

IRO NOTICE OF DECISION – WC



Notice of Independent Review Decision IRO REVIEWER REPORT -WC

Date notice sent to all parties: 7-12-2012

IRO CASE #:

DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE:

L5-S1 right micro discectomy

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

American Board of Orthopaedic 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 medical necessity exists for each of the health care services in dispute.

INFORMATION PROVIDED TO THE IRO FOR REVIEW:

- 8-12-10 MRI of the lumbar spine.
- 11-1-10 MD., office visit.
- 11-19-10 Myelogram of the cervical spine, thoracic spine and lumbar spine.
- 11-19-10 CT scan of the lumbar spine.
- 7-25-11 MD., office visit.
- 9-22-11 MD., office visit.
- 1-25-12 MD., office visit.
- 2-7-12 MRI of the lumbar spine.
- 2-23-12 EMG/NCS of the lower extremities performed by, MD.
- 2-27-12 MD., office visit.

- 4-9-12 MD., performed a Designated Doctor Evaluation.
- 5-7-12 MD., office visit.
- 5-22-12 UR performed by MD.
- 5-30-12 UR performed by DO.

PATIENT CLINICAL HISTORY [SUMMARY]:

8-12-10 MRI of the lumbar spine without contrast shows normal lumbar MRI scan.

11-1-10 MD., the claimant is a male status post MVA with rollover and ejection that is experiencing right upper and lower extremity numbness with neck pain and right EHL weakness. The claimant will be sent for an EMG/NCS of the right upper and lower extremities. He also recommended CT myelogram of the cervical and thoracic spine. He will continue with physical therapy. He was given Lortab and Amrix. He believed the thoracic disc herniation is causing right lower extremity weakness and hyperreflexia. He does not have any right upper extremity hyperreflexia.

11-19-10 Myelogram of the cervical spine, thoracic spine and lumbar spine shows mild ventral extradural defect at L4-L5 which corresponds to mild diffuse disc bulge with no significant spinal canal stenosis. Suggestion of minimal ventral extradural defect at T8-T9 which corresponds to a right posterior paracentral osteophyte with no significant spinal canal stenosis as seen on the CT scan of the thoracic spine.

11-19-10 CT scan of the lumbar spine shows mild diffuse disc bulge at L4-L5 with no significant spinal canal stenosis seen.

7-25-11 MD., the claimant complains of headaches and residual weakness and numbness in the right foot. The first epidural steroid injection did not help, but the second injection resulted in increased sensation and range of motion. The evaluator recommended referral to Dr. for another right L4-L5 epidural steroid injection and will be referred to Dr. for evaluation and treatment of his headaches. He will be started on Topamax 25 mg po bid for headache.

9-22-11 MD., notes the recommendation of a minimal invasive right L4-L5 laminectomy/discectomy/decompression. Even though EMG/NCS and MRI was negative, CT myelogram shows a mild disc bulge. He improved with L4-L5 translaminar epidural steroid injection was highly effective. With his clinical evidence of right LE weakness and therapeutic improvement with L4-L5 epidural steroid injection, a minimal invasive right L4-L5 laminectomy/decompression.

1-25-12 MD., the claimant was involved in a high energy motor vehicle accident where he was in a coma for about a week. He came out of the coma, experienced a diffuse axonal injury. He had memory loss and speech problems for about six months. Coming out of that, he developed some low back pain on the center of his back and some pain in his right leg and a foot drop on his right leg. Through therapy and epidural injections, he has recovered some of the right foot drop, however, he still has numbness of the three lateral toes on the right foot and

weakness of his dorsiflexor on the right side. He does not have true sciatica radiating out of his buttock down the leg. It is numbness, pain, and weakness, from the knee down. He denies bowel or bladder incontinence. Importantly, is that this gentleman got relief of the numbness and weakness in his foot after an epidural steroid injection by Dr.. During the accident, he sustained a shoulder injury which was fixed by Dr.. On exam, he has a list to his gait. On palpation of his back, there is no pain to palpation but he has obvious spasm on the right side of his back that is worse with extension and flexion. He has a positive straight leg raise on the right. He has a good pulse to that leg. He has minimal atrophy of the right calf at about half an inch relative to the left side. He has obvious motor weakness of 3+/5 with the right dorsiflexion. He has L5 and S1 sensory changes. Plan: His MRIs are over a year and a half old, as well as the nerve conduction study. This gentleman obviously has some type of neurogenic component to his foot and leg and some mechanical low back pain. His studies are over a year and a half old and he could not warrant the second opinion without some new studies. He was therefore ordering a nerve conduction study and an updated MRI.

2-7-12 MRI of the lumbar spine shows disc desiccation at L5-S1. Epidural lipomatosis to the lumbar and sacral spine. Broad-based 1.6 mm disc bulge with an associated annular fissure at L5-S1. Early degenerative facet changes. Addendum: The images were resubmitted for a second interpretation blind read. The previous report is accurate. There is epidural lipomatosis at L5 and the sacral levels. A mild broad-based protrusion at L5-S1 is present with an annular tear. Mild foraminal narrowing is present without central stenosis at this level. The remaining lumbar levels are unremarkable.

2-23-12 EMG/NCS of the lower extremities performed by, MD., was normal.

2-27-12 MD., the claimant returns with his nerve conduction study and his MRI findings. Mr. was involved in a motor vehicle accident. He has had persistent right leg pain in the S1 distribution, weakness in the S1 and L5 distribution. He has had several steroid injections which gave him temporary relief; they were done at the right L4 based on the MRI findings. Due to the patient's failure to respond and his weakness, he repeated the nerve conduction studies. The repeat studies did not show any radiculopathy; however, the claimant still has weakness of his right leg. On physical examination, he has 3+ to 4-/5 dorsiflexion and plantar flexion; the neurologist states that the patient has weakness in his toes and foot. He was to refer Mr. back to Dr. for an L5 transforaminal epidural assessment. He also suggested to the claimant that if this provides him with temporary relief at this location, he is a candidate for an L5-S1 laminectomy and microdiscectomy for the intractable leg pain, persistent disc bulge at this level, traumatic disc bulge secondary to the high energy accident. He did not feel that he is a candidate for a spinal fusion.

4-9-12 MD., performed a Designated Doctor Evaluation. He felt the claimant was not at MMI. He has had trouble with his brain functioning with loss of memory. He is still being treated for that and he should also be treated for his L5-S1 disc, and he has foot drop on the right foot. Depending on whether or not he has surgery

with the lumbar area, it would be three to six months for his expected date of MMI. Estimated MMI date is 08/09/12.

5-7-12 MD., the claimant has had a work related injury about a year and a half ago. He has undergone several epidural steroid injections. He is on anti-inflammatories and is in physical therapy. On February 27th he visited with claimant and looked at his new MRI (magnetic resonance imaging) scan. We came to the realization that he has been treated for the L4/5 disc when it clearly shows that he had an L5/S1 annular tear off to the affected right side. He was symptomatic on that side at that time. Because of the atrophy in his right leg and weakness in the right foot EHL (extensor hallucis longus) at 3+/5, he sent him for a diagnostic block. The first block was done at L5/S1 for a transforaminal block. He had complete relief for approximately 2 1/2 days and then he had over 60% relief for about two weeks. His symptoms started to return last week. Dr. facilitated an appointment here and put him on a Medrol Dosepak. He is still better and his foot is still stronger. He comes in here for an opinion. On physical examination, he has a mild straight leg raise. He has atrophy of his calf muscles and anterior tibial muscles. He has intrinsic muscles of his right foot. He has improved to a level of 4+/5 with his dorsi flexion strength and 4-/5 on his EHL (extensor hallucis longus). The problem is coming from his L5/S1. The claimant was going to meet statutory maximum medical improvement and require an impairment rating as of August 2012. At this point in time, the right thing to do would be an L5/S1 right sided microdiscectomy based on his failure to thrive with physical therapy, anti-inflammatories, and several epidural steroid injections which have not provided him with sustained relief.

5-22-12 UR performed by MD., notes that attempts at peer to peer discussion were unsuccessful. ODG criteria for lumbar decompression include imaging findings demonstrating neuro compressive lesions. However, the lumbar MRI does not demonstrate S1 nerve root compressive. 2-23-12 EMG was within normal limits without signs supporting a diagnosis of radiculopathy. Based on the records reviewed and the guidelines above recommend non certification.

5-30-12 UR performed by, DO., states medical necessity is not established for the appeal request for L5-S1 right sided microdiscectomy. The claimant reported he was injured on 8-1-10, but the mechanism of injury is not described. MRI of the lumbar spine dated 2-7-12 reported disc desiccation at L5-S1 with a broad based 1.6 mm disc bulge and sacral spine. An addendum confirmed that the previous report was accurate. The records indicate that EMG done 2-23-12 was within normal limits. Treatment to date has included several epidural steroid injections, anti-inflammatories and physical therapy. Physical exam on 5-7-12 reported a mild SLR. He has atrophy of the calf muscles and anterior tibialis muscles. He has intrinsic muscles of the right foot. He has 4+/5 dorsiflexion strength and 4-5 on EHL. The claimant's physical exam and imaging studies do not correlate. As such, the proposed surgical procedure is not recommended. He discussed the case with Dr.. There seems to be a discrepancy in the case. The request is not certified.

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

BASED ON THE RECORDS PROVIDED, THE LUMBAR L4/L5 MICRODISCECTOMY ON THE RIGHT IS NOT RECOMMENDED. THE REPORTED EXAM FINDINGS ARE FAR GREATER THAN THE DIAGNOSTIC TEST FINDINGS BY LUMBAR MRI WITH 1/6 MM DISC BULGE AND NEGATIVE EMG/NCV. THEREFORE, THE L5-S1 RIGHT MICRO DISCECTOMY IS NOT REASONABLE OR MEDICALLY NECESSARY.

Per ODG last updated 6-29-12 Microdiscectomy: Recommended. Standard discectomy and microdiscectomy are of similar efficacy in treatment of herniated disc. (Bigos, 1999) See Discectomy/laminectomy for more information and references. For average hospital LOS after criteria are met.

Per ODG 2012 Discectomy/laminectomy: 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) For unequivocal evidence of radiculopathy, see AMA Guides. (Andersson, 2000) 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](#)) In workers' comp it is recommended to screen for presurgical biopsychosocial variables because they are important predictors of discectomy outcomes. ([DeBerard, 2011](#))

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 ligament hypertrophy, facet hypertrophy, and disc protrusion, in addition to anatomical derangements of the spinal column such as tumor, trauma, etc. ([Weinstein, 2008](#)) ([Katz, 2008](#)) A comparison of surgical and nonoperative outcomes between degenerative spondylolisthesis and spinal stenosis patients from the SPORT trial found that fusion was most appropriate for spondylolisthesis, with or without listhesis, and decompressive laminectomy alone most appropriate for spinal stenosis. ([Pearson, 2010](#)) 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) According to a new study, surgery provides better results than non-surgical treatment for most patients with back pain related to a herniated disk, but not for those receiving workers' compensation. (Atlas, 2010) Use of appropriateness criteria to guide treatment decisions for each clinical situation involving patients with low back pain and/or sciatica, with criteria based upon literature evidence, along with shared decision-making, was observed in one prospective study to improve outcomes in low back surgery. (Danon-Hersch, 2010) An updated SPORT trial analysis confirmed that outcomes of lumbar discectomy were better for patients who have symptoms of a herniated lumbar disc for six months or less prior to treatment. Increased symptom duration was related to worse outcomes following both operative and nonoperative treatment, but the relative increased benefit of surgery compared with nonoperative treatment was not dependent on the duration. (Rihn, 2011) Comparative effectiveness evidence from SPORT shows good value for standard open discectomy after an imaging-confirmed diagnosis of intervertebral disc herniation [as recommended in ODG], compared with nonoperative care over 4 years. (Tosteson, 2011)

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. 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 (\geq 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)

IRO REVIEWER REPORT - WC

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)