

# Health Decisions, Inc.

6601 CR 1022

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10/26/15

**IRO CASE #:**

**DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE:** Lumbar Spine CT Myelogram

**A DESCRIPTION OF THE QUALIFICATIONS FOR EACH PHYSICIAN OR OTHER HEALTH CARE PROVIDER WHO REVIEWED THE DECISION:** Board Certified Orthopedic Surgeon with over 13 years' 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.

**PATIENT CLINICAL HISTORY [SUMMARY]:**

The patient is a female who sustained a work related injury on XX/XX/XX. This request is for Lumbar Spine CT Myelogram after the patient was injured during Physical Therapy treatments after surgery.

xxx: MR Lumbar Spine without Contrast read: Impression: 1) Degenerative disc disease at L4-L5 with minimal facet arthropathy and ligamentum flavum hypertrophy contributing to mild central canal stenosis, mild to moderate neural foraminal stenosis along with a bulging disc centrally and to the left with slight touching of the L4 nerve root at the neural foraminal levels. 2) No acute disc extrusion is noted. 3) No acute compression fracture of the vertebral bodies is seen. 4) Disc dislocation with broad based bulging disc at the L5-S1 level without any compression of the nerve root. The spinal canal is adequate at this level.

xxxxx: Follow up letter before surgery: is seen in follow up. She was last evaluated at which point it was recommended that she consider surgical interventions. The patient now returns in follow up with no significant improvement in her previous symptomatology which includes low back pain with radiation into the left lower extremity along the lateral thigh and calf, and intermittently into the dorsum of the left foot with associated numbness in a similar distribution. The patient continues to describe her pain level as an 8-9/10 on a visual analog scale with worsening symptomatology after prolonged sitting, standing, coughing, sneezing and Valsalva maneuver. The patient also denies bowel or bladder dysfunction. Lumbar ROM was decreased in forward flexion secondary to body habitus and pain. Motor exam reveals 4/5 strength in the tibialis anterior and extensor hallucis longus muscle on the left, otherwise 5/5 throughout. Deep tendon reflexes were +2 throughout and symmetrical. Plantar responses were flexor bilaterally. Gait was antalgic. The patient had difficulty with heel walking and less difficulty with toe walking. Tandem walk was within normal limits. Straight Leg rising was positive on the left at 45 degrees and negative on the right. Sensory exam reveals a hypoesthetic region in the L5 distribution on the left to pin prick and light touch, otherwise intact. Impression: Lumbar radiculopathy, Herniated nucleus pulposus at L4-5, Lumbago. Recommendations: I reviewed the various non-surgical options with the patient including doing nothing to

continuing physical therapy for symptomatic relief to possible reevaluation for epidural steroid therapy. The patient understands said nonsurgical options and is willing to proceed with surgical intervention at this time. I described a lumbar laminectomy, discectomy, foraminotomy and partial facetectomy at L4-5 in detail including the possible complications. The patient understands the risks of surgery and is willing to proceed with surgical intervention at this time.

xxxx: Preoperative and Postoperative Diagnosis: 1) Lumbar radiculopathy. 2) Herniated nucleus pulposus at L4-L5. Procedure Performed: Lumbar microdiscectomy, laminectomy, foraminotomy, and partial facetectomy at L4-L5 on the left. CPT code 63030, 77002, and 95937.

xxxx: PT Initial Evaluation: In my professional opinion, this client requires skilled physical therapy in conjunction with a home exercise program to address the problems and achieve the goals outlined below. Overall rehabilitation potential is good. The patient and or family were educated regarding their diagnosis, prognosis and related pathology. The client exhibits good understanding and performances of the therapeutic activity and instructions outlined in this skilled rehabilitation session. Patient presents with a significant biomechanical deformity and subsequent injury which should improve with an appropriate orthotic to control abnormal motion and to balance weight bearing. Plan: It is recommended that this client attend rehab therapy for 3 visits a week with an expected duration of 4 weeks.

xxxx: PT Daily note: The client tolerated today's treatment today with mild complaints of pain and difficulty. Treatment emphasis was to focus on pain relief, postural improvements, and ROM improvements.

xxxx: PT Daily note: Client reports being stiff and sore today but was able to tolerate treatments. We reviewed goals and home exercise program.

xxxx: PT Re-evaluation note: Overall rehabilitation potential is fair. Moving & Handling objects: 40% to less than 60%. Impairments Identified: Balance, Ambulation, ADL's, Fatigue, Flexibility, Strength, weakness. Percentage of Goals Met: 45 Tolerance: with moderate- soreness, pain, fatigue/weakness. Treatment emphasis to focus on: Maximizing function related to: ADL's, Work performance, recreational activity, and functional activities. Problem #1 Pain: Decreased from 7/10 to 3/10. Problem #2 Client knowledge of Home exercise program: Pt educated. Problem #3 Palpation improvements: Tenderness decreasing to 0. Problem #4 Flexibility: Musculoskeletal improvements to Quads and hamstrings. Problem #5 Improvements to the ROM Lumbar Spine. Problem #6 Muscle Testing: Thoracolumbar Planes Left +4/5 Right +4/5. Problem #7 Muscle Testing: Lower Extremity MMT Left +4/5. Problem #8 Functional tests: Bilateral squat 30 degrees poor form. Plan to continue under current plan.

xxxx: PT Daily note: The patient tolerated today's treatment activity with mild complaints of pain and difficulty. Viewed goals, progress, and HEP with client with treatment Emphasis to focus on: Maximizing function related to ADL's, functional activities, Muscle function improvements, postural improvements

xxxxx: PT Daily note: Mild limitations in: joint stability due to localized pain and weakness. Mild limitation in soft tissue mobility due to localized pain, stiffness, and weakness. Treatment emphasis to focus on: Pain relief, Postural improvements. ROM/ mobility improvements, muscle function improvements, Enhanced Dynamic stability.

xxxxx Follow up: is seen in follow up. As you will recall, she is status post a lumbar microdiscectomy, laminectomy, foraminotomy and partial facetectomy at L4-5 on the left performed xxxxx at. The patient now returns in follow up and relates near complete resolution of her preoperative symptomatology which she had described as low back pain with radiation into the left lower extremity along the lateral thigh and calf, and intermittently into the dorsum or the left foot with associated numbness in a similar distribution. The patient denies leg pain, numbness and tingling. She does describe peri-incisional muscle spasms. She currently describes her pain level as a 3/10 on visual analog scale with worsening symptomatology following prolonged sitting and standing. However denies worsening symptomatology with coughing sneezing or Valsalva maneuver. The patient denies bowel or bladder dysfunction at this time. Lumbar ROM was decreased in forward flexion secondary to body habitus and muscle spasms. Motor exam reveals 5/5 strength throughout. Deep tendon reflexes +2 throughout and symmetrical. Plantar responses

were flexor bilaterally. Gait: the patient had no difficulty with heel or toe walking. Tandem walk was within normal limits. Straight Leg Raise was negative. Spurling's sign was negative. Sensory exam reveals no hypoesthetic region to pin prick and light touch. Coordination was intact. Lumbar incision is well healed. Recommendations: The patient will extend her postoperative rehab program times six weeks and will be seen in follow up after said regimen has been completed and reevaluated.

xxxx: PT Daily note: Impairments identified Body mechanics, Endurance, and weakness. Percentage of goals met: 35% Emphasis to focus on maximizing function related to ADL's, Postural Improvements, Muscle function improvements, ROM/ Mobility improvements.

xxxx: PT Progress and Daily note: Progression under current plan. No significant changes.

xxxx: Follow up letter. The patient now returns in follow up and reports approximately two weeks prior to today's evaluation she was lifting objects in physical therapy and had an acute onset of severe low back pain. Straight leg raise was positive at 50 degrees on the left and negative on the right. Due to the interval change in the patient's neurologic status, at this time I recommend: MRI with and without contrast enhancement to rule out epidural fibrosis versus recurrent disc herniation. Lumbar spine series to include flexion and extension views in the standing position to rule out instability. The patient was provided with a Medrol dosepak on today's evaluation. The patient will be seen in follow up when said regimen has been completed and reevaluated.

xxxx: Follow up letter: The patient was last evaluated on xxxx at which time it was recommended an MRI of the lumbar spine with and without contrast enhancement. Said study has been denied by insurance carrier. The patient has had no significant improvement in her aggravated low back pain without lower extremity symptomatology following an incident in which she was lifting objects in physical therapy which occurred approximately two weeks prior to her previous evaluation as noted above. She currently describes her pain level as a 4/10 on visual analog scale. Recommendation: Obtain a CT myelogram of the lumbar spine to adequately evaluate the central canal and neural foramina to determine the patient's candidacy for a repeat laminectomy versus a lumbar fusion procedure. Lumbar spine series to include flexion and extension views to rule out instability. The patient will be seen in follow up after said regimen has been completed and reevaluated.

xxxx: UR: In my judgement, the information available does support the medical necessary of a modification of the request. I recommend initial approval with lumbar spine series flexion/ extension, lateral views to initially assess for potential instability of lumbar spine. There is no report regarding progressive focal neurological deterioration or acute injuries at this time to support the need of the CT myelogram until after assessment of the lumbar spine flexion/extension views. The instability at the lumbar spine level with flexion/extension views would be to assess for potentially the lumbar spine fusion. I recommend reassessing the need for CT lumbar spine with myelogram after undergoing lumbar spine radiographic studies. Therefore the request for lumbar spine CT myelogram is not medically necessary at this time. The request for lumbar spine series with flex/ext and AP/lateral views is medically necessary.

xxxx: Lumbar Spine X-ray read: Impression: Moderate degree of scoliosis of the mid lumbar spine with the convexity to the right and the apex being at the L3 level with Cobb's angle of about 9 degrees. Flexion and extension views show no significant degree of spondylosis with moderate degenerative disc disease at L4-L5 and L5-S1 with less extent at the L3-L4 level.

xxxx: UR: In my judgment, the information available does not support the medical necessity of this request. This patient has low back pain without any leg symptoms, i.e. no leg pain, no leg numbness and no leg tingling. That fact was confirmed. As noted in the guidelines, a CT scan for low back pain without any serious underlying conditions documented is not indicated. This patient does not have documented significant trauma to warrant a CT scan. stated that the myelogram was necessary to plan for surgery. The patient has back pain without any radicular pain. That is not an evidence of any tumor, infection, or instability. She did have flexion and extension x-rays which did not show any instability. Therefore, she would not be a surgical candidate on that basis of low back pain alone. Also of note is that the patients exam is unchanged from her exam a year ago on xxxxxwhen she had 4/5 strength in the left

anterior tibialis and EHL. For the reasons, the myelogram and CT scan are not medically necessary.

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

The request for CT myelogram is denied.

The Official Disability Guidelines (ODG) supports CT myelography in patients with spinal disorders in which MRI is precluded. The most common indication for this study is for post-operative imaging in patients with spinal hardware. CT myelograms are also recommended in patients with pacemakers, claustrophobia, and large physical size. Nerve roots are imaged well on CT myelogram.

This patient had worsening of back pain in xxxxx. She had no lower extremity symptoms, consistent with possible neural compression. Based on the records reviewed, she does not require a repeat laminectomy for isolated lower back pain. Further imaging of the central canal and neural foramina is not warranted in this patient. If the patient's spine required imaging, CT myelogram would have no advantage over standard MRI with contrast.

CT Myelogram is not medically necessary for this patient.

Per ODG:

Not recommended except for selected indications below, when MR imaging cannot be performed, or in addition to MRI. Myelography and CT Myelography OK if MRI unavailable, contraindicated (e.g. metallic foreign body), or inconclusive. ([Slebus, 1988](#)) ([Bigos, 1999](#)) ([ACR, 2000](#)) ([Airaksinen, 2006](#)) ([Chou, 2007](#)) Invasive evaluation by means of myelography and computed tomography myelography may be supplemental when visualization of neural structures is required for surgical planning or other specific problem solving. ([Seidenwurm, 2000](#)) Myelography and CT Myelography have largely been superseded by the development of high resolution CT and magnetic resonance imaging (MRI), but there remain the selected indications below for these procedures, when MR imaging cannot be performed, or in addition to MRI. ([Mukherji, 2009](#))

**ODG Criteria for Myelography and CT Myelography:**

1. Demonstration of the site of a cerebrospinal fluid leak (postlumbar puncture headache, postspinal surgery headache, rhinorrhea, or otorrhea).
2. Surgical planning, especially in regard to the nerve roots; a myelogram can show whether surgical treatment is promising in a given case and, if it is, can help in planning surgery.
3. Radiation therapy planning, for tumors involving the bony spine, meninges, nerve roots or spinal cord.
4. Diagnostic evaluation of spinal or basal cisternal disease, and infection involving the bony spine, intervertebral discs, meninges and surrounding soft tissues, or inflammation of the arachnoid membrane that covers the spinal cord.
5. Poor correlation of physical findings with MRI studies.
6. Use of MRI precluded because of:
  - a. Claustrophobia
  - b. Technical issues, e.g., patient size
  - c. Safety reasons, e.g., pacemaker
  - d. Surgical hardware

**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)**