CLAIMS EVAL

Utilization Review and
Peer Review Services

Notice of Independent Review Decision-WC

DATE OF REVIEW: 11/25/08

IRO CASE #:

DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE

Laminectomy L4-L5 and L5-S1 with neuromuscular junction (NMJ) testing.

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:

X 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

7-7-06 , MD., office visit.

8-3-06 , MD., office visit.

9-1-06 , MD., office visit.

9-26-06 , PAC/ , MD., office visit.

10-19-06 , PAC/ , MD., office visit.

11-2-06 , PAC/ , MD., office visit.

11-10-06 , MD., office visit.

12-8-06 , MD., office visit.

12-14-06 , PAC/ , MD., office visit.

2-27-07 , PAC/ , MD., office visit.

3-9-07 , MD., performed a Designated Doctor Evaluation.

3-27-07 , PAC/ , MD., office visit.

2-5-08 , MD., office visit.

3-13-08 EMG/NCS performed by , MD.

4-17-08 , MD., performed a Designated Doctor Evaluation.

5-9-08 , PAC/ , MD., office visit.

5-15-08 , MD., performed a Required Medical Evaluation.

6-13-08 , PAC/ , MD., office visit.

7-8-08 , PAC/ , MD., office visit.

9-15-08 MRI of the lumbar spine interpreted by , MD.

9-18-08 , MD., office visit.

10-1-08 , DO., UR non-certification for posterior laminectomy at L4-L5 and L5-S1 with NMJ testing.

10-15-08 , MD., office visit.

11-3-08 , MD., UR non-certification for posterior laminectomy at L4-L5 and L5-S1 with NMJ testing.

PATIENT CLINICAL HISTORY [SUMMARY]:

Documentation submitted for my review notes a xx-year-old man with a date of injury of xx/xx/xx, who presented for evaluation on 7-7-06 under the direction of , MD. The claimant complained of low back pain as well as radiating pain into the buttock region and numbness in the anterior thigh. The claimant initially had significant numbness in the anterior thigh, however, this had been gradually resolving. The claimant had participated in therapy for a few weeks and was taking Hydrocodone and muscle relaxants. It was noted the claimant had an MRI test performed. On examination, all major motor groups were graded 5/5. Sensory was intact. There was no evidence of tenderness, spasm or masses to the lumbosacral spine. ROM of the lumbar spine was 80 degrees in forward flexion and 5 degrees in extension. X-rays of the lumbar spine showed good lordosis of the lumbar spine. No evidence of degeneration noted. The MRI of the lumbar spine showed L4-L5 right foraminal annular tear. At L5-S1, there is a 3 mm to 4 mm posterior central disc height substance protrusion mildly indenting the thecal sac. The claimant was provided the diagnosis of lumbar radiculopathy, disc protrusion at L5-S1, annular tear at L4-L5 and low back pain. Treatment recommendations included obtaining an EMG/NCS. If this test is negative, then consider facet injection series.

Follow up visit with Dr. on 8-3-06 noted the claimant obtained an NCS study and presented for follow up. It was noted the claimant's NCS was negative for radiculopathy. Therefore, the evaluator recommended referral to pain management for facet injections.

On 9-1-06, Dr. evaluated the claimant. He continued to complain of significant low back pain radiating into the bilateral buttock region. He also has some numbness in the anterior thigh as well. It was noted the claimant initially obtained a NCS of just lower ankle region. This showed tarsal tunnel syndrome. However, the claimant did not obtain an EMG and full NCS. It was noted that the new study showed bilateral S1 radiculopathy. Treatment options were discussed with the claimant. He had failed all attempts of conservative treatment and has elected to proceed with lumbar epidural steroid injection.

On 9-26-06, the claimant presented for follow up under the direction of Dr. . It was noted the claimant underwent a lumbar epidural steroid injection, which provided about 40% pain relief. However, the claimant continued to have pain in the low back and bilateral buttocks. Dr. recommended the claimant complete the series of injection and undergo physical therapy.

On 10-19-06, the claimant reported he received no relief from the second epidural steroid injection. He reported constant burning sharp pain to the right worse than the left. His left lower extremity radiculopathy is worsening. He was not taking any medications, except for Valium. The claimant was provided with a prescription for Celebrex 200 mg. The claimant was encouraged to undergo the third epidural steroid injection.

On 11-2-06, the claimant reported he felt 90% better post the third epidural steroid injection. However, he continued with right greater than left lower leg pain and numbness. The claimant is doing home exercise program and therapy. He feels good relief with the Celebrex and Hydrocodone. The claimant was advised to continue with a home exercise program and with therapy.

On 11-2-06, Dr. recommended obtaining a discogram to evaluate the potential discogenic back pain, as the claimant continued with increasing pain with flexion and radiation from the lumbosacral region into the paraspinal muscles.

On 12-8-06, Dr. reported the claimant continues to have severe low back pain and increasing pain with flexion. He has failed all attempts of conservative treatment including therapy, series of injections and wishes to explore surgical treatment options. A discogram had been requested. However, approval has not been obtained yet. On exam, motor strength was 5/5. He is able to heel and toe walk and is able to squat. Sensory was intact to light touch. DTR were normal and symmetric. The evaluator again requested a lumbar discogram.

On 12-14-06, Dr. recommended referral to pain management to consider further treatment options. Flexeril was refilled.

On 2-27-07, the claimant reported he was doing well. He had very little lower extremity pain and the low back pain was intermittent. It was felt the claimant could return to work full duty with limitations. He was continued with the use of Celebrex.

On 3-9-07, , MD., performed a Designated Doctor Evaluation. He certified the claimant had reached MMI and awarded the claimant 5% whole person impairment.

On 3-27-07, Dr. evaluated the claimant. He agreed with the impairment rating determination. The claimant was released from active care and will be seen as needed.

On 2-5-08, the claimant was evaluated by Dr. . The claimant returned complaining of significant low back pain, as well as pain radiation to the right buttock into the posterior

thigh. He wishes to pursue epidural steroid injection treatment. On examination, strength was 5/5. Sensory exam was intact to light tough. DTR were intact. He had a positive SLR on the right. The claimant is tender to palpation at the bilateral PSIS region. Treatment recommendations included a new MRI study to evaluate his disc protrusion and annular tear, then recommend a series of lumbar epidural steroid injections.

On 3-13-08, an EMG/NCS performed by , MD., was within normal limits. There is no electrophysiological evidence of a lumbar radiculopathy.

On 4-1-08 , MD., performed a Designated Doctor Evaluation. It was his opinion the claimant's compensable injury is the L5-S1 3 mm to 4 mm posterior disc protrusion and the right L4-L5 disc annular tear.

On 5-9-08, the claimant was evaluated by Dr. . The claimant reported worsening of lower back pain, right lower extremity pain, numbness and tingling from his buttock, posterior thigh, to his calf and to his foot. Treatment options were discussed with the claimant. He was provided with bilateral PSIS injections. He was also initiated on Celebrex and Tramadol daily p.r.n for pain.

On 5-15-08, , MD., performed a Required Medical Evaluation. It was his opinion that ongoing orthopedic treatment was reasonable and medically necessary for his back injury. The evaluator recommended he continued pain management with Dr. and Dr. . The evaluator also recommended continuing medications and increasing Celebrex 200 mg bid and Ultracet to 2-3 times a day. He also recommended a trial of a TENS unit for pain relief. The evaluator did not believe that an MRI would be of value. The evaluator felt that a bilateral facet injection may be helpful for pain relief. He did not feel the claimant was a surgical candidate. He noted that he did not expect the claimant to reach a medical endpoint to treatment for at least 18 months to two more years.

Follow up with Dr. noted the claimant desired to initiate IRO proceedings, as the MRI was not being approved. Ultram ER is not providing enough pain relief and he takes two Celebrex a day as well. He continues with back pain, leg pain and increased pain at work as well.

On 9-15-08, an MRI of the lumbar spine revealed a broad-based posterior disc protrusion at L5-S1, with does not result in significant canal narrowing. There is mild to moderate right foraminal narrowing and mild left foraminal narrowing at that level. There is a posterolateral to the right disc protrusion at L4-L5, which results in mild right-sided foraminal narrowing. This is superimposed upon a mild generalized disc bulge at that level.

On 9-18-08, Dr. reported the claimant has failed all attempts of conservative treatment including medication treatment, multiple therapy of treatment as well as the multiple epidural steroid injection treatment. Therefore, it was recommended the claimant undergo minimally invasive discectomy and decompression at L4-L5 and L5-S1.

On 10-1-08, , DO., performed a UR with non-certification for posterior laminectomy at L4-L5 and L5-S1 with NMJ testing.

On 10-15-08, the claimant was evaluated by Dr. The claimant reported he had x1 denial of his surgery recommendation. The claimant continues with severe low back pain as well as right lower extremity radiculopathy consisting of pain, tingling, and numbness from the buttock, posterior thigh, to the calf to the lateral foot, ankle, medial foot and plantar surface as well. He has difficulty with increasing lifting at work. He has failed two years of conservative care. On examination, he has motor strength 5/5 in bilateral lower extremity, except 5-/5 on the right extensor hallucis longus and anterior tibialis as 4+/5 strength in the right plantar flexion. DTR are 2+ on the left and 1+ on the right. He has positive SLR at approximately 40 degrees. He has a positive antalgic gait and positive instability test. He is able to toe stand and heel stand on both feet but with significant weakness and pain and instability on the right foot. Treatment recommendation includes minimally invasive discectomy and decompression at L4-L5 and L5-S1.

On 11-3-08, , MD., performed a UR with non-certification for posterior laminectomy at L4-L5 and L5-S1 with NMJ testing.

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

BASED ON THE MEDICAL RECORDS PROVIDED, THIS CLAIMANT HAS A HISTORY OF LOW BACK PAIN UNRELIEVED BY ANY FORM OF TREATMENT THAT HAS BEEN ATTEMPTED. OBJECTIVE DIAGNOSTIC TESTING REFLECTS A NORMAL ELECTRODIAGNOSTIC TESTING AND EVIDENCE OF DISC PROTRUSION. THE CLAIMANT'S PHYSICAL EXAMINATIONS PERFORMED BY SEVERAL PROVIDERS HAVE FAILED TO DEMONSTRATE ANY SIGNS OF RADICULOPATHY. CURRENT EVIDENCE BASED MEDICINE SUPPORTS PERFORMING A LUMBAR DISCECTOMY AND LAMINECTOMY IN CLAIMANTS WITH RADICULAR SYMPTOMS EVIDENT BY ELECTRODIAGNOSTIC TESTING OR PHYSICAL EXAMINATION. THIS CLAIMANT DOES NOT MEET THE INDICATIONS TO CERTIFY THE PROPOSED SURGICAL INTERVENTION. THEREFORE, THE REQUEST FOR POSTERIOR LAMINECTOMY L4-L5 AND L5-S1 WITH NEUROMUSCULAR JUNCTION TESTING IS NOT CERTIFIED.

ODG-TWC, last update 11-17-08 Occupational Disorders of the Lumbar and Thoracic Spine: 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)
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 ligamental 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.
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 (massage therapist or chiropractor)
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
- X 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)