



CLAIMS EVAL

Utilization Review and
Peer Review Services

Notice of Independent Review Decision-WC

CLAIMS EVAL REVIEWER REPORT - WC

DATE OF REVIEW: 2-5-10

IRO CASE #:

DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE

Lumbar laminectomy/decompression L4-S1 lateral recess decompression, L4-L5 and L5-S1 left, 2 days inpatient stay

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

American Board of Orthopaedic Surgery-Board Certified

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

- DC., office visits on 6-17-09 and 7-16-09.
- 6-30-09 MRI of the lumbar spine.
- MD., office visits on 8-15-09 , 9-29-09 and 11-3-09.
- 9-2-09 lumbar epidural steroid injection performed by MD.

- 10-1-09 DC., letter of medical necessity.
- 11-10-09 MD., performed a Utilization Review.
- 12-7-09 MD., performed a Utilization Review.

PATIENT CLINICAL HISTORY [SUMMARY]:

On 6-17-09, DC, evaluated the claimant. The claimant was injured on xx/xx/xx when he bent down and pulled on a piece of sheet metal. The claimant states that as he pulled on the 3 x 15 piece of sheet metal, he felt a sharp pain in his low back. The claimant was sent to the company doctor MD., who prescribed Naproxen. On exam, the claimant had tenderness to palpation to palpation of the lumbar erector spinae musculature. Range of motion was decreased in all planes. The claimant has diminished strength of the bilateral legs and it is rated as 4/5. DTR were normal. Sensory exam was normal. The evaluator recommended rehabilitation and ultrasound.

An MRI of the lumbar spine dated 6-30-09 shows disc protrusion at L4-L5 and L5-S1 with desiccation of the disc material. There is slight narrowing of the lateral recess on the left side at L4-L5 and L5-S1.

Follow up with Dr. on 7-16-09 notes the claimant continues with sharp low back pain that radiates to the right leg. The evaluator recommended active rehabilitation.

Office visit with MD., on 8-15-09 notes the claimant was working. While working, he pulled a piece of metal approximately 25 to 30 feet long and weighing approximately 40 pounds. His foot slipped causing him to give way. He developed sudden pain in the back with associated left lower extremity pain. The claimant presented with ongoing complaints of central low back pain, left-sided lower back pain, and left lower extremity pain radiating into the calf. He describes his back and leg pain as being of equal intensity. The pain travels into the left buttock going all the way into the calf but without any associated numbness or tingling. He reports weakness in the left lower extremity. On exam, the claimant is tender on deep palpation over the lower lumbar spine. There is no evidence of bruising or swelling over the low back. He was able to flex to approximately 15 degrees and extend normally. The straight leg raising test was negative on both sides. The evaluator did not find evidence of nerve root tension signs. Neurologic testing showed full power in all lower extremity myotomes tested including L2, L3, L4, L5, and S1. Dermatome sensory function was diminished over the lateral aspect of the foot consistent with the S1 dermatome extending directly onto the dorsum of the foot. There was numbing sensation over the lateral calf. Deep tendon reflexes were within normal limits. Radiographs of the lumbar spine were done today. These were AP and lateral views as well as flexion and extension studies. The study showed five non-rib-bearing lumbar vertebrae. Lumbar lordosis was maintained. Disc space height was preserved. No spondylolysis or spondylolisthesis was seen. Between flexion and extension, no abnormal translation or rotation was seen. No other bony or soft tissue abnormalities were noted. The evaluator felt the claimant had lumbar disc protrusions, L4-L5 and L5-S1, lateral recess encroachment secondary to disc protrusion, L4-L5 and L5-S1, possible left lumbar radiculopathy and low back muscular strain. The evaluator recommended epidural steroid injections at the L4-L5 and L5-S1 levels on the left side. This should be as a series with clinical review after the first injection.

On 9-2-09, the claimant underwent a lumbar epidural steroid injection performed by MD.

Follow up with Dr. on 9-29-09 notes the claimant had an epidural steroid injection and obtained 20-30% improvement of his symptoms overall. The claimant reported he had good relief for the first few days after which his symptoms have returned. The claimant is now complaining of pain in the low back and left lower extremity. On exam, the claimant can heel walk and toe walk without difficulty. His flexion is limited to 30 degrees, extension is limited to 10 degrees. The SLR was negative. The claimant has no evidence of nerve root tension signs. He is tender to the right of the midline in the low back. Neurological exam shows full power in all lower extremity myotomes tested. Sensory testing showed diminished dermatomal sensation over the calf and foot on the left side when compared to the right side. DTR were within normal limits. The evaluator reported he did not see signs of sciatica on his examination, but understanding the ongoing complaints of pain down the left lower extremity, this might be related to the lateral recess encroachment on both sides, which effectively would cause nerve root entrapment. The evaluator recommended a second epidural steroid injection and two weeks of work conditioning prior to return to the workforce.

10-1-09 DC., letter of medical necessity for work conditioning.

11-3-09 MD., the claimant is seen for follow up. He had the injections, has also had physical therapy, and has had medication management. Despite this, he continues to have ongoing left sided leg pain. The evaluator discussed the fact that he had nerve entrapment at the L4-L5 and L5-S1 levels on the left and this was likely to be the source of his ongoing pain. The evaluator reported that given the failure of conservative measures at this time, he recommended a lateral recess decompression at each of the L4-L5 and L5-S1 levels.

11-10-09 MD., performed a Utilization Review. The reviewer reported that the MRI submitted does not demonstrate any significant nerve root impingement or canal stenosis that would require decompression at this time. The claimant does have some minor sensory changes in the left lower extremity. However, there is objective clinical evidence suggesting motor weakness in the quadriceps, anterior tibialis, or foot flexion or dorsiflexion. There is also insufficient clinical documentation regarding conservative care. The claimant has had one epidural steroid injection and no physical therapy summary notes were submitted for review. It is also unclear what medication management the claimant is on as no prescribed medications can be determined from the submitted clinical documentation. Therefore, the evaluator reported that the request is not established medically necessary.

12-7-09 MD., performed a Utilization Review. The reviewer reported that the claimant has no nerve root tension signs just diminished sensory function over the lateral aspect of the foot. DTR were normal, as was strength. The evaluator reported that under current guidelines nerve root compression is required and signs of unilateral quadriceps or anterior tibialis weakness with unilateral hip/thigh knee and medial pain. Therefore, the evaluator denied the request for surgery.

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

FROM REVIEW OF THE CLINICAL RECORDS PROVIDED, THERE IS NO OBJECTIVE EVIDENCE OF A LUMBAR RADICULOPATHY. DIAGNOSTIC STUDIES HAVE SHOWN DEGENERATIVE CHANGES OF THE LUMBAR SPINE, WHICH WERE NOT CAUSED OR AGGRAVATED BY THE WORK EVENT.

SURGICAL DECOMPRESSION IS NOT LIKELY TO BENEFIT THE CLAIMANT, AND LIKELY TO LEAD TO IATROGENIC DISABILITY. THEREFORE, THE REQUEST FOR LUMBAR LAMINECTOMY/DECOMPRESSION L4-S1 LATERAL RECESS DECOMPRESSION, L4-L5 AND L5-S1 LEFT AND 2 DAYS INPATIENT STAY IS NOT REASONABLE OR MEDICALLY NECESSARY.

ODG-TWC, last update 1-29-10 Occupational Disorders of the Low Back – Laminectomy/Discectomy: Recommended for indications below. Surgical discectomy for carefully selected patients with radiculopathy due to lumbar disc prolapse provides faster relief from the acute attack than conservative management, although any positive or negative effects on the lifetime natural history of the underlying disc disease are still unclear. Unequivocal objective findings are required based on neurological examination and testing. (Gibson-Cochrane, 2000) (Malter, 1996) (Stevens, 1997) (Stevenson, 1995) (BlueCross BlueShield, 2002) (Buttermann, 2004) Standard discectomy and microdiscectomy are of similar efficacy in treatment of herniated disc. (Bigos, 1999) While there is evidence in favor of discectomy for prolonged symptoms of lumbar disc herniation, in patients with a shorter period of symptoms but no absolute indication for surgery, there are only modest short-term benefits, although discectomy seemed to be associated with a more rapid initial recovery, and discectomy was superior to conservative treatment when the herniation was at L4-L5. (Osterman, 2006) The SPORT studies concluded that both lumbar discectomy and nonoperative treatment resulted in substantial improvement after 2 years, but those who chose discectomy reported somewhat greater improvements than patients who elected nonoperative care. (Weinstein, 2006) (Weinstein2, 2006) A recent RCT compared decompressive surgery with nonoperative measures in the treatment of patients with lumbar spinal stenosis, and concluded that, although patients improved over the 2-year follow-up regardless of initial treatment, those undergoing decompressive surgery reported greater improvement regarding leg pain, back pain, and overall disability, but the relative benefit of initial surgical treatment diminished over time while still remaining somewhat favorable at 2 years. (Malmivaara, 2007) Patients undergoing lumbar discectomy are generally satisfied with the surgery, but only half are satisfied with preoperative patient information. (Ronnberg, 2007) If patients are pain free, there appears to be no contraindication to their returning to any type of work after lumbar discectomy. A regimen of stretching and strengthening the abdominal and back muscles is a crucial aspect of the recovery process. (Burnett, 2006) According to a major recent trial, early surgery (microdiscectomy) in patients with 6-12 weeks of severe sciatica caused by herniated disks is associated with better short-term outcomes, but at 1 year, disability outcomes of early surgery vs conservative treatment with eventual surgery if needed are similar. The median time to recovery was 4.0 weeks for early surgery and 12.1 weeks for prolonged conservative treatment. The authors concluded, "Patients whose pain is controlled in a manner that is acceptable to them may decide to postpone surgery in the hope that it will not be needed, without reducing their chances for complete recovery at 12 months. Although both strategies have similar outcomes after 1 year, early surgery remains a valid treatment option for well-informed patients." (Peul-NEJM, 2007) (Deyo-NEJM, 2007) A recent randomized controlled trial comparing decompression with decompression and instrumented fusion in patients with foraminal stenosis and single-level degenerative disease found that patients universally improved with surgery, and this improvement was maintained at 5 years. However, no obvious additional benefit was noted by combining decompression with an instrumented fusion. (Hallett, 2007) A recent British study found that lumbar discectomy improved patients' self-reported overall physical health more than other elective surgeries. (Guilfoyle, 2007) Microscopic sequestrectomy may be an alternative to

standard microdiscectomy. In this RCT, both groups showed dramatic improvement. (Barth, 2008) There is consistent evidence that for patients with a herniated disk, discectomy is associated with better short-term outcomes than continued conservative management, although outcomes begin to look similar after 3 to 6 months. This is a decision to be made with the patients, discussing the likelihood that they are going to improve either way but will improve faster with surgery. Similar evidence supports the use of surgery for spinal stenosis, although the outcomes look better with surgery out to about 2 years. (Chou, 2008) Standard open discectomy is moderately cost-effective compared with nonsurgical treatment, a new Spine Patient Outcomes Research Trial (SPORT) study shows. The costs per quality-adjusted life-year gained with surgery compared with nonoperative treatment, including work-related productivity costs, ranges from \$34,355 to \$69,403, depending on the cost of surgery. It is wise and proper to wait before initiating surgery, but if the patient continues to experience pain and is missing work, then the higher-cost option such as surgery may be worthwhile. (Tosteson, 2008) Note: Surgical decompression of a lumbar nerve root or roots may include the following procedures: discectomy or microdiscectomy (partial removal of the disc) and laminectomy, hemilaminectomy, laminotomy, or foraminotomy (providing access by partial or total removal of various parts of vertebral bone). Discectomy is the surgical removal of herniated disc material that presses on a nerve root or the spinal cord. A laminectomy is often involved to permit access to the intervertebral disc in a traditional discectomy.

Patient Selection: Microdiscectomy for symptomatic lumbar disc herniations in patients with a preponderance of leg pain who have failed nonoperative treatment demonstrated a high success rate based on validated outcome measures (80% decrease in VAS leg pain score of greater than 2 points), patient satisfaction (85%), and return to work (84%). Patients should be encouraged to return to their preinjury activities as soon as possible with no restrictions at 6 weeks. Overall, patients with sequestered lumbar disc herniations fared better than those with extruded herniations, although both groups consistently had better outcomes than patients with contained herniations. Patients with herniations at the L5-S1 level had significantly better outcomes than did those at the L4-L5 level. Lumbar disc herniation level and type should be considered in preoperative outcomes counseling. Smokers had a significantly lower return to work rate. In the carefully screened patient, lumbar microdiscectomy for symptomatic disc herniation results in an overall high success rate, patient satisfaction, and return to physically demanding activities. (Dewing, 2008) Workers' comp back surgery patients are at greater risk for poor lumbar discectomy outcomes than noncompensation patients. (DeBerard, 2008)

Spinal Stenosis: For patients with lumbar spinal stenosis, standard posterior decompressive laminectomy alone (without discectomy) offers a significant advantage over nonsurgical treatment. Discectomy should be reserved for those conditions of disc herniation causing radiculopathy. (See Indications below.) Laminectomy may be used for spinal stenosis secondary to degenerative processes exhibiting ligamentary hypertrophy, facet hypertrophy, and disc protrusion, in addition to anatomical derangements of the spinal column such as tumor, trauma, etc. (Weinstein, 2008) (Katz, 2008) See also Laminectomy.

Recent Research: Four-year results for the Dartmouth Spine Patient Outcomes Research Trial (SPORT, n= 1244) indicated that patients who underwent standard open discectomy for a lumbar disc herniation achieved significantly greater improvement than nonoperatively treated patients (using recommended treatments - active physical therapy, home exercise instruction, and NSAIDs) in all primary and secondary outcomes except work status (78.4% for the surgery group compared with 84.4%). Although patients receiving surgery did better generally, all patients in the study improved. Consequently, for patients who don't want an operation no matter how bad their pain is, this study suggests that they will improve and they will not have

complications (e.g., paralysis) from nonoperative treatment, but those patients whose leg pain is severe and is limiting their function, who meet the ODG criteria for discectomy, can do better with surgery than without surgery, and the risks are extremely low. (Weinstein2, 2008) In most patients with low back pain, symptoms resolve without surgical intervention. (Madigan, 2009) This study showed that surgery for disc herniation was not as successful as total hip replacement but was comparable to total knee replacement in success. Pain was reduced to within 60% of normal levels, function improved to 65% normal, and quality of life was improved by about 50%. The study compared the gains in quality of life achieved by total hip replacement, total knee replacement, surgery for spinal stenosis, disc excision for lumbar disc herniation, and arthrodesis for chronic low back pain. (Hansson, 2008) For radiculopathy with herniated lumbar disc, there is good evidence that standard open discectomy and microdiscectomy are moderately superior to nonsurgical therapy for improvement in pain and function through 2 to 3 months, but patients on average experience improvement either with or without surgery, and benefits associated with surgery decrease with long-term follow-up. (Chou, 2009)

ODG Indications for Surgery™ -- Discectomy/laminectomy --

Required symptoms/findings; imaging studies; & conservative treatments below:

I. Symptoms/Findings which confirm presence of radiculopathy. Objective findings on examination need to be present. For unequivocal evidence of radiculopathy, see AMA Guides, 5th Edition, page 382-383. (Andersson, 2000) Straight leg raising test, crossed straight leg raising and reflex exams should correlate with symptoms and imaging.

Findings require ONE of the following:

- A. L3 nerve root compression, requiring ONE of the following:
 - 1. Severe unilateral quadriceps weakness/mild atrophy
 - 2. Mild-to-moderate unilateral quadriceps weakness
 - 3. Unilateral hip/thigh/knee pain
- B. L4 nerve root compression, requiring ONE of the following:
 - 1. Severe unilateral quadriceps/anterior tibialis weakness/mild atrophy
 - 2. Mild-to-moderate unilateral quadriceps/anterior tibialis weakness
 - 3. Unilateral hip/thigh/knee/medial pain
- C. L5 nerve root compression, requiring ONE of the following:
 - 1. Severe unilateral foot/toe/dorsiflexor weakness/mild atrophy
 - 2. Mild-to-moderate foot/toe/dorsiflexor weakness
 - 3. Unilateral hip/lateral thigh/knee pain
- D. S1 nerve root compression, requiring ONE of the following:
 - 1. Severe unilateral foot/toe/plantar flexor/hamstring weakness/atrophy
 - 2. Moderate unilateral foot/toe/plantar flexor/hamstring weakness
 - 3. Unilateral buttock/posterior thigh/calf pain

(EMGs are optional to obtain unequivocal evidence of radiculopathy but not necessary if radiculopathy is already clinically obvious.)

II. Imaging Studies, requiring ONE of the following, for concordance between radicular findings on radiologic evaluation and physical exam findings:

- A. Nerve root compression (L3, L4, L5, or S1)
- B. Lateral disc rupture
- C. Lateral recess stenosis

Diagnostic imaging modalities, requiring ONE of the following:

- 1. MR imaging
- 2. CT scanning

3. Myelography
4. CT myelography & X-Ray

III. Conservative Treatments, requiring ALL of the following:

- A. Activity modification (not bed rest) after patient education (≥ 2 months)
- B. Drug therapy, requiring at least ONE of the following:
 1. NSAID drug therapy
 2. Other analgesic therapy
 3. Muscle relaxants
 4. Epidural Steroid Injection (ESI)
- C. Support provider referral, requiring at least ONE of the following (in order of priority):
 1. Physical therapy (teach home exercise/stretching)
 2. Manual therapy (chiropractor or massage therapist)
 3. Psychological screening that could affect surgical outcome
 4. Back school (Fisher, 2004)

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)