

CASEREVIEW

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Notice of Independent Review Decision

[Date notice sent to all parties]: June 12, 2013

IRO CASE #:

DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE:

MRI Lumbar-Spine with and without contrast

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

This physician is Board Certified in Family Medicine with over 13 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:

07/19/11: Evaluation
07/26/11: Evaluation
08/02/11: Evaluation
08/16/11: Evaluation
09/19/11: Evaluation
10/17/11: Evaluation
01/10/12: Evaluation
04/11/12: Evaluation
07/11/12: Evaluation
08/10/12: Evaluation
11/12/12: Evaluation
02/04/13: Evaluation
04/25/13: UR performed
05/06/13: Evaluation

05/15/13: UR performed

PATIENT CLINICAL HISTORY [SUMMARY]:

The claimant is a male who was injured on xx/xx/xx when the elevator he was in free fell for about five floors. When he got out of the elevator he started to have pain in his lower back and pain in his right leg to his groin area. He also suffered a right ACL tear and underwent surgery in September of 2011 followed by PT. Past history is positive for 2 motorcycle wrecks in the 80s, the second wreck resulted in an injury to his lower back in which he received multiple injection for pain and was told he needed a fusion by one doctor, but decided to just do injections based on the recommendations from his pain specialist.

On July 19, 2012, the claimant was evaluated for low back pain extending into the groin and down the legs. On examination he had decreased flexion and extension, TTP in paraspinous musculature and an antalgic gait. Sitting Straight leg raise was negative bilaterally. Sensation was decreased in right L4 pattern. DTRs were 2+ bilateral in patellar and Achilles. Diagnosis: Back contusion and Lumbar radiculopathy. Plan: MRI L-Spine.

On August 2, 2012, the claimant was re-evaluated who reported a MRI was completed that showed degenerative changes. stated the claimant's symptoms and exam demonstrated an acute exacerbation, aggravation and acceleration of his underlying degenerative condition and would need to see a pain specialist for injection to treat the pain. Medications included Norco 7.5 mg-325mg, Vicoprofen 7.5mg-200mg, and Hydrocodone 7.5mg-500mg.

On January 10, 2012, the claimant was re-evaluated for continued pain in the low back extending into the groin. further reported the MRI showed a tear of the L4/L5 disc that was not there on a previous MRI. The claimant was reported not to have undergone any injections yet as they were denied twice. felt that the new changes on his MRI needed to be addressed by a surgeon. On physical examination there was TTP in the L-spine, decreased ROM, positive SLR on the right sitting at 90 degrees and decreased sensation on the right in a L4 and L5 pattern. Strength was 5/5. Plan: Referral Neurosurgery.

On April 11, 2012, the claimant was re-evaluated for continued pain in the back that shoots down the left leg to the great toe. It was reported the neurosurgeon suggested a lumbar fusion, but the compensability of the back injury was in question. On physical exam SLR was now positive on the left sitting at 90 degrees. Also decreased sensation in a L5 and S1 pattern.

On August 10, 2012, the claimant was re-evaluated for continued severe back pain. It was reported the claimant had seen a Designated Doctor three times who suggested the claimant was not at MMI and needed ESIs and also suggested the spondylolisthesis at L4/L5 was part of the compensable injury. No exam provided. Plan: Referral Pain Management.

On November 12, 2012, the claimant was re-evaluated who found on physical examination TTP in the L spine midline and paraspinal muscles. There was decreased ROM and decreased sensation in L5 and S1 pattern. Positive SLR on the left sitting at 90 degrees.

On February 4, 2013, the claimant was re-evaluated who reported the claimant had about 3 days relief from the last set of injection on 12/7/12. It was also noted he had a Medical Peer Review which stopped further treatment. reported the claimant had not had any pain medication the last few weeks. He felt the claimant needed an FCE and a work conditioning program. No physical exam provided. Plan: Continue light duty, PT and meds as needed.

On April 25, 2013, performed a UR. Rationale for Denial: The above noted reference would not support this specific request to be one of medical necessity, as there is no documentation of a focal neurological deficit on physical examination, and the submitted documentation does not provide any data with respect to the presence of radicular symptoms.

On May 6, 2013, the claimant was re-evaluated for continued low back pain. stated the claimant never had PT for the low back and only a few injections. No physical examination was provided. A copy of the MRI performed on July 26, 2011 and read was provided within the encounter report. Impression of the MRI: 1. Mild levoscoliosis of the lumbar spine. 2. Loss of normal fatty marrow may indicate red marrow conversion, recommend clinical correlation. 3. Multilevel degenerative disc changes and lumbar spondylosis with varying degrees of foraminal stenosis. There is also moderate spinal canal stenosis at L4-L5. Plan: Continue light duty, PT and Meds.

On May 15, 2013: performed a UR. Rationale for Denial: ODG criteria for lumbar MRI include acute thoracic or lumbar spine trauma with fracture or neurological deficit; low back pain with radiculopathy after at least 1 month of conservative care; or low back pain with suspicion for cancer, myelopathy, or cauda equine syndrome. However, there remains no recent neurologic exam. A change or progression in neurologic findings was not documented. Recommend noncertification.

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

The previous adverse determinations are upheld. Based on ODG, repeat MRIs are not routinely recommended unless there have been significant changes in symptoms and/or findings suggestive of significant pathology that would warrant it. Based on the records that were reviewed, such a change was not demonstrated. No physical examinations were provided in any of the documentation in 2013. Therefore, the request for MRI Lumbar-Spine with and without contrast is not found to be medically necessary at this time.

PER ODG:

MRIs (magnetic resonance imaging)	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
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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 annular 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. (Deyo, 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 *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) 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](#)) MRI with and without contrast is best test for prior back surgery. ([Davis, 2011](#)) See also [ACR Appropriateness Criteria](#)TM. See also [Standing MRI](#).

Recent research: More than half of requests for MRI of the lumbar spine are ordered for indications considered inappropriate or of uncertain value, pointing to evidence of substantial overuse of lumbar spine MRI scans. For family physicians, only 34% of their MRI scans were considered appropriate vs 58% of those ordered by other specialties. On the other hand, the vast majority of MRIs ordered for headaches, 83%, were deemed appropriate. ([Emery, 2013](#)) This study casts doubt on the value of post-op spinal imaging for patients with sciatica, because it could not distinguish those with a favorable clinical outcome from those with persistent symptoms. Disk herniation was visible in 35% of patients with a favorable outcome and in 33% with an unfavorable outcome, and nerve root compression was present in 24% of those with a favorable outcome and in 26% of those with an unfavorable outcome. They concluded that the MRI scan does not have any discriminatory power at all. Irrelevant findings have the potential to frighten patients and initiate cascades of unnecessary testing or intervention, with occasional risks. The study showed that neither a herniated disk nor the presence of scar tissue on MRI was associated with patient outcome, but these findings may lead to unnecessary further imaging and surgery. ([el Barzouhi, 2013](#))

Indications for imaging -- Magnetic resonance imaging:

- 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.

	<ul style="list-style-type: none">- 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)**