



Medical Review Institute of America, Inc.
America's External Review Network

DATE OF REVIEW: May 11, 2010

IRO Case #:

Description of the services in dispute:

CT myelogram–lumbar spine and lumbar flexion/extension x–rays (#72265, #62284, #72132, and #72114).

A description of the qualifications for each physician or other health care provider who reviewed the decision

This physician reviewer is board certified by the American Board of Anesthesiology in General Anesthesiology and in Pain Medicine as a Sub Board. This physician reviewer is a member of the American Society of Anesthesiologist, American Society of Regional Anesthesia, and American Medical Association. This physician has been in active practice since 1992.

Review Outcome

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

Upheld

Based on the clinical information provided, medical necessity was not established for the proposed CT myelogram lumbar spine with flexion extension x–rays (#72265, #62284, #72132, and #72114).

Information provided to the IRO for review

Records Submitted for Review from Carrier:

1. IRO referral documents, 6 pages
2. Utilization review notification of reconsideration determination D.O. 03/18/10, 4 pages
3. Utilization review notification of adverse determination M.D. 03/04/10, 4 pages

Records Submitted for Review from URA:

1. Prescription for CT myelogram, 03/15/10, 1 page
2. Preauthorization request, 03/01/10, Dr., 1 page
3. Pre authorization request form CT myelogram lumbosacral spine with flexion and extension x–rays, 10/16/09, 03/15/10, 2 pages
4. Office visit note D.O. 02/18/10, 1 page

5. Office consultations M.D., 11/05/09, 12/22/09, 01/26/10, 3 pages
6. Procedure reports lumbar ESI with epidurogram, 12/01/09 and 01/05/10, 2 pages
7. Office visit M.D. 10/16/09, 4 pages
8. MRI lumbosacral spine 09/21/09, date illegible (transcribed 09/29/09), 5 pages
9. Patient information form, 1 page

Patient clinical history [summary]

The patient is a male whose date of injury is xx/xx/xx. Records indicate the patient was carrying a gas pump and experienced the acute onset of low back pain. MRI lumbar spine dated 09/29/09 revealed lumbar scoliosis with diffuse anterior and lateral osteophytic spurring with disc space narrowing at L2-3 and L3-4. There is minor narrowing of the central canal at L2-3 with disc protrusion and degenerative facet changes. At L3-4 there is a 6 mm broad based disc extrusion and degenerative facet changes, with moderate central canal stenosis extending into the left lateral recess, and mild bilateral neural foraminal narrowing. Minor contact with the exiting left L3 nerve root within the left neural foramen is noted. At L4-5 there is a 3 mm broad based disc protrusion with underlying uncovertebral spurring, and degenerative facet changes with minor narrowing of the central canal and mild bilateral neural foraminal narrowing. At L5-S1 there is a 3 mm disc protrusion with mild bilateral neural foraminal narrowing. Records indicate the patient was treated conservatively with physical therapy and epidural steroid injections. The patient was recommended to undergo CT myelogram lumbar spine with flexion and extension x-rays. This request was determined to be not medically necessary by Dr. on review dated 03/04/10. Dr. noted that the patient sustained a work related injury to the low back in 07/09 and treatment to date included medications and epidural steroid injections (ESIs). Dr. noted that the records reviewed did not provide a more recent evaluation of the patient that identified the need for CT myelogram lumbar spine with lumbar x-rays and flexion extension views. Dr. noted that the request for CT myelogram was identified in 10/16/09 medical report and update is needed since this was about 6 months prior to review. A reconsideration determination by Dr. on 03/18/10 determined that the request for CT myelogram lumbar spine with lumbar flexion extension x-rays was not medically necessary. Dr. noted that the documentation lacks evidence that supports progression of neurologic deficit since the claimant has last MRI. Per ODG, magnetic resonance imaging has largely replaced computed tomography scanning in the non invasive evaluation of patient's with painful myelopathy because of superior soft tissue resolution and multi planar capability. Invasive evaluation by means of myelography and computed tomography myelography may be supplemental in visualization of neural structures required for surgical planning or other specific problem solving. Dr. further noted that documentation provided did not show evidence of any neurologic deficits, new onset of pain or recent traumatic events that would support the request for the proposed imaging.

Analysis and explanation of the decision include clinical basis, findings and conclusions used to support the decision.

Based on the clinical information provided, medical necessity was not established for the proposed CT myelogram lumbar spine with flexion extension x-rays. The patient sustained a lifting injury to the low back in 07/09. MRI lumbar spine revealed multi level degenerative changes with disc protrusions at L2-3, L3-4, L4-5, and L5-S1 with varying degrees of osteophytic spurring and degenerative facet changes. At L3-4 there is moderate central canal stenosis and minor central stenosis at L4-5. There is no documentation of progressive neurologic deficit. MRI lumbar spine appears to have appropriately identified relevant pathology with no indication of inconclusive findings. Per ODG, CT Myelography may be indicated if MRI unavailable, contraindicated (e.g. metallic foreign body), or inconclusive. There is no evidence of such prerequisites in this case. As such, the proposed CT myelogram and flexion extension x-rays lumbar spine are not indicated as medically necessary.

A description and the source of the screening criteria or other clinical basis used to make the decision:

ODG Treatment Integrated Treatment/Disability Duration Guidelines, Low Back chapter, Online Version

ODG Treatment Integrated Treatment/Disability Duration Guidelines, Low Back chapter, Online Version CT & CT Myelography (computed tomography):

Not recommended except for indications below for CT. CT Myelography OK if MRI unavailable, contraindicated (e.g. metallic foreign body), or inconclusive. (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. 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) 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)

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