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Notice of Independent Review Decision

DATE OF REVIEW: MARCH 19, 2008

IRO CASE #:

DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE

Lumbar discogram at L3-L4 and L5-S1 w/a control at L1-L2 (62290)

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

- Board Certified in Orthopaedic Surgery
- Fellow, American Academy of Orthopaedic Surgeons
- Licensed to Practice Medicine in State of Texas

REVIEW OUTCOME

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

Upheld (Agree)

Medical documentation does not support the medical necessity of the lumbar discogram at L3-L4 and L5-S1 w/a control at L1-L2 (62290)

INFORMATION PROVIDED TO THE IRO FOR REVIEW

Texas Department of Insurance

- Utilization reviews (02/19/08 – 02/28/08)

M.D.

- Office notes (01/10/08 – 02/20/08)
- Utilization reviews (02/19/08 – 02/28/08)

D.O.

- Office notes (03/27/07 – 01/07/08)
- Radiodiagnostics (04/03/07 – 11/19/07)

Physicians Center

- Office notes (03/27/07 – 01/07/08)
- Radiodiagnostics (04/03/07 – 11/19/07)

M.D.

- Office notes (03/27/07 – 02/15/08)
- Therapy (04/04/07 - 01/29/08)
- Radiodiagnostics (04/03/07 – 05/22/07)
- Designated Doctor Evaluation (10/09/07)

Orthopaedics

- Office notes (12/10/07 – 02/15/08)
- Radiodiagnostics (05/22/07 – 11/19/07)
- Letter from Ms.
- Letters to Ombudsman
- Letter from Dr. 1/20/08
- Letter from Dr. 1/24/08
- Designated doctor, M.D., 10/9/07

ODG criteria have been utilized for the denial.

PATIENT CLINICAL HISTORY [SUMMARY]:

The patient is a xx-year-old female who injured her lower back on xx/xx/xx, when she fell with a student weighing 188 lbs on top of her.

The patient had severe complaints of low back pain radiating to the left leg associated with burning sensation. She was initially placed on Medrol Dosepak, muscle relaxant, and anti-inflammatories.

X-rays revealed anterolisthesis of L5 on S1 by approximately 10 mm in distance and postsurgical changes at L5 probably representing laminectomy and attempted posterior fusion. X-rays of the left hip and pelvis revealed osteoarthritis in hips bilaterally associated with joint space narrowing and subchondral sclerosis. Magnetic resonance imaging (MRI) of the lumbar spine revealed postoperative changes related to laminectomy and posterior fusion at L5-S1; grade I anterolisthesis of L5/S1 narrowing both foramina, right greater than left. Flexion/extension views revealed spondylolisthesis at L5-S1, probably on a degenerative basis, and moderate degenerative changes at L5-S1.

The patient underwent six weeks of physical therapy (PT) followed by lumbar epidural steroid injections (ESIs) without any relief. She was referred for a surgical consultation to, M.D., who felt that the back pain could be due to nonunion at L5-S1 and transitional symptoms between L3-L4 and L4-L5. He felt that a discogram at L3-L4 and L4-L5 might be needed.

CT scan of the lumbar spine was performed, which revealed degenerative narrowing of the L5-S1 intervertebral disc with a grade I anterolisthesis and posterior fusion of the facet joint by bone grafting and changes of prior L5 laminectomy. There was some facet degeneration at L4-L5 and mild left neural foraminal narrowing at L5-S1.

M.D., performed a designated doctor evaluation (DDE) to address the extent of the injury. He opined that the low back pain and radicular pain were directly resulted to the compensable injury of xx/xx/xx, as the prior surgery yielded

excellent results, which allowed the patient to be pain free and very active. The mechanism of injury could have caused the anterolisthesis and if this had been present for years before the injury, there would have been more sclerosis and degenerative changes. Therefore, the current injury was a new injury which was consistent with the stated mechanism of injury.

In November 2007, lumbar myelogram with CT scan demonstrated prior surgical changes at L5-S1, grade I anterolisthesis of L5 on S1 and some underlying scarring around the thecal sac and lower lumbar nerve root sleeves.

M.D., a pain management physician, noted paresthesias in the right lower extremity throughout the L5 dermatomal distribution and a position straight leg raising (SLR) test. He prescribed Lyrica and Nexium, and scheduled the patient for a two-level discogram L3 through L4 and L5 through S1 with a control level at L1 through L2.

M.D., noted that the patient had undergone two lumbar ESIs, which did not provide her with any relief. He discussed surgical intervention for the L5-S1 anterolisthesis and recommended discogram.

In January 2008, D.O., an orthopedist, also suggested lumbar discogram and electrodiagnostic studies of the lower extremities for symptoms of radiculitis.

On February 15, 2008, the patient returned to Dr. complaining of increased low back pain radiating to the left lower extremity. She ambulated with a limp, complaining of difficulty when changing positions. She indicated that she would occasionally fall and also reported frequent urgency for urination. She also reported weight gain without an increase in appetite. On examination, Achilles was trace bilaterally, seated straight leg raise (SLR) was positive on the left and hamstrings were on the right. Dr. was concerned about the complaints of bladder dysfunction and left lower extremity weakness and due to potential neurologic loss, he again emphasized on proceeding with the lumbar discogram to decide over the surgical intervention.

On February 19, 2008, the request for outpatient lumbar discogram at L3-L4 and L5-S1 level was nonauthorized with following rationale: *The claimant is one year post injury and has spinal surgery 30 years ago. The claimant's prior surgery was at L5-S1, so the rationale for testing this disc is not clear. In addition, there is mention in the notes that a control level is planned, but the request does not include a control level. In addition, there is no specific request for a post-discogram CT. The performance of discography without CT does not appear medically reasonable. In addition, the claimant has not been cleared psychologically for discography as is recommended by Official Disability Guidelines (ODG). The documentation contains no clear evidence of injury attributable to February 28, 2007, only evidence of degenerative disc disease (DDD) and evidence of prior surgery.*

On February 28, 2008, the second request for outpatient L3-L4 and L5-S1 discogram with control at L1-L2 was denied. Rationale: *Please provide the MRI report referred to in the submitted material. The documentation is insufficient for review of the medical necessity or ODG compliance.*

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

Based on a review of available medical records and Official Disability Guidelines (ODG), the proposed discogram is not medically indicated. I concur with the rationale for non-authorization on February 19, 2008 and cite the specific ODG criteria below.

Not recommended. In the past, discography has been used as part of the pre-operative evaluation of patients for consideration of surgical intervention for lower back pain. However, the conclusions of recent, high quality studies on discography have significantly questioned the use of discography results as a preoperative indication for either IDET or spinal fusion. These studies have suggested that reproduction of the patient's specific back complaints on injection of one or more discs (concordance of symptoms) is of limited diagnostic value. (Pain production was found to be common in non-back pain patients, pain reproduction was found to be inaccurate in many patients with chronic back pain and abnormal psychosocial testing, and in this latter patient type, the test itself was sometimes found to produce significant symptoms in non-back pain controls more than a year after testing.) Also, the findings of discography have not been shown to consistently correlate well with the finding of a High Intensity Zone (HIZ) on MRI. Discography may be justified if the decision has already been made to do a spinal fusion, and a negative discogram could rule out the need for fusion (but a positive discogram in itself would not allow fusion). ([Carragee-Spine, 2000](#)) ([Carragee2-Spine, 2000](#)) ([Carragee3-Spine, 2000](#)) ([Carragee4-Spine, 2000](#)) ([Bigos, 1999](#)) ([ACR, 2000](#)) ([Resnick, 2002](#)) ([Madan, 2002](#)) ([Carragee-Spine, 2004](#)) ([Carragee2, 2004](#)) ([Maghout-Juratli, 2006](#)) ([Pneumaticos, 2006](#)) ([Airaksinen, 2006](#)) Discography may be supported if the decision has already been made to do a spinal fusion, and a negative discogram could rule out the need for fusion on that disc (but a positive discogram in itself would not justify fusion). Discography may help distinguish asymptomatic discs among morphologically abnormal discs in patients without psychosocial issues. Precise prospective categorization of discographic diagnoses may predict outcomes from treatment, surgical or otherwise. ([Derby, 2005](#)) ([Derby2, 2005](#)) ([Derby, 1999](#)) Positive discography was not highly predictive in identifying outcomes from spinal fusion. A recent study found only a 27% success from spinal fusion in patients with low back pain and a positive single-level low-pressure provocative discogram, versus a 72% success in patients having a well-accepted single-level lumbar pathology of unstable spondylolisthesis. ([Carragee, 2006](#)) The prevalence of positive discogram may be increased in subjects with chronic low back pain who have had prior surgery at the level tested for lumbar disc herniation. ([Heggeness, 1997](#)) Discography involves the injection of a water-soluble imaging material directly into the nucleus pulposus of the disc. Information is then recorded about the pressure in the disc at the initiation and completion of injection, about the amount of dye accepted, about the configuration and distribution of the dye in the disc, about the quality and intensity of the patient's pain experience and about the pressure at which that pain experience is produced. Both routine x-ray imaging during the injection and post-injection CT examination of the injected discs are usually performed as part of the study. There are two diagnostic objectives: (1) to evaluate radiographically the extent of disc damage on discogram and (2) to characterize the pain response (if any) on disc injection to see if it compares with the typical pain symptoms the patient has been experiencing. Criteria exist to grade the degree of disc degeneration from none (normal disc) to severe. A symptomatic degenerative disc is considered one that disperses injected contrast in an abnormal, degenerative pattern, extending to the outer margins of the annulus and at the same time reproduces the patient's lower back complaints (concordance) at a low injection pressure. Discography is not a sensitive test for radiculopathy and has no role in its confirmation. It is, rather, a confirmatory test in the workup of axial back pain and its validity is intimately tied to its indications and performance. As stated, it is the end of a diagnostic workup in a patient who has failed all reasonable conservative care and remains highly symptomatic. Its validity is enhanced (and only achieves potential meaningfulness) in the context of an MRI showing both dark discs and bright, normal discs -- both of which need testing as an internal validity measure. And the discogram needs to be performed according to contemporary diagnostic criteria -- namely, a positive response should be low pressure, concordant at equal to or greater than a VAS of 7/10 and demonstrate degenerative changes (dark disc) on MRI and the discogram with negative findings of at least one normal disc on MRI and discogram. See also [Functional anesthetic discography \(FAD\)](#).

While not recommended above, if a decision is made to use discography anyway, the following criteria should apply:

o Back pain of at least 3 months duration

- o Failure of recommended conservative treatment including active physical therapy
- o An MRI demonstrating one or more degenerated discs as well as one or more normal appearing discs to allow for an internal control injection (injection of a normal disc to validate the procedure by a lack of a pain response to that injection)
- o Satisfactory results from detailed psychosocial assessment (discography in subjects with emotional and chronic pain problems has been linked to reports of significant back pain for prolonged periods after injection, and therefore should be avoided)
- o Intended as a screen for surgery, i.e., the surgeon feels that lumbar spine fusion is appropriate but is looking for this to determine if it is not indicated (although discography is not highly predictive) ([Carragee, 2006](#)) NOTE: In a situation where the selection criteria and other surgical indications for fusion are conditionally met, discography can be considered in preparation for the surgical procedure. However, all of the qualifying conditions must be met prior to proceeding to discography as discography should be viewed as a non-diagnostic but confirmatory study for selecting operative levels for the proposed surgical procedure. Discography should not be ordered for a patient who does not meet surgical criteria.
- o Briefed on potential risks and benefits from discography and surgery
- o Single level testing (with control) ([Colorado, 2001](#))
- o Due to high rates of positive discogram after surgery for lumbar disc herniation, this should be potential reason for non-certification

Decision is based on ODG guidelines and the experience of a Board Certified Orthopaedic Surgeon, trained in an AGME approved orthopaedic surgery residency. Additionally, the reviewing physician participates in continuing medical education and maintenance of certification parameters outlined by the American Board of Orthopaedic Surgery and the American Academy of Orthopaedic Surgeons. Reference to MMI and determination of impairment, disability, or apportionment is based on the American Medical Association's *Guides to the Evaluation of Permanent Impairment*. Reference to standard of care in the orthopaedic surgery community is based on literature cited in the *Orthopaedic Knowledge Update*, 9th Edition (AAOS, 2008) in addition to any specifically cited journal articles.

A DESCRIPTION AND THE SOURCE OF THE SCREENING CRITERIA OR OTHER CLINICAL BASIS USED TO MAKE THE DECISION:

- ⊗ **ODG- OFFICIAL DISABILITY GUIDELINES & TREATMENT GUIDELINES**
- ⊗ **PEER REVIEWED NATIONALLY ACCEPTED MEDICAL LITERATURE (SEE ABOVE. ORTHOPAEDIC KNOWLEDGE UPDATE, 9TH EDITION (AAOS, 2008))**