

CASEREVIEW

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Notice of Independent Review Decision

[Date notice sent to all parties]: September 25, 2012

IRO CASE #:

DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE:

72148 MRI Lumbar without contrast

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

This physician is Board Certified Physical Medicine and Rehabilitation with over 18 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:

02/16/12: MRI Lumbar Spine without contrast
02/21/12: Consultation
02/21/12: Radiology Report
03/13/12: Consultation.
03/13/12: Radiology Report
04/20/12: Follow-up.
04/20/12: Radiology Report
05/16/12: Peer Review

06/06/12: Follow-up.
06/06/12: Radiology Report
07/18/12: Follow-up by.
07/18/12: Radiology Report
07/24/12: UR
08/20/12: UR
07/18/12: Follow-up.

PATIENT CLINICAL HISTORY [SUMMARY]:

This claimant is a female who sustained a fall. She was knocked down by a student who ran into her in the school. She was evaluated in the emergency room where x-rays were performed.

MRI Lumbar Spine, Impression: 1. There is a mild to moderate acute L1 superior endplate compression fracture with approximately 40% loss of vertebral body height. Mild to moderate superior endplate edema is noted. Mild retropulsion is noted, with mild ventral thecal sac flattening. There is mild soft tissue edema around the L1 vertebral body. Some bone marrow edema from the L1 superior endplate does extend to the right L1 pedicle. This finding was discussed with physician covering . He asked us to send the patient to the emergency room. These instructions were conveyed to the patient. 2. There are mild degenerative changes in the lumbar spine.

On February 21, 2012, the claimant reported that since the fall she has been having low back pain on the right as well as the left. She also reported feeling constipated since the fall. She had been taking only Advil, although she had been prescribed Vicodin. She continued to work. On physical exam, she was able to ambulate freely without gait disturbances. Palpation and percussion of the back revealed no pain or tenderness in the upper lumbar spine. The area where the patient points to where the pain is, is in the low back area. Assessment: Burst fracture at L1 with approximately 50% anterior body collapse. Plan: A Jewett hypertension brace was recommended, as well as a bone density scan. She was also prescribed Tramadol. Radiology Review: AP and lateral flexion/extension radiographs of the lumbar spine showed L1 vertebral body fracture with loss of normal alignment at the thoracolumbar junction and local kyphosis. There is loss of vertebral body height of at least 33% anteriorly and also some posteriorly. There is no visualized retropulsed component of the plain films.

On March 13, 2012, the claimant was evaluated by MD who on physical exam found she was having increased pain. She had good motor function and 5/5 strength in the iliopsoas, quads, tibialis anterior, EHL, and gastrocsoleus. Reflexes were intact in the patellar tendon and ankle jerks. Plan: She was only finally approved for a TLSO brace that day. They were going to proceed with the Jewett extension brace. Radiology Review: Her plain x-rays showed an L1 burst fracture. There was increased angulation approximately 16 degrees, came to approximately 11 degrees at a fairly normal segment or neutral segment.

On April 20, 2012, the claimant was re-evaluated by MD who reported she was having increase dysesthesia around the right hip and also some right leg complaints. Plan: If she was still having increased pain with any new neurologic symptoms in 3 weeks, then Dr would advocate for an updated MRI. Radiology Review: Her x-rays showed approximately an 18 degree kyphosis focal at the L1 compression area with angulation at the fracture segment.

On May 16, 2012, , MD reviewed the claimant's medical records and rendered the following opinions: 1. I believe that documentation does support that current symptoms and physical findings are causally related to activity at work. 2. may well have had some degree of pre-existing osteoporosis. That condition may have contributed to the work related compression fracture. 3. Documentation does support the current treatment including office visits, diagnostic testing, referrals and medications have been medically necessary for the treatment of the compensable injury. The patient has not undergone any procedures or surgery. 4. ODG indicates that may require up to eight visits to a treating physician for the treatment of this injury. ODG further indicates that may require up to eight visits to a physical therapist for the treatment of this injury. ODG indicates that the provision of appropriate oral pain medications is reasonable and appropriate pending the patient's symptomatic and functional response to the use of such medications. Unless the patient's condition changes significantly, ODG does not indicate that additional supervised medical treatment is indicated including additional office visits, additional medications, further diagnostic testing, surgery, the provision of additional durable medical equipment or physical therapy.

On June 6, 2012, the claimant was re-evaluated by MD who reported she had been wearing her brace for months and was really doing well with minimal complaints. Assessment: Stable fracture. Plan: Re-evaluate in six weeks. She would discontinue her brace and begin physical therapy and a home-directed exercise program. Radiology Review: Her x-rays showed no increase in angulation.

On July 18, 2012, the claimant was re-evaluated by MD who reported she had discontinued her brace but had not done physical therapy. She reported a pretty significant increase in her pain, which she described as being more pain when she initially had the fracture. She was also having pain into the right hip and leg. Average pain was 1-2/10 and now increased to 8/10. Plan: Repeat MRI to evaluate whether or not the L1 vertebral body had subsided more into the spinal canal, which would be causing her more pain. Radiology Review: Her x-rays showed very, very slight increasing in kyphosis. However, it did appear that it had subsided somewhat at the T12-L1 vertebral body, possibly could be encroaching more into the spinal canal.

On July 24, 2012, MD performed a UR. Rationale for Denial: Deny repeat MRI Lumbar spine given lack of clinical information. Submitted documentation does not include a recent physical exam and therefore there is no documentation of significant change in exam to suggest significant pathology. Also submitted

documentation does not provide information regarding requested repeat MRI of lumbar spine on April of 2012.

On August 20, 2012, MD performed a UR. Rationale for Denial: This patient's physical exam was incomplete and did not provide a physical exam that would allow for assessment of the neurological status currently. Thus the request is not supported as a medical necessity as written.

On August 24, 2012, the claimant was re-evaluated by MD who reported an increase of pain in the right lower lumbar region and pain radiating down the right leg. On exam her gait was slow and purposeful. Her current left tib anterior strength was 5, current right tib anterior strength was 5, current left EHL/Peroneus strength was 5, current right EHL/Peroneus strength was 5. Assessment: The patient has had a slight increase in the retropulsion of her initial burst fracture. Subsequently she's had increased right buttock and right leg complaints. And right anterior thigh complaints that have been debilitating for her. She had new onset neurologic findings of increased pain with a positive straight leg raise. Plan: To get an updated MRI to evaluate the new onset finding of right leg complaints.

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

Previous adverse determinations are upheld. Information submitted for review indicates an increase in the claimant's pain in right hip and buttock, with low back pain extending into the right leg. Records submitted indicate intact knee and ankle reflexes on 3/13/12. Note dated 7/18/12 notes "pain into the right hip and leg". Average pain was 1-2/10 and now increased to 8/10", but without a documented physical exam. Note dated 8/24/12 indicates, "normal 5/5 strength in the right EHL, peroneus longus, and tibialis anterior", with "new onset neurologic findings of increased pain with a positive straight leg raise", without documented changes in reflexes, tone, or muscle strength which would support myelopathy, radiculopathy, or significant change in claimant's neurological exam. Additionally, repeat plain film xrays reported only "very, very slight increasing in kyphosis" in 7/18/12 note, when claimant reported increased pain.

As per ODG, repeat MRI is not routinely recommended, and should be reserved for a significant change in symptoms and/or findings suggestive of significant pathology (eg, tumor, infection, fracture, neurocompression, recurrent disc herniation). The provided documentation does not support a significant change in symptoms and/or clinical findings suggestive of significant pathology, therefore the request for 72148 MRI Lumbar without contrast denied.

PER ODG:

<p>MRIs (magnetic resonance imaging)</p>	<p>Recommended for indications below. MRI's are test of choice for patients with prior back surgery, but for uncomplicated low back pain, with radiculopathy, not recommended until after at least one month conservative therapy, sooner if severe or progressive neurologic deficit. Repeat MRI is not routinely recommended, and should be reserved for a significant change in symptoms and/or findings suggestive of significant pathology (eg, tumor, infection, fracture, neurocompression, recurrent disc herniation). (Bigos, 1999) (Mullin, 2000) (ACR, 2000) (AAN, 1994) (Aetna, 2004) (Airaksinen, 2006) (Chou, 2007) Magnetic resonance imaging has also become the mainstay in the evaluation of myelopathy. An important limitation of magnetic resonance imaging in the diagnosis of myelopathy is its high sensitivity. The ease with which the study depicts expansion and compression of the spinal cord in the myelopathic patient may lead to false positive examinations and inappropriately aggressive therapy if findings are interpreted incorrectly. (Seidenwurm, 2000) There is controversy over whether they result in higher costs compared to X-rays including all the treatment that continues after the more sensitive MRI reveals the usual insignificant disc bulges and herniations. (Jarvik-JAMA, 2003) In addition, the sensitivities of the only significant MRI parameters, disc height narrowing and anular tears, are poor, and these findings alone are of limited clinical importance. (Videman, 2003) Imaging studies are used most practically as confirmation studies once a working diagnosis is determined. MRI, although excellent at defining tumor, infection, and nerve compression, can be too sensitive with regard to degenerative disease findings and commonly displays pathology that is not responsible for the patient's symptoms. With low back pain, clinical judgment begins and ends with an understanding of a patient's life and circumstances as much as with their specific spinal pathology. (Carragee, 2004) Diagnostic imaging of the spine is associated with a high rate of abnormal findings in asymptomatic individuals. Herniated disk is found on magnetic resonance imaging in 9% to 76% of asymptomatic patients; bulging disks, in 20% to 81%; and degenerative disks, in 46% to 93%. (Kinkade, 2007) Baseline MRI findings do not predict future low back pain. (Borenstein, 2001) MRI findings may be preexisting. Many MRI findings (loss of disc signal, facet arthrosis, and end plate signal changes) may represent progressive age changes not associated with acute events. (Carragee, 2006) MRI abnormalities do not predict poor outcomes after conservative care for chronic low back pain patients. (Kleinstück, 2006) 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 magnetic resonance imaging (MRI) 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) Despite guidelines recommending parsimonious imaging, use of lumbar MRI increased by 307% during a recent 12-year interval. When judged against guidelines, one-third to two-thirds of spinal computed tomography imaging and MRI may be inappropriate. (Devo, 2009) As an alternative to MRI, a pain assessment tool named Standardized Evaluation of Pain (StEP), with six interview questions and ten physical tests, identified patients with radicular pain with high sensitivity (92%) and specificity (97%). The diagnostic accuracy of StEP exceeded that of a dedicated screening tool for neuropathic pain and spinal magnetic resonance imaging. (Scholz, 2009) Clinical quality-based incentives are associated with less advanced imaging, whereas satisfaction measures are associated with more rapid and advanced imaging, leading Richard Deyo, in the Archives of Internal Medicine to call the fascination with lumbar spine imaging an idolatry. (Pham, 2009) Primary care physicians are making a significant amount of inappropriate referrals for CT and MRI, according to new research published in the <i>Journal of the American College of Radiology</i>. There were</p>
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	<p>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) Degenerative changes in the thoracic spine on MRI were observed in approximately half of the subjects with no symptoms in this study. (Matsumoto, 2010) This large case series concluded that iatrogenic effects of early MRI are worse disability and increased medical costs and surgery, unrelated to severity. (Webster, 2010) Routine imaging for low back pain is not beneficial and may even be harmful, according to new guidelines from the American College of Physicians. Imaging is indicated only if they have severe progressive neurologic impairments or signs or symptoms indicating a serious or specific underlying condition, or if they are candidates for invasive interventions. Immediate imaging is recommended for patients with major risk factors for cancer, spinal infection, cauda equina syndrome, or severe or progressive neurologic deficits. Imaging after a trial of treatment is recommended for patients who have minor risk factors for cancer, inflammatory back disease, vertebral compression fracture, radiculopathy, or symptomatic spinal stenosis. Subsequent imaging should be based on new symptoms or changes in current symptoms. (Chou, 2011) The National Physicians Alliance compiled a "top 5" list of procedures in primary care that do little if anything to improve outcomes but excel at wasting limited healthcare dollars, and the list included routinely ordering diagnostic imaging for patients with low back pain, but with no warning flags, such as severe or progressive neurologic deficits, within the first 6 weeks. (Aguilar, 2011) Owning MRI equipment is a strongly correlated with patients receiving MRI scans, and having an MRI scan increases the probability of having surgery by 34%. (Shreibati, 2011) A considerable proportion of patients may be classified incorrectly by MRI for lumbar disc herniation, or for spinal stenosis. Pooled analysis resulted in a summary estimate of sensitivity of 75% and specificity of 77% for disc herniation. (Wassenaar, 2011) (Sigmondsson, 2011) Accurate terms are particularly important for classification of lumbar disc pathology from imaging. (Fardon, 2001) Among workers with LBP, early MRI is not associated with better health outcomes and is associated with increased likelihood of disability and its duration. (Graves, 2012) There is support for MRI, depending on symptoms and signs, to rule out serious pathology such as tumor, infection, fracture, and cauda equina syndrome. Patients with severe or progressive neurologic deficits from lumbar disc herniation, or subjects with lumbar radiculopathy who do not respond to initial appropriate conservative care, are also candidates for lumbar MRI to evaluate potential for spinal interventions including injections or surgery. For unequivocal evidence of radiculopathy, see AMA Guides. (Andersson, 2000) See also ACR Appropriateness Criteria™. See also Standing MRI.</p> <p><u>Indications for imaging -- Magnetic resonance imaging:</u></p> <ul style="list-style-type: none"> - Thoracic spine trauma: with neurological deficit - Lumbar spine trauma: trauma, neurological deficit - Lumbar spine trauma: seat belt (chance) fracture (If focal, radicular findings or other neurologic deficit) - Uncomplicated low back pain, suspicion of cancer, infection, other "red flags" - Uncomplicated low back pain, with radiculopathy, after at least 1 month conservative therapy, sooner if severe or progressive neurologic deficit. - Uncomplicated low back pain, prior lumbar surgery - Uncomplicated low back pain, cauda equina syndrome - Myelopathy (neurological deficit related to the spinal cord), traumatic - Myelopathy, painful - Myelopathy, sudden onset - Myelopathy, stepwise progressive - Myelopathy, slowly progressive - Myelopathy, infectious disease patient - Myelopathy, oncology patient
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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)**