



**CLAIMS EVAL**

*Utilization Review and  
Peer Review Services*

Notice of Independent Review Decision-WC

**DATE OF REVIEW: 6-25-10**

**IRO CASE #:**

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

Outpatient Left Side Lumbar epidural steroid injection L3/4 -- 62311, 77003, J1041, J7050, T0028

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

American Board of Neurological Surgery

**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**

- Employer's First Report of Injury.
- FNP., office visits on 2-1-10, 2-5-10, 2-11-10 and 3-22-10.
- Physical therapy initial evaluation on 1-28-10. Follow up visit on 2-1-10.
- 2-10-10 MRI of the lumbar spine.
- 4-2-10 MD., office visit.
- 5-3-10 and 4-12-10 the claimant underwent a lumbar epidural steroid injection with fluoroscopy at left L3-L4.
- 5-19-10 MD., performed Utilization Review.
- 6-2-10 Utilization Review performed by MD.

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

Per The Employer's First Report of Injury, the claimant sustained a work related injury on xx/xx/xx while employed at xxxx. On this date, the claimant was unloading boxes from the back of a truck. He stepped down out of the truck and over extended his left leg causing pain.

FNP., the claimant reports that in the course of his duties as xx for xxxx where he has been working the past 15 years. He was getting some boxes out of his truck and he was standing on the side rail. When he stepped down to get off he pulled the muscles in his hip and his lower leg. He points to the gastroc as being the point of most pain. He reports when he walks normally the pain increases. If he walks on his heel it relieves the pain to his lower leg. He describes a pulsating, intermittent pain. He also has pain to the left hip. He denies any shortness of breath or dyspnea. He has no clotting factor risk. He has never had an injury such as this in the past. On exam, circumference of the gastrocs are measured, 9 cm distal to the tibial plateau. To the left 49.5 cm and to the right 47.5 cm. Pedal pulses are within normal limits. He has no pain with EHL and plantar flexion. There is no redness to the area. No ropiness acid no increase in surface temperature over the area. There is no ecchymosis is noted. Evaluation of the hip shows Fabere is positive to the left. Assessment: Strain to the left gastrocnemius and strain to the left hip. The claimant is returned to modified duties. The claimant is placed on Celebrex. Physical therapy was ordered.

2-1-10 FNP., the claimant reported his calf is improved. He thinks his hip might be worse but when asked to pinpoint where his hip is hurting, it is actually along the belt line. It is not in the hip joint. He has been to physical therapy. He reports good relief of symptoms there. He can take a step fine. He just gets a little hit of pain to the calf when he is on the ball of his foot: He has been doing towel exercises as directed by physical therapy for stretching and isometrics. He reports questionable relief of symptoms with the Celebrex but there is no stomach upset. On exam, there is no pain with resisted EHL or plantar flexion. There is no redness or ropiness along the calf. Pedal pulse is intact and equals the right: Gait is normal with no foot drag. He has full flexion and extension at the waist. The claimant is returned to modified duty. The claimant does not feel the Anaprox helps. This was discontinued. The claimant was referred to physical therapy.

Physical therapy initial evaluation on 1-28-10. Follow up visit on 2-1-10.

2-5-10 FNP., the claimant started back to regular activities. Although he is a xxxx , he often helps his coworkers as they load things. At the end of Wednesday when he went back home he had quite a bit of pain to his low back that radiates around to the front of his leg and even an area underneath the kneecap. He reports his kneecap is not hurting at this point. He has been heating and elevating it whenever his back is hurting as well. The most severe pain that he is experiencing is the crossover pain over the front part of his left upper leg. He denies any loss of bowel or bladder function or any loss of sensation. He has pain with standing and it increases as the day goes on. He has finished the Celebrex. He is currently taking 800 mg ibuprofen which he had from another injury. He does take Prilosec p.r.n. He reports the ibuprofen does not cause dyspepsia. He rates his pain on a scale of 1 to 10 as a 4 when he is just sitting, to a 7 or 8 with activity. He is unable to get to sleep at night. He says when finally gets to sleep any slight movement awakens him with the pain. On exam, gait is normal. There is no foot drag. He has increased pain with extension at the waist. Flexion is within normal limits. LS curve is normal with no palpable spasm. Heel toe walk is normal. EHL and plantarflexion normal. DTRs at the knee and heel, 2 out of 4 bilaterally. No deficit with inversion and eversion of the right. When testing the left no deficit with inversion, but seems to have less strength with eversion. Sensation is intact. Quad and tibia strength is normal. Seated straight leg raises positive for radiculopathy. Supine straight leg raises, he has pain at about 45 degrees with radicular symptoms. There is no crossover. Fabere is negative for hip pain but the Fabere maneuver onsets radicular pain down his leg on the left. Assessment: Pain to back and left hip and left lower leg in an L3-L4 pattern. Plan: return to modified duty. The claimant is provided with a prescription for Ibuprofen. The claimant is continued with Prilosec. The evaluator recommended an MRI of the lumbar spine.

2-10-10 MRI of the lumbar spine shows at L1-L2, there is complete loss of disk space height. Anterior osteophytes are demonstrated. Posterior osteophytes are demonstrated. There is bilateral posterior facet hypertrophy and ligamentum flavum hypertrophy. No definite spinal stenosis or neural foraminal stenosis is demonstrated.

At L2-L3, there is complete loss of disk space height. Anterior and posterior osteophytes are demonstrated. There is bilateral posterior facet hypertrophy and ligamentum flavum hypertrophy with mild neural foraminal stenosis, left greater than right. The anterior-posterior diameter of the spinal canal measures 17 mm. At L3-L4, disk space narrowing and disk desiccation is demonstrated. There is a posteromedian disk bulge. There is bilateral posterior facet hypertrophy and ligamentum flavum hypertrophy with bilateral neural foraminal stenosis, left greater than right. The anterior-posterior diameter of the spinal canal measures 11 mm. At L4-L5, disk space narrowing and disk desiccation is demonstrated. There is a posteromedian disk bulge. There is bilateral posterior facet hypertrophy and ligamentum flavum hypertrophy with bilateral, neural foraminal stenosis, right greater than left. The anterior-posterior diameter of the spinal canal measures 7.5 mm. At L5-S1, disk space narrowing and disk desiccation is demonstrated. There is bilateral posterior facet hypertrophy and ligamentum flavum hypertrophy. There is mild bilateral neural foraminal stenosis. The anterior-posterior diameter of the spinal canal measures 1 cm.

2-11-10 FNP., the claimant states he is walking better and he is sleeping well. He has been taking ibuprofen and Soma. The knee pain and calf pain is gone. Review of the MRI shows multilevel degenerative disc disease at L1-L2, L2-L3. The evaluator felt the claimant had a lumbar strain with radiculopathy to the hip and calf on the left. The claimant was returned to regular duty.

3-22-10 FNP., the claimant is 2 months out from the date of injury. He complains of burning pain to the inner aspect of the left upper leg. At the last appointment, he was returned to full duty but told him not to participate in climbing on roofs or heavy ladders or anything. He is a supervisor so he does not have to do that, but he regularly helps out on the job. He was going to a conference the next week (that was about the first week in February) and he was looking forward to that because he certainly would not be doing any heavy lifting or anything there. He reported that when he went to the conference, he was taking ibuprofen 1 p.o. q.d, hour of sleep and he was limping a little bit, but at conference he did lot of walking. When he returned from the conference, the limping continued and he took ibuprofen twice a day. He has not been doing his usual activities such as cutting the grass or working in the yard, trying not to aggravates the symptoms. He tells me that last week over spring break, he did lots of walking. He was with friends Monday, Tuesday and Wednesday, and the friends continually asked him what was wrong with his left leg because of the limp. Wednesday night he left midland and he drove home. He was using the gas pedal with his right and he suddenly got a burning sensation to the inside aspect of the left upper leg. This was a new finding. Then Thursday morning, it continued to burn. He tried heat, but that made the pain worse. He used an ice pack and he describes a method of strapping it on and that seemed to help resolve the symptoms. He is back at work. He is now taking ibuprofen 3 times a day. It is not burning right now. He reports that if he holds his leg out in full extension, his leg is alright, but if he rotates his foot to the right or the left or points his toe, it causes increase in he pain. The pain is relieved if he draws his toes back up towards his chest. Again, he has no pain today and no burning- This is a new finding. We have done the MPI which demonstrates degenerative disc diseased with spinal

stenosis and neuroforaminal stenosis multilevel. At the L2-L3 level, there is a complete loss of disc space height. Anterior and posterior osteophytes are demonstrated. There is also bilateral posterior facet hypertrophy and ligamentum flavum hypertrophy with mild neural foraminal stenosis, left greater than right. On exam, his gait is normal. He did not detect a limp today. There is no foot drag. He has pain-free full flexion and extension at the waist. LS curve is normal. There is no palpable spasm. Heel-toe walk is normal. He does have some pain with plantar flexion, but plantar flexion is strong and equal bilaterally, so is EHL. DRE knee and heel are 2/4 bilaterally- Inversion and eversion is normal. Sensation is intact. Quad tibial strength is normal. There is no weakness noted. The claimant is to continue with regular duty. He should not be doing any weakness.

4-2-10 MD., the claimant is a man whose date of injury was xx/xx/xx. He was moving an approximately 30 pound box from his pickup truck and after lifting and twisting, he developed sudden pain in his left leg radiating down the lateral anterior thigh, down past the knee to the anterior medial shin. This actually got worse and the following day, he had burning pain in a similar distribution. This has been treated with whirlpool, physical therapy and ibuprofen and has gotten quite a bit better. He reports that he does continue to have daily pain in the anterior medial thigh. This is a burning type pain. Denies any weakness. The symptoms are worse with activities, such as climbing ladders, working in his yard, etc. It is relieved by repositioning or ice and ibuprofen. He has had no change in his bowel or bladder habits or any right-sided complaint. He denied any back pain and has not had back surgery in the past. On physical exam of the low back, he is non tender. Neurologic exam shows motor exam reveals 5/5 strength. Sensory exam reveals slight decreased sensation in the anterior and medial thigh on the left to light touch, preserved pinprick. Reflexes are 2-3+ and symmetric at the patella and the Achilles. Straight leg raise test is negative. Internal and external rotation of the hips produces a slight degree of anterior thigh pain on the left, negative on the right. MRI of the lumbar spine shows evidence of diffuse spondylosis. He has some small disc bulges at L2-L3 and L3-L4 and some lateral recess stenosis, as well. Assessment: Lumbar strain with radiculopathy. The evaluator recommended a lumbar epidural steroid injection. This will target the left L3-L4 level consistent with his symptoms. He will likely recover from this without any need for surgery.

On 5-3-10 and 4-12-10 the claimant underwent a lumbar epidural steroid injection with fluoroscopy at left L3-L4.

On 5-19-10 MD., performed Utilization Review. The evaluator denied the request for lumbar epidural steroid injection at L3-L4.

On 6-2-10 Utilization Review performed by MD., denied the request for lumbar epidural steroid injection at L3-L4 #3.

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

Medical records reflect a claimant with complaints of low back pain with radiation down the left leg. On physical exam of the low back, he is non tender. Neurologic exam shows motor exam reveals 5/5 strength. Sensory exam reveals slight decreased sensation in the anterior and medial thigh on the left to light touch, preserved pinprick. Reflexes are 2-3+ and symmetric at the patella and the Achilles. Straight leg raise test is negative. Based on the records provided, I agree with the two previous denials. ODG is clear about the use of multiple epidural steroid injections particularly for chronic pain without true radiculopathy. Per ODG, if after the initial block/blocks are given 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 recommendation is for no more than 4 blocks per region per year. Repeat injections should be based on continued objective documented pain relief, decreased need for pain medications, and functional response. Current research does not support a routine use of a "series-of-three" injections in either the diagnostic or therapeutic phase. There is an absence in documentation showing the claimant has true radiculopathy. Additionally, there is no documented response to the prior two epidural steroid injection of 50-70% for at least 6-8 weeks. Therefore, the request for leftside lumbar epidural steroid injection at L3-L4 is not reasonable or medically necessary.

**ODG-TWC, last update 6-17-10 Occupational Disorders of the Low Back – 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) (Delpont, 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) (Buenaventura, 2009) 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) This RCT concluded that caudal epidural injections containing steroids demonstrated better and faster efficacy than placebo. (Sayegh, 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)**