exam is normal. There is no evidence of dermatomal sensory deficits. DTR are 2+. The evaluator reported that the EMG was done about 4 weeks after the injury and was negative. Diagnosis provided was L5-S1 left sided disc herniation. Recommendations include the claimant is to return to work with restrictions.

X-rays of the lumbar spine dated 5-6-09 notes that on dynamic lateral flexion and extension views, the spine looks stable. Alignment is good, vertebral bodies appear adequate density. SI joints look good.

Follow-up with Dr. dated 5-25-09 notes the claimant complains of low back pain that extends to the left more so than the right leg. On exam of the lumbar spine, there is good alignment. There is evidence of muscle guarding. On dynamic examination, forward flexion is 20 degrees. Extension is to 0 degrees. Lateral flexion to the left and right is 10/20 degrees: Total sacral motion is 30 degrees. Straight leg raising test is positive at 50 degrees on the left with positive sciatic nerve stretch test. Foraminal compression test is positive on the left. The pain is worsened by extension Femoral nerve stretch test is negative bilaterally. Leg length appears equal. Motor examination shows excellent strength. There is no evidence of atrophy. There is no evidence of dermatomal sensory deficits. Reflexes, knee jerks 2+, bilaterally; ankle jerks 2+ bilaterally. There is no evidence of pathological reflexes. Examination of the vascular system reveals good pedal pulses and both calves are soft. No edema present. Both hips move fully.

On 7-6-09, Dr. notes that the claimant is complaining of lower back pain with bilateral legs numbness. He is not better. The pain increases with sitting. He takes Hydrocodone 7.5 2-3 per day. Exam of the lumbosacral spine shows good alignment. There is evidence of muscle guarding. On dynamic examination, forward flexion is 20 degrees. Extension is to 0 degrees. Lateral flexion to the left and right is 10/20 degrees. Total sacral motion is 30 degrees. Straight leg raising test is positive at 50 degrees on the left with positive sciatic nerve sketch test. Foraminal compression test is positive on the left. The pain is worsened by extension. Femoral nerve stretch test is negative bilaterally. Leg length appears equal. Motor examination show excellent strength. There is no evidence of atrophy. There is no evidence of dermatomal sensory deficits. Reflexes, knee jerks 2+, bilaterally; ankle jerks 2+ bilaterally. There is no evidence of pathological reflexes. Examination of the vascular system reveals good pedal pulses and both calves are soft. Diagnosis provided included L5-S1 left sided disc herniation and spinal stenosis at L4-L5. The evaluator recommended the claimant return to work with restrictions and a lumbar epidural steroid injection.

On 7-8-09, , DO., a Utilization Review notes the patient has MRI and physical examination findings to possibly support an ESI but the treating providers own note does not mention this. The treating provider states that the patient is noncompliant with a home exercise program and has symptom magnification, which does not support doing any injections at this rime Injections are not indicated as an isolated therapy.

7-21-09 , MD., Utilization Review notes there is insufficient objective clinical evidence in the submitted records to suggest lower extremity radiculopathy is present in this patient. The submitted MRI was of poor copy quality and cannot be interpreted. The submitted EMG study was also of poor quality and equivocal for evidence of radiculopathy as the paraspinal muscles were not tested in the EMG. The patient shows no evidence of neurologic deficit on his most recent physical exam. ODG recommends unequivocal

evidence of radiculopathy and that the patient be refractor to conservative care before epidural steroid injections are considered. As the clinical documentation does not meet the recommendations made by ODG, medical necessity for the request cannot be established at this time.

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

AFTER REVIEW OF THE MEDICAL RECORDS, THERE IS NOT EQUIVOCAL EVIDENCE OF RADICULOPATHY. THERE IS NO EVIDENCE OF NEUROLOGICAL DEFICIT ON HIS RECENT PHYSICAL EXAM. IT WAS NOTED THAT THE ORIGINAL INJURY CAUSED RADIATION OF PAIN ON THE RIGHT BUT NOW THE PATIENT HAS MORE PAIN ON THE LEFT. ACCORDING TO THE NOTES, THE PATIENT WAS NONCOMPLIANT WITH A HOME EXERCISE PROGRAM AND HAS SYMPTOM MAGNIFICATION. ODG RECOMMENDS UNEQUIVOCAL EVIDENCE OF RADICULOPATHY AND THE PATIENT FAIL CONSERVATIVE CARE PRIOR TO IMPLEMENTATION OF THE EPIDURAL STEROID INJECTION. THIS CASE DOES NOT MEET THE ODG MEDICAL NECESSITY GUIDELINES. THEREFORE, THE REQUESTED EPIDURAL STEROID INJECTION FOR TREATMENT AS AN OUTPATIENT IS NOT CERTIFIED.

**ODG-TWC, last update 8-13-09 Occupational Disorders of the Low Back – Lumbar epidural steroid injection:** Recommended as a possible option for short-term treatment of radicular pain (defined as pain in dermatomal distribution with corroborative findings of radiculopathy) with use in conjunction with active rehab efforts. See specific criteria for use below. Radiculopathy symptoms are generally due to herniated nucleus pulposus or spinal stenosis, although ESIs have not been found to be as beneficial a treatment for the latter condition.

Short-term symptoms: The American Academy of Neurology recently concluded that epidural steroid injections may lead to an improvement in radicular 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. (Armon, 2007) Epidural steroid injection can offer short-term pain relief and use should be in conjunction with other rehab efforts, including continuing a home exercise program. There is little information on improved function or return to work. There is no high-level evidence to support the use of epidural injections of steroids, local anesthetics, and/or opioids as a treatment for acute low back pain without radiculopathy. (Benzon, 1986) (ISIS, 1999) (DePalma, 2005) (Molloy, 2005) (Wilson-MacDonald, 2005) This recent RCT concluded that both ESIs and PT seem to be effective for lumbar spinal stenosis for up to 6 months. Both ESI and PT groups demonstrated significant improvement in pain and functional parameters compared to control and no significant difference was noted between the 2 treatment groups at 6 months, but the ESI group was significantly more improved at the 2nd week. (Koc, 2009)

Use for chronic pain: Chronic duration of symptoms (> 6 months) has also been found to decrease success rates with a threefold decrease found in patients with symptom duration > 24 months. The ideal time of either when to initiate treatment or when

treatment is no longer thought to be effective has not been determined. (Hopwood, 1993) (Cyteval, 2006) Indications for repeating ESIs in patients with chronic pain at a level previously injected (> 24 months) include a symptom-free interval or indication of a new clinical presentation at the level.

Transforaminal approach: Some groups suggest that there may be a preference for a transforaminal approach as the technique allows for delivery of medication at the target tissue site, and an advantage for transforaminal injections in herniated nucleus pulposus over translaminar or caudal injections has been suggested in the best available studies. (Riew, 2000) (Vad, 2002) (Young, 2007) This approach may be particularly helpful in patients with large disc herniations, foraminal stenosis, and lateral disc herniations. (Colorado, 2001) (ICSI, 2004) (McLain, 2005) (Wilson-MacDonald, 2005)

Fluoroscopic guidance: Fluoroscopic guidance with use of contrast is recommended for all approaches as needle misplacement may be a cause of treatment failure.

(Manchikanti, 1999) (Colorado, 2001) (ICSI, 2004) (Molloy, 2005) (Young, 2007)

Factors that decrease success: Decreased success rates have been found in patients who are unemployed due to pain, who smoke, have had previous back surgery, have pain that is not decreased by medication, and/or evidence of substance abuse, disability or litigation. (Jamison, 1991) (Abram, 1999) Research reporting effectiveness of ESIs in the past has been contradictory, but these discrepancies are felt to have been, in part, secondary to numerous methodological flaws in the early studies, including the lack of imaging and contrast administration. Success rates also may depend on the technical skill of the interventionalist. (Carette, 1997) (Bigos, 1999) (Rozenberg, 1999) (Botwin, 2002) (Manchikanti, 2003) (CMS, 2004) (Delport, 2004) (Khot, 2004) (Buttermann, 2004) (Buttermann2, 2004) (Samanta, 2004) (Cigna, 2004) (Benzon, 2005) (Dashfield, 2005) (Arden, 2005) (Price, 2005) (Resnick, 2005) (Abdi, 2007) (Boswell, 2007) Also see Epidural steroid injections, "series of three" and Epidural steroid injections, diagnostic. ESIs may be helpful with radicular symptoms not responsive to 2 to 6 weeks of conservative therapy. (Kinkade, 2007) Epidural steroid injections are an option for short-term pain relief of persistent radiculopathy, although not for nonspecific low back pain or spinal stenosis. (Chou, 2008) As noted above, injections are recommended if they can facilitate a return to functionality (via activity & exercise). If post-injection physical therapy visits are required for instruction in these active self-performed exercise programs, these visits should be included within the overall recommendations under Physical therapy, or at least not require more than 2 additional visits to reinforce the home exercise program.

With discectomy: Epidural steroid administration during lumbar discectomy may reduce early neurologic impairment, pain, and convalescence and enhance recovery without increasing risks of complications. (Rasmussen, 2008)

An updated Cochrane review of injection therapies (ESIs, facets, trigger points) for low back pain concluded that there is no strong evidence for or against the use of any type of injection therapy, but it cannot be ruled out that specific subgroups of patients may respond to a specific type of injection therapy. (Staal-Cochrane, 2009) Recent studies document a 629% increase in expenditures for ESIs, without demonstrated improvements in patient outcomes or disability rates. (Deyo, 2009) There is fair

evidence that epidural steroid injection is moderately effective for short-term (but not long-term) symptom relief. (Chou3, 2009)

Criteria for the use of Epidural steroid injections:

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. Objective findings on examination need to be present. For unequivocal evidence of radiculopathy, see AMA Guides, 5th Edition, page 382-383. (Andersson, 2000)

(2) Initially unresponsive to conservative treatment (exercises, physical methods, NSAIDs and muscle relaxants).

(3) Injections should be performed using fluoroscopy (live x-ray) and injection of contrast for guidance.

(4) Diagnostic Phase: At the time of initial use of an ESI (formally referred to as the “diagnostic phase” as initial injections indicate whether success will be obtained with this treatment intervention), a maximum of one to two injections should be performed. A repeat block is not recommended if there is inadequate response to the first block (< 30% is a standard placebo response). A second block is also not indicated if the first block is accurately placed unless: (a) there is a question of the pain generator; (b) there was possibility of inaccurate placement; or (c) there is evidence of multilevel pathology. In these cases a different level or approach might be proposed. There should be 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) Therapeutic phase: If after the initial block/blocks are given (see “Diagnostic Phase” above) and found to produce pain relief of at least 50-70% pain relief for at least 6-8 weeks, additional blocks may be required. This is generally referred to as the “therapeutic phase.” Indications for repeat blocks include acute exacerbation of pain, or new onset of symptoms. The general consensus recommendation is for no more than 4 blocks per region per year. (CMS, 2004) (Boswell, 2007)

(8) Repeat injections should be based on continued objective documented pain relief, decreased need for pain medications, and functional response.

(9) Current research does not support a routine use of a “series-of-three” injections in either the diagnostic or therapeutic phase. We recommend no more than 2 ESI injections for the initial phase and rarely more than 2 for therapeutic treatment.

(10) It is currently not recommended to perform epidural blocks on the same day of treatment as facet blocks or sacroiliac blocks or lumbar 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. (Doing both injections on the same day could result in an excessive dose of steroids, which can be dangerous, and not worth the risk for a treatment that has no long-term benefit.)

#### **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)