

Health Decisions, Inc.

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Notice of Independent Review Decision

July 21, 2014

IRO CASE #:

DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE:

Outpatient Revision Laminectomy at L5 for the Lumbar Spine

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

A Board Certified Neurological Surgeon with over 16 years of experience

REVIEW OUTCOME:

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

Upheld (Agree)

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:

04-07-11: Operative Note
06-06-11: Operative Note
10-14-11: Follow Up Visit Report
01-15-12: MRI Lumbar Spine without Contrast
08-19-13: URA regarding requested lumbar facet injection
01-27-14: Office Visit Report
03-14-14: MRI Lumbar Spine without Contrast
03-24-14: Office Visit Report
05-08-14: URA
06-20-14: URA

PATIENT CLINICAL HISTORY [SUMMARY]:

The claimant is a male who has low back pain and bilateral leg pain. He sustained his injury at work to the low back on xx/xx/xx. He was diagnosed with

joint pain of multiple sites. He has had a microdiscectomy, ESI, pain medication, post-op PT and facet treatments without relief.

04-07-11: Operative Note. Pre/Post-Op Diagnosis: Lumbar radiculopathy. Procedure: 1. Transforaminal Epidural Steroid Injection L5/S1, left. 2. Contrast study of nerve root sleeve and/or epidural space (epidurography) with interpretation; no radiologist present. 3. Fluoroscopic guidance. 4. IV conscious sedation. Radiographic Interpretation note: The flow in the nerve root sheath and into the epidural space.

06-06-11: Operative Note. Preoperative Diagnosis: 1. Lumbar disk herniation, L5-S1. 2. Lumbar radiculopathy. Postoperative Diagnosis: Same. Procedures: 1. Microdiscectomy, L5-S1 on the left. 2. Intraoperative use of microscope. 3. Placement of Amnioshield Dural graft. 4. Intraoperative neuromonitoring, dictated separately. 5. Intraoperative use and interpretation of C-arm fluoroscopy.

10-14-11: Follow Up Visit Report. The claimant c/o increased lumbar pain. He states since surgery his left leg has improved, but back pain is getting worse. He rates pain 7/10. Upon examination, there is pain with all ROM. Diagnoses: 1. Increase in lumbar pain with intermittent radiculopathy. 2. Previous lumbar surgery, the left L5-S1 laminectomy/discectomy on 6/6/11. Plan: Recommend an MRI with and w/o contrast. Short dose of steroids, Celebrex, Rybix and Zanaflex.

01-15-12: MRI Lumbar Spine without Contrast. Conclusion: 1. Status post left hemilaminectomy at L5/S1. Soft tissue density anterolateral to the thecal sac results in mild posterior displacement of the preganglionic left S1 nerve root and mild narrowing of the left neural foramen. Post gadolinium T1 Weighted axial images were helpful to differentiate the etiology of the soft tissue between postoperative fibrosis and residual disk material. If this is performed, an addendum will accompany this report. 2. Mild spinal stenosis at L4/5 which appears to be a combination of acquired stenosis (articular facet arthropathy with hypertrophy of the ligamentum flavum and minimal bulging of the annulus fibrosus) and congenital stenosis (short pedicles).

01-27-14: Office Visit Report. The claimant c/o pain on bilateral posterior legs, down to foot and numbness on the lateral side of the left leg and bilateral leg weakness. Upon examination, paravertebral muscles are non-tender, with no evidence of spasm or trigger point. Lumbar ROM is WNL in all directions and non-painful, flexion, rotation on the right/left and extension is painful at 75%. Lateral bending to the right is painful. SLR positive on right side at 30 degrees and left at 60 degrees. Right Psoas strength is 4, right and left quadriceps are 4, Right and left tip anterior strength 4. Right and left EHL/Peroneus strength is 4. Right ankle and knee are present at Hypo. Left light touch is abnormal at L4, L5 and S1 dermatomes. Assessment: Sciatica in bilateral legs, lumbar spondylosis. Plan: Continue Neurontin, Meloxicam and Norco, recommend MRI of lumbar spine without contrast. RX: Cyclobenzaprine, Mobic.

03-14-14: MRI Lumbar Spine without Contrast interpreted. Conclusion: 1. Degenerative disc disease is seen at L4-5 with a diffuse posterior disc bulge and severe facet arthropathy and ligamentum flavum hypertrophy with moderate canal stenosis and moderate bilateral neural foraminal narrowing. There is interval development of findings consistent with a synovial cyst adjacent to the right anterior facet at this level which contributes to canal stenosis with a compression deformity on the right lateral aspect of the thecal sacral this level. 2. Post-surgical changes are again seen with left-sided hemiflaminectomy of L5. There is a posterior disc bulge and left-sided disc protrusion again seen with moderate left neural foraminal narrowing without significant interval change.

03-24-14: Office Visit Report. The claimant c/o LBP with radiating pain down both of his legs with numbness and weakness, worse on the right leg. Problems: Sciatica, lumbosacral spondylosis without myopathy. Upon examination, the claimant has difficulty acquiring a full, upright position when getting out of the chair. Plan: Continue medicaitons.

05-08-14: URA. Rationale: Based on the documentation, the requested services are denied. Consideration should be given to CT myelography to better correlate symptoms/signs as well as to assess for stability/instability in this post-operative setting.

06-20-14: URA. Rationale: The previous denial on 5-5-14 was due to the fact additional diagnostic testing was required to better correlate signs and symptoms as well as assess for stability/instability. No additional medical records were provided for review. The previous denial is supported. The Official Disability Guidelines state discectomy and laminectomy is indicated when physical examination findings of radiculopathy are documented with corroboration by imaging studies and/or electrodiagnostic testing. The most recent evaluation provided for review documented motor weakness throughout both lower extremities, which is inconsistent with continued compression at the L5 level only. Additionally, the provided records indicate the patient has been treated only with oral medications since the previous surgery, and failure of other rehabilitation modalities and a home-based exercise program were not documented. Based on these factors, the appeal request for L5 lumbar revision laminectomy as an outpatient is denied.

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

The previous adverse determinations are upheld. The patient's complaints of back pain appear unchanged since his initial work injury in xxxx. His leg symptoms have been persistent since 2013 with some question of improved left leg symptoms after left L5/S1 laminotomy/discectomy in 2011. The most recent Lumbar MRI findings in March 2014 show worsening stenosis and degenerative changes at L4/5 compared to the January 2012 study. This case does not appear to be well worked up as the last Lumbar MRI was done without contrast which makes any comments on the L5/S1 level difficult. The proposed surgery at L5,

revision laminectomy, does not appear to clearly address the patients back pain and may worsen some latent instability. The progression of degenerative change and stenosis at L4/5 raises questions about any relation of these changes to a work injury in xxxx. No mention is made of Physical Therapy trial or smoking status. At this time, any further surgery at L5 is not indicated due to the need for more workup as mentioned above. Therefore, the request for Outpatient Revision Laminectomy at L5 for the Lumbar Spine is not found to be medically necessary at this time.

Per ODG:

<p>Laminectomy/ laminotomy</p>	<p>Recommended for lumbar spinal stenosis. For patients with lumbar spinal stenosis, surgery (standard posterior decompressive laminectomy alone, without discectomy) offered a significant advantage over nonsurgical treatment in terms of pain relief and functional improvement that was maintained at 2 years of follow-up, according to a new SPORT study. Discectomy should be reserved for those conditions of disc herniation causing radiculopathy. 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) This study showed that surgery for spinal stenosis and for disc herniation were not as successful as total hip replacement but were comparable to total knee replacement in their 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) 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) In patients with spinal stenosis, those treated surgically with standard posterior decompressive laminectomy showed significantly greater improvement in pain, function, satisfaction, and self-rated progress over 4 years compared to patients treated nonoperatively, and the results in both groups were stable between 2 and 4 years. (Weinstein, 2010) Comparative effectiveness evidence from SPORT shows good value for standard posterior laminectomy after an imaging-confirmed diagnosis of spinal stenosis [as recommended in ODG], compared with nonoperative care over 4 years. (Tosteson, 2011) Decompressive surgery (laminectomy) is more effective for lumbar spinal stenosis than land based exercise, but given the risks of surgery, a self-management program with exercise prior to consideration of surgery is also supported. (Jarrett, 2012) This study indicates that in patients with a primary diagnosis of lumbar spinal stenosis (LSS), the rate of fusions and the use of implants has increased, and the decompression rate has decreased. Trends in the surgical management of stenosis have become increasingly important to study because more invasive procedures, including the addition of fusion and the use of implants, have been associated with greater use of resources and increased complications. (Bae, 2013) Laminectomy is a surgical procedure for treating spinal stenosis by relieving pressure on the spinal cord. The lamina of the vertebra is removed or trimmed to widen the spinal canal and create more space for the spinal nerves. See also Discectomy/laminectomy for surgical indications, with the exception of confirming the presence of radiculopathy. For average hospital LOS after criteria are met, see Hospital length of stay (LOS</p>
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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 (≥ 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)

For average hospital LOS after criteria are met, see Hospital length of stay (LOS).

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)**