



CLAIMS EVAL

*Utilization Review and
Peer Review Services*

Notice of Independent Review Decision-WC

CLAIMS EVAL REVIEWER REPORT - WC

DATE OF REVIEW: 2-19-10 (AMENDED 2-22-10)

IRO CASE #:

DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE

Lumbar discogram with post CT scan

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

- 3-13-08 MRI of the lumbar spine.
- 4-8-08, MD., office visit.
- 4-10-08 EMG/NCS performed by, MD.
- 9-5-08, MD., office visit.
- MD., office visit on 10-9-08, 2-10-09,
- 4-3-09, MD., office visit.
- 4-14-09, MD., performed a Designated Doctor Evaluation.
- MD., office visits on 7-16-09, 8-31-09, 11-5-09, 12-16-09, and 12-21-09.
- 10-27-09 Lumbar CT myelogram of the lumbar spine.

- Physical therapy 8-31-09 and 11-9-09.
- Literature on discogram.

PATIENT CLINICAL HISTORY [SUMMARY]:

3-13-08 MRI of the lumbar spine showed right sided disc herniation with mild foraminal encroachment at the L3-L4 level. Diffuse central herniation at the L4-L5 level. Left paracentral focal herniation with annular tear at L5-S1.

4-8-08, MD., the evaluator reported that the claimant's symptoms are typical of right S1 radiculopathy but the evaluator did not find significant examination abnormalities. Ankle reflexes are depressed but are down bilaterally making for a nonspecific finding. The claimant's symptoms have persisted now for close of two months despite excellent conservative therapy.

4-10-08 EMG/NCS performed by, MD., was normal.

9-5-08, MD., the claimant reported he completed epidural steroid injection and the pain has improved. The evaluator recommended another epidural steroid injection at L5-S1 this time.

10-9-08, MD., the claimant the claimant reported he was lifting a bucket of water, when he felt pain in his lower back. The claimant was seen by the company doctor who provided a diagnosis of lumbar sprain. He underwent change of treating doctor. He underwent a series of epidural steroid injection. On exam, the claimant has positive SLR, Nachlas, Kemps and Bechterew test. Muscle testing is +5 on the left and +4/5 on the right. DTR are +2 on the left and +1. The evaluator recommended physical therapy, and MRI of the lumbar spine. The claimant was taken off work.

2-10-09, MD., the claimant reports low back pain that radiates down the right leg to the foot. The claimant is seen for reevaluation. The evaluator felt the claimant had lumbar intervertebral disc syndrome, lumbago and lumbar radiculopathy. The evaluator recommended refill of medications and await ortho evaluation.

4-3-09, MD., the claimant is a 50-year-old male was seen for orthopedic consultation at the request of Dr. for injuries that occurred to his lumbar spine that resulted from a work injury on February 21, 2008. The patient was working in what seems like a general laborer capacity. He was lifting a large tub full of water. The water spilled out of the tub. The patient slipped forward while holding the tub and strained his back, suffering pain to his back and into his legs. The same day, he went to Nova Health. There, he was evaluated, started on a Medrol Dosepak. He was treated with some physical therapy with no relief. Lumbar MRI was obtained, as was an EMG. He was referred to an orthopedic surgeon. The orthopedic surgeon recommended epidural injections. The patient was seen by Dr. who performed 3 lumbar epidural injections. The patient then came under the care of Dr., He has been complaining of primarily of back pain with radiation to the right leg with only rarely left leg symptoms. He is referred here now for orthopedic consultation. On exam, the patient is a well-developed, well-nourished 50-year-old male who is very cooperative with the exam. He has markedly decreased lumbar flexion with pain going to his right leg. He has a positive straight leg raise on the right reproducing his leg symptoms. He also has weakness in the extensor hallucis longus on the right. Achilles reflexes were bilaterally weak. Patellar reflexes were also bilaterally weak. Toe and heel walking was difficult, but it appeared the patient had the

most weakness with right-sided toe walking. The patient also had numbness along the right L5 distribution. The x-rays reveal normal bony alignment. There is no evidence of fracture or subluxation. The evaluator reported he would like to get the EMG results. If the EMG results match with the patient's physical exam, which strongly suggests a right L5 radiculopathy, then the evaluator felt he could proceed with a lumbar laminotomy and microdiscectomy to decompress the disk at L5 on the right. If the EMG has any inconsistency, then the evaluator would recommend a CT myelogram first. The patient's clinical presentation appears to be sincere and is consistent with radiculopathy. The evaluator had little doubt that this patient can be helped with a lumbar decompression.

4-14-09, MD., performed a Designated Doctor Evaluation. He certified the claimant had reached MMI on 7-23-08 and awarded the claimant 0% impairment.

7-16-09, MD., the evaluator noted he was able to get the results of the EMG. The EMG was performed on April 8, 2008 and showed no evidence of peripheral neuropathy or radiculopathy. Because the patient appeared sincere in his presentation when seen, the evaluator felt that his presentation was consistent with a right L5 radiculopathy. The evaluator felt that CT myelogram was needed, as this is a higher resolution study than the MRI.

8-31-09, MD., the evaluator reported that for some unknown reason, the insurance company thought we submitted for a lumbar diskogram but, in fact, he submitted for a CT myelogram of his lumbar spine. On examination, he has tenderness in his right lower lumbar region. He has decreased range of motion with flexion and extension limited by pain. He has a positive straight leg raise on the right. His motor strength is intact in his lower extremities and he continues to have decreased sensation in the right L5 distribution. He also has weakness in the extensor hallucis longus on the right. His Achilles and patellar reflexes are weak bilaterally. The evaluator reported he will resubmit for the CT resolution study than the MRI.

10-27-09 Lumbar CT myelogram showed a mild broad based right foraminal/far lateral disc protrusion superimposed on mild spondylosis and annular disc bulging at the L3-L4 level. The right L3-L4 neural foramen is moderately encroached. There is a small left paracentral L4-L5 disc protrusion superimposed on spondylosis and annular disc bulging at the L4-L5 level. There is borderline canal stenosis at L4-L5 with mild indentation of the ventral thecal sac by the L4-L5 disc protrusion and annular disc bulging. There is minimal to mild multilevel spondylosis and annular disc bulging of the lumbar spine, which causes minimal neural foraminal encroachment at L2-L3 bilaterally, L3-L4 on the left, L4-L5 bilaterally and L5-S1 bilaterally.

11-5-09, MD., the claimant presents with lumbar pain he rates as 5/10 with constant pain in his lower back area, radiating into his bilateral legs, predominately on his right side. On examination of patient's lumbar spine, he has tenderness in his right lower lumbar region and decreased range of motion with flexion and extension limited by pain. He continues to have a mildly positive straight leg raise on the right. His motor strength is intact in his lower extremities, but he continues to have some decreased sensation in his right L5 distribution. He continues to have weakness in his extensor hallucis longus on the right. His Achilles and patellar reflexes are weak bilaterally. The patient is unable to toe-walk due to pain but is able to heel-walk without any difficulty. With regard to

patient's lumbar spine, we will set the patient up for a psychosocial screening for lumbar surgery.

Physical therapy 8-31-09, and 11-9-09.

12-16-09, MD., the claimant presented for the purpose of a psychosocial screening. He answered 217 questions as part of a Battery for Health Improvement inventory. The patient did not endorse any of the validity items, indicating a valid study. The patient's results were compared to both a patient reference population as well as a community reference population. The patient tested average when compared to the patient reference population and only tested above average for physical complaints when compared to the community population, which is what would be expected considering the community reference population was not ill and would not be expected to have complaints. Based on the results of the psychosocial screening, this patient has no psychosocial barriers to recovery and would be a candidate for surgical intervention if indicated.

12-21-09, MD., since patient's last visit he had participated in and completed a psychosocial screening. Today, the patient presents with lumbar pain he rates as 6/10 with constant pain in his lower back area. He has occasional numbness and tingling in his bilateral lower extremities, predominately on his right side. On examination of patient's lumbar spine, he has tenderness in his right lower lumbar region and decreased range of motion with flexion and extension limited by pain, He has a mildly positive straight leg raise on the right. His motor strength is intact in his lower extremities and he has mild decreased sensation in his right L5 distribution. His Achilles and patellar reflexes are weak bilaterally. The evaluator reported he will proceed with a preoperative lumbar diskogram. We will see the patient back, once he has obtained his diskogram, to review his results.

Literature on discogram.

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

Review of the medical records does not correlate an injury to the lumbar disc with the reported mechanism of injury. The request is for a lumbar discogram with post CT scan. The evidence based medical literature notes this is a controversial test, which is used to justify a surgical fusion. Current surgical outcomes from fusion of the spine based on the results of discogram are very poor.

The ODG guidelines do not support the use of discography as noted below. Therefore, the request for lumbar discogram with post CT scan is not reasonable or medically necessary.

ODG-TWC, last update 2-12-10 Occupational Disorders of the Low Back – Discogram: 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) (Pneumatics, 2006) (Airaksinen, 2006) (Manchikanti, 2009) 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) Invasive diagnostics such as provocative discography have not been proven to be accurate for diagnosing various spinal conditions, and their ability to effectively guide therapeutic choices and improve ultimate patient outcomes is uncertain. (Chou, 2008) Although discography, especially combined with CT scanning, may be more accurate than other radiologic studies in detecting degenerative disc disease, its ability to improve surgical outcomes has yet to be proven. It is routinely used before IDET, yet only occasionally used before spinal fusion. (Cohen, 2005) Provocative discography is not recommended because its diagnostic accuracy remains uncertain, false-positives can occur in persons without low back pain, and its use has not been shown to improve clinical outcomes. (Chou2, 2009) This recent RCT concluded that, compared with discography, injection of a small amount of bupivacaine into the painful disc was a better tool for the diagnosis of discogenic LBP. (Ohtori, 2009) Discography may cause disc degeneration. Even modern discography techniques using small gauge needle and limited pressurization resulted in accelerated disc degeneration (35% in the discography group compared to 14% in the control group), disc herniation, loss of disc height and signal and the development of reactive endplate changes compared to match-controls. These findings are of concern for several reasons. Discography as a diagnostic test is controversial and in view of these findings the utility of this test should be reviewed. Furthermore, discography in current practice will often include injecting discs with a low probability of being symptomatic in an effort to validate other disc injections, a so-called control disc. Although this strategy has never been confirmed to increase test validity or utility, injecting normal discs even with small gauge needles appears to increase the rate of degeneration in these discs over time. The phenomenon of accelerated adjacent

segment degeneration adjacent to fusion levels may be, in part, explained by previous disc puncture if discography was used in segments adjacent to the fusion. Similarly, intradiscal therapeutic strategies (injecting steroids, sclerosing agents, growth factors, etc.) have been proposed as a method to treat, arrest or prevent symptomatic disc disease. This study suggests that the injection procedure itself is not completely innocuous and a recalculation of these demonstrated risks versus hypothetical benefits should be considered. (Carragee, 2009) 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).

Discography is Not Recommended in ODG.

Patient selection criteria for Discography if provider & payor agree to perform anyway:

- 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.

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)