Applied Resolutions LLC

An Independent Review Organization
1124 N. Fielder Road, #179, Arlington, TX 76012
(512) 772-1863 (phone)
(512) 853-4329 (fax)

Notice of Independent Review Decision -- Amended

DATE OF REVIEW: 06/09/2008**; AMENDED 6/14/08**

IRO CASE #:

DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE

Fluoroscopy, dynamic views of lumbar spine

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

Board Certified Neurosurgeon with additional training in Pediatric Neurosurgery

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)

Upon independent review the reviewer finds that the requested fluoroscopy, dynamic views of lumbar spine is medically necessary.

INFORMATION PROVIDED TO THE IRO FOR REVIEW

Adverse Determination Letters 4/24/08, 5/6/08
ODG Guidelines and Treatment Guidelines
MD, Letter of Medical Necessity 5/14/08
MD 4/10/08, 9/27/07
MRI Lumbar Spine 6/8/07
PT 7/19/07
OTR 2/23/07
Pain Care, Consolidation of Reports 4/1/08
PPE and Request for CPM 4/1/08
Initial Examination 4/1/08
MD 3/31/08, 12/17/07, 7/18/07

MD 2/1/08, 12/21/07, 10/26/07, 9/14/07, 8/17/07, 7/20/07
MD 9/4/07
Report of Medical Evaluation 7/27/07
Review of Medical History and Physical Exam 7/20/07
Radiology Report 9/25/06
ODG Guidelines submitted by URA for Lower Back- Lumbar and Thoracic

PATIENT CLINICAL HISTORY [SUMMARY]:

This is a male with a date of injury xx/xx/xx while pulling a large metal disc, weighing about 200 pounds. He has pain and numbness in the lower extremities. He has had physical therapy, pain management, and epidural steroid injection. The neurological examination is normal. An MRI of the lumbar spine 06/08/2007 reveals a right paracentral disc herniation at L4-L5. An EMG/NCV 09/04/2007 was a limited study, but was normal. He continues with pain. The provider is requesting fluoroscopic dynamic views of the lumbar spine.

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

Upon independent review of the medical records provided and the ODG Guidelines, this reviewer finds that the requested fluoroscopic dynamic views of the lumbar spine are medically necessary. This patient has had chronic back pain, and occult instability is a potential cause for this. He is not presenting with acute back pain. The ODG does say that flexion and extension imaging studies "may be a criteria prior to fusion, for example in evaluating symptomatic spondylolisthesis when there is consideration for surgery". This is just an example, however. These studies are used to look for occult instability, which can be missed on static films, including an MRI, and be a source of symptoms (see references below). The results of this study would impact patient care, and therefore, the study is medically necessary.

References/Guidelines

Clin Radiol. 2002 Jul;57(7):632-9.
Segmental lumbar spine instability at flexion-extension radiography can be predicted by conventional radiography.
Pitkänen MT, **Manninen HI**, **Lindgren KA**, **Sihvonen TA**, **Airaksinen O**, **Soimakallio S**.
AIM: To identify plain radiographic findings that predict segmental lumbar spine instability as shown by functional flexion-extension radiography. MATERIALS AND METHODS: Plain radiographs and flexion-extension radiographs of 215 patients with clinically suspected lumbar spine instability were analysed. Instability was classified into anterior or posterior sliding instability. The registered plain radiographic findings were traction spur, spondylarthrosis, arthrosis of facet joints, disc degeneration, retrolisthesis, degenerative spondylolisthesis, spondylolytic spondylolisthesis and vacuum phenomena. Factors reaching statistical significance in univariate analyses ($P < 0.05$) were included in stepwise multiple logistic regression analysis. RESULTS: Degenerative spondylolisthesis ($P = 0.004$ at L3-4 level and $P = 0.017$ at L4-5 level in univariate analysis and odds ratio 16.92 at L4-5 level in multiple logistic regression analyses) and

spondylolytic spondylolisthesis (P = 0.003 at L5-S1 level in univariate analyses) were the strongest independent determinants of anterior sliding instability. Retrolisthesis (odds ratio 10.97), traction spur (odds ratio 4.45) and spondylarthrosis (odds ratio 3.20) at L3-4 level were statistically significant determinants of posterior sliding instability in multivariate analysis. CONCLUSION: Sliding instability is strongly associated with various plain radiographic findings. In mechanical back pain, functional flexion-extension radiographs should be limited to situations when symptoms are not explained by findings of plain radiographs and/or when they are likely to alter therapy. Copyright 2002 The Royal College of Radiologists.

Radiology. 2007 Oct;245(1):62-77.

Lumbar intervertebral instability: a review.

Leone A, **Guglielmi G**, **Cassar-Pullicino VN**, **Bonomo L**.
Department of Radiology, Catholic University, School of Medicine, Largo A. Gemelli 8, 00168 Rome, and Department of Radiology, Scientific Institute Hospital Casa Sollievo della Sofferenza, San Giovanni Rotondo, Italy. a.leonemd@tiscali.it

Intervertebral instability of the lumbar spine is thought to be a possible pathomechanical mechanism underlying low back pain and sciatica and is often an important factor in determining surgical indication for spinal fusion and decompression. Instability of the lumbar spine, however, remains a controversial and poorly understood topic. At present, much controversy exists regarding the proper definition of the condition, the best diagnostic methods, and the most efficacious treatment approaches. Clinical presentation is not specific, and the relationship between radiologic evidence of instability and its symptoms is controversial. Because of its simplicity, low expense, and pervasive availability, functional flexion-extension radiography is the most thoroughly studied and the most widely used method in the imaging diagnosis of lumbar intervertebral instability. In this article, we provide an overview of the current concepts of vertebral instability, focusing on degenerative lumbar intervertebral instability, and review the different imaging modalities most indicated in diagnosing vertebral instability.

Spine. 2006 May 1;31(10):E298-301.

Dynamic degenerative lumbar spondylolisthesis: diagnosis with axial loaded magnetic resonance imaging.

Jayakumar P, **Nnadi C**, **Saifuddin A**, **Macsweeney E**, **Casey A**.

STUDY DESIGN: Retrospective review of case notes and imaging. OBJECTIVE: To show the advantage of axial loaded magnetic resonance imaging (MRI) for identification of dynamic degenerative spondylolisthesis as a suspected cause of spinal claudication. SUMMARY OF BACKGROUND DATA: Degenerative spondylolisthesis typically occurs at L4/L5 and is usually evident on plain radiography. However, dynamic degenerative spondylolisthesis may become evident on erect radiographs when not shown on supine radiographs or MRI. METHODS: The case notes and imaging (radiography, conventional MRI, and axial loaded MRI) in 2 patients with symptoms of spinal claudication were reviewed. RESULTS: A 44-year-old female presented with a 3-year history of intermittent low back pain and right leg numbness after a fall. A 52-year-old female presented with a 4-year history of low back pain, bilateral leg weakness, and right leg numbness. In both cases, conventional MRI studies showed mild-to-moderate degenerative disc disease only with no evidence of abnormal spinal alignment or nerve root compression. Axial loaded MRI clearly showed the development of a degenerative spondylolisthesis with central canal stenosis and facet ganglion formation in 1 case. CONCLUSIONS: Axial loaded MRI identified occult dynamic degenerative

spondylolisthesis, which correlated with the clinical picture but was not shown on initial conventional MRI or plain radiography

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)**