

INDEPENDENT REVIEWERS OF TEXAS, INC.

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Notice of Independent Review Decision

DATE OF REVIEW: March 29, 2012

IRO CASE #:

DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE:

Lumbar Myleogram with CT scan at Southwest Diagnostic Imaging Center as requested by Benzel MacMaster, M.D.

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

Board Certified Orthopedic Surgeon

REVIEW OUTCOME:

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

X Upheld (Agree)

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:

Progress notes Dr. 01/18/11 and 01/24/11

MRI right knee 01/20/11

X-rays right knee 01/25/11

X-rays right hip 01/25/11

X-ray right ankle 01/25/11

X-ray left ankle 01/25/11

Physical therapy evaluation 02/07/11

Physical therapy progress notes 04/04/11 and 09/16/11

Initial visit and progress notes Dr. 02/11/11-01/19/12

MRI lumbar spine 03/11/11

Initial evaluation Dr. 03/28/11

EMG/NCV lower extremities 04/13/11
CT myelogram lumbar spine 05/31/11
Lab reports 05/31/11 and 07/15/11
Chest x-ray 07/15/11
Venous ultrasound 07/15/11
Lexiscan myocardial perfusion stress/rest SPECT scan 07/18/11
Operative report decompressive laminectomy for spinal stenosis L4-5 level
07/21/11
Intraoperative lumbar x-ray 07/21/11
ECG 07/21/11
Consult notes Dr. 07/15/11 and 07/16/11
Initial consultation and follow-up notes Dr. 11/09/11-01/17/12
MRI lumbar spine 12/12/11
Operative report bilateral L4-5 and L5-S1 lumbar facet injections 01/09/12
Injection consultation Dr. 12/21/11
Preauthorization review 01/24/12
Preauthorization review 02/03/12
Prospective review (M2) response 03/16/12

PATIENT CLINICAL HISTORY [SUMMARY]:

The claimant is a male who was injured on xx/xx/xx climbing in back of when his foot slipped and he fell backwards “doing the splits”. He complained of right hip and knee pain as well as low back pain with radicular symptoms. MRI dated 03/11/11 revealed severe concentric encroachment on thecal sac at L4-5 related to endplate spur, facet ligamentum flavum hypertrophy and superimposed broad based disc bulge versus protrusion. There is moderate diffuse annular bulging at L3-4 level which combined with facet ligamentum flavum hypertrophy resulting in borderline central spinal canal stenosis. Electrodiagnostic testing performed on 04/13/11 reported findings consistent with a right S1 radiculopathy with both acute and chronic changes. CT myelogram performed 05/31/11 revealed L4-5 severe central canal and subarticular recess stenosis with partial Myelographic block due to disc bulge, spondylosis and facet degenerative change/thickening of ligamentum flavum superimposed on congenitally shallow central canal. The L5 nerve root sleeves are impinged on weight bearing myelogram. There is mild central canal narrowing at the L3-4. On 07/21/11 the claimant underwent decompressive laminectomy for spinal stenosis at the L4-5 level. Repeat MRI dated 12/12/11 revealed post-operative changes at the L4-5 level, with relief of the previously seen thecal sac stenosis. There was moderate right foraminal narrowing by asymmetric disc collapse and bulging, unchanged. There was acute non-displaced fracture of the right L4 pedicle. Records indicate the claimant also participated in functional restoration/PRIDE program. On 01/09/12 the claimant underwent bilateral L4-5 and L5-S1 lumbar facet injections. The claimant was seen in follow-up by Dr. on 01/18/12. Examination of the lumbar spine revealed a healed posterior midline incision without evidence of inflammation or infection. There was tenderness to palpation over the lumbosacral junction and adjacent

tissues. Lumbar spine range of motion voluntarily demonstrated moderate restriction of motion in all planes. Straight leg raise was reported as producing pain in the back and buttock only on the left, and right straight leg raise produces pain in the anterior thigh, with no specific radicular symptoms on either side. Bow string test was negative bilaterally. Achilles tendon reflexes were 1/5 bilaterally, and patellar tendon reflexes were 2/4 bilaterally. CT myelogram was recommended.

A pre-authorization request for outpatient lumbar myelogram with post CT scan was reviewed on 01/24/12 and the request was denied. Reviewer noted that the claimant is status post lumbar surgery. He has recently been participating in PRIDE program. Last imaging was performed on 12/12/11 which showed the presence of prior surgery at L4-5 as well as moderately severe stenosis at L3-4. It is not clear why there is need for CT myelogram since the MRI appears to delineate the pathology. It does not appear to meet Official Disability Guidelines criteria.

A reconsideration request for lumbar myelogram with CT scan was reviewed on 02/03/12 and again denied. The reviewer was able to complete a peer to peer conversation with Dr. with discussion of the case/clinical records and denial rationale. It was noted that Dr. notes document no radiculopathy, only what he refers to as segmental rigidity. Dr. notations on 12/18/11 visit note documents radicular findings with no motor or sensory loss on either side in the L4-5 distribution. The 12/12/11 MRI of the lumbar spine seems clear with L3-S1 degenerative disc disease and some post-operative changes at L4-5 on the right side. This does not correlate with any clinical examination by two doctors in over one month. The MRI seems clear and no reason to expect CT myelogram would show anything different. Dr. offered no other additional information other than he wanted to be sure he did not have a myelographic block.

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

The request for lumbar myelogram with CT scan at Imaging Center is not supported as medically necessary based on the clinical data provided. The claimant is noted to have sustained an injury to the low back on xx/xx/xx. After undergoing a course of conservative care the claimant underwent decompressive laminectomy at L4-5 performed 07/21/11. The claimant subsequently participated in functional restoration/PRIDE program. MRI of the lumbar spine was performed on 12/12/11 which revealed post-operative changes as well as multilevel degenerative changes. At L3-4 the thecal sac is markedly narrowed by diffuse disc bulging, tiny midline disc extrusion with minimal cranial migration, markedly thickened ligamentum flavum and shallow bony canal. The foramina are minimally narrowed by disc bulging. On examination there was no evidence of motor or sensory deficits. Per Official Disability Guidelines, CT myelogram may

be indicated if MRI is unavailable, contraindicated or inconclusive. None of these apply to the current case as MRI is available and unambiguous. As such, medical necessity is not established for proposed CT myelogram of lumbar spine.

A DESCRIPTION AND THE SOURCE OF THE SCREENING CRITERIA OR OTHER CLINICAL BASIS USED TO MAKE THE DECISION:

X MEDICAL JUDGEMENT, CLINICAL EXPERIENCE AND EXPERTISE IN ACCORDANCE WITH ACCEPTED MEDICAL STANDARDS

X ODG- OFFICIAL DISABILITY GUIDELINES & TREATMENT GUIDELINES

CT (computed tomography) – Not recommended except for indications below for CT. ([Slebus, 1988](#)) ([Bigos, 1999](#)) ([ACR, 2000](#)) ([Airaksinen, 2006](#)) ([Chou, 2007](#)) Magnetic resonance imaging has largely replaced computed tomography scanning in the noninvasive evaluation of patients with painful myelopathy because of superior soft tissue resolution and multiplanar capability. ([Seidenwurm, 2000](#)) The new ACP/APS guideline as compared to the old AHCPR guideline is more forceful about the need to avoid specialized diagnostic imaging such as computed tomography (CT) without a clear rationale for doing so. ([Shekelle, 2008](#)) A new meta-analysis of randomized trials finds no benefit to routine lumbar imaging (radiography, MRI, or CT) for low back pain without indications of serious underlying conditions, and recommends that clinicians should refrain from routine, immediate lumbar imaging in these patients. ([Chou-Lancet, 2009](#)) Primary care physicians are making a significant amount of inappropriate referrals for CT and MRI, according to new research published in the *Journal of the American College of Radiology*. There were high rates of inappropriate examinations for spinal CTs (53%), and for spinal MRIs (35%), including lumbar spine MRI for acute back pain without conservative therapy. ([Lehnert, 2010](#))

Indications for imaging -- Computed tomography:

- Thoracic spine trauma: equivocal or positive plain films, no neurological deficit
- Thoracic spine trauma: with neurological deficit
- Lumbar spine trauma: trauma, neurological deficit
- Lumbar spine trauma: seat belt (chance) fracture
- Myelopathy (neurological deficit related to the spinal cord), traumatic
- Myelopathy, infectious disease patient
- Evaluate pars defect not identified on plain x-rays
- Evaluate successful fusion if plain x-rays do not confirm fusion ([Laasonen, 1989](#))

CT myelography See [Myelography](#)

Myelography - 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