



CLAIMS EVAL

*Utilization Review and
Peer Review Services*

Notice of Independent Review Decision-WC

DATE OF REVIEW: 12-20-10

IRO CASE #:

DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE

MRI of the lumbar spine with and without contrast between 11/3/10 and 1/2/11

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

American Board of Orthopaedic Surgery-Board Certified

REVIEW OUTCOME

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

- Upheld (Agree)
 Overturned (Disagree)

Partially Overturned (Agree in part/Disagree in part)

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

- 12-20-04 MRI of the lumbar spine.
- 1-11-10 MD., performed a Designated Doctor Evaluation.
- MD., office visits on 12-7-09, 3-10-10, 6-11-10, and 9-8-10.
- 7-27-10 MD., performed a Peer Review.
- 9-8-10 MD., letter.
- 10-14-10 DO., performed a Utilization Review.
- 11-10-10 MD., performed a Utilization Review.

PATIENT CLINICAL HISTORY [SUMMARY]:

12-20-04 MRI of the lumbar spine showed posterior fusion with bilateral pedicle screws at L4, L5 and S1.

1-11-10 MD., performed a Designated Doctor Evaluation. She noted the claimant is on several medications which can impact his attention and concentration including Lortab, Robaxin, Amitriptyline and Lyrica. It was her opinion that the claimant would not be capable of work due to both his physical limitation and above cognitive affects.

Follow up with Dr. on 3-10-10 notes the claimant has lower back pain. He takes multiple medications. He has tried weaning off them. However, he cannot due to pain. The claimant was provided with Protonix, Lortab, Lyrica, Amitriptyline and Methocarbamol. He needs to be physically active. The evaluator requested an MRI to see if there is any nerve compression and a CT scan to see if he had a solid fusion.

6-11-10, MD., the claimant is getting worse with back pain, which is his biggest problem. X-rays of the lumbar spine show a halo on the left S1 and right L4 screw. It looks like the right side of the L5-S1 is not completely healed posteriorly. There is some facet arthropathy of L3-L4. The evaluator reported he obtained a denial for lumbar CT and MRI scan. The evaluator did not know the source of his back pain. The evaluator reported that a CT scan should be done to see if he has pseudoarthrosis and an MRI to

evaluate the spinal canal to see if there is pseudomeningocele, epidural scar or spinal canal stenosis.

7-27-10 MD., performed a Peer Review. It was his opinion that the claimant was a chronic pain patient with failed back surgery syndrome having undergone a multilevel fusion in his lower lumbar spine. He reported the claimant needed some type of maintenance care with medications such as Lyrica, Hydrocodone and intermittent use of a muscle relaxant. He would need maintenance care on an every 3-4 month basis.

9-8-10 MD., notes the claimant is unable to perform any gainful employment secondary to his back injury which occurred on xx/xx/xx . The claimant has intractable low back and bilateral extremity radiculopathy. He is on high doses of Lortab, Robaxin, Amitriptyline and Lyrica. His inability to have gainful employment is permanent. His condition has not changed since 6-8-09.

9-8-10 MD., the claimant is back stating that the lumbar pain continues to be a constant limiting factor that forces him to modify many of his activities of daily living. Throughout this whole time since surgery, this has been a constant struggle for him. However, over the last two months, he has had considerable increase of pain through the right posterior thigh radiating into the posterior ankle. This has been far more aggressive without any history of traumatic events. The numbness and tingling continues as well but the new development of the bilateral groin pain has also limited many of his functions. There is tenderness of the paraspinous muscles and the lumbosacral region. The lower extremities have a decreased sensation along the posterior right thigh as well as the posterior and lateral lower leg. There is quick fatigue of both hip flexors but otherwise motor function is intact. There is a positive bilateral straight leg raise test, the right considerably more than the left. There are diminished reflexes of both patellar reflexes but the right Achilles is completely absent. There is also a decreased sensation on the plantar aspect of both feet. Assessment: Lumbar internal disk derangement, lumbago, lumbar radiculopathy. Discussion and plan: Although the patient continues to have the regular use of medications that includes Lortab, Methocarbamol, Lyrica, and now Lunesta. The patient's symptoms have progressively worsened primarily over the last two months. He has now developed some neurological changes yet the studies have been refused. The lumbar MRI would serve to evaluate the spinal canal and surrounding soft tissues to seek for a possibility of a pseudomeningocele epidural scar or newly developed spinal canal stenosis above the fusion, The CT scan would evaluate whether or not there is a pseudoarthrosis that would significantly reproduce these symptoms. Although the patient is permanently disabled, his symptoms have dramatically worsened and therefore these images and studies should be performed. He should maintain proper body mechanics and avoid any type of direct heavy lifting.

On 10-14-10 DO., performed a Utilization Review. This patient has undergone instrumented lumbar fusion and metallic hardware associated with this procedure will interfere with MR imaging quality; anticipated yield of the requested study is questionable. Records submitted also indicate lumbar CT was ordered concurrently to evaluate fusion status and it has not been satisfactorily delineated why two separate

studies are needed to satisfactorily evaluate the patient's lumbar spine/fusion; it is possible to perform one study that will sufficiently delineate soft tissues as well as the pertinent skeletal structures/fusion and that will not be impeded by the presence of metallic hardware. Considering the amount of time that has passed since the reported injury & surgery dates and the patient's overall status, records submitted have not satisfactorily delineated how obtaining updated imaging at this point will be utilized to develop a treatment plan that will ultimately result in significant improvement in the patient's function/status. Additional pertinent clinical information/documentation is needed. This determination may be appealed or a new request may be submitted.

On 11-10-10, MD., performed a Utilization Review. It was his opinion that Based on the medical records dated 09;08/10, the patient has had considerable increase of pain through the right posterior thigh radiating into the posterior ankle. As per medicals, it is noted that there is a concurrent request for a CT scan. The medical necessity of this MRI request cannot be established because one imaging modality would suffice to address the clinical suspicion of pseudomeningocele, spinal canal stenosis, and pseudoarthrosis. Furthermore, an MRI may be indicated for uncomplicated low back pain with radiculopathy if there is documentation of at least one month of conservative therapy. However, aside from medications, there was no mention of other conservative management such as Home Exercise Program or Physical Therapy in the latest medicals sent for review. The medical necessity of this request cannot be established at this point.

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

THERE IS NO MEDICAL INDICATION FOR A LUMBAR MRI IN THIS CASE. CLAIMANT HAD PRIOR FUSION WITH PEDICLE SCREWS AND RODS. THESE STRUCTURES WOULD CAUSE ARTIFACT AND STREAKING AND WOULD NOT REVEAL ANY USEFUL INFORMATION ABOUT THE SPINAL CANAL. THEREFORE, THE REQUEST FOR A LUMBAR MRI IS NOT REASONABLE.

ODG-TWC, last update 12-17-10 Occupational Disorders of the Low Back – MRI: Recommended for indications below. MRI's are test of choice for patients with prior back surgery. 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) 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. See also ACR Appropriateness Criteria™. See also Standing MRI.

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. (For unequivocal evidence of radiculopathy, see AMA Guides, 5th Edition, page 382-383.) (Andersson, 2000)
- 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

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)