



Notice of Independent Review Decision

**DATE OF AMENDED DECISION: JULY 3, 2013**

**DATE OF ORIGINAL DECISION: JUNE 27, 2013**

**IRO CASE #:**

**DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE:**

Discogram L2-3 and L3-4 w/ Post CT Scan CPT 62290, 72295, 72132

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

American Board of Orthopaedic Surgery

**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 medical necessity exists for each of the health care services in dispute.

**INFORMATION PROVIDED TO THE IRO FOR REVIEW:**

- 12-7-12 MD, office visit
- 12-17-12 Notice of Independent Review Decision

- 1-17-13 MD, office visit
- 1-17-13 MD, addendum
- 2-5-13 DO, Designated Doctor Evaluation
- 2-15-13 MD, EMG/NCV
- 2-28-13 MD, office visit
- 3-13-13 MD, office visit
- 4-19-13 MD, office visit
- Denial letter on 5-2-13
- Order for discogram with post CT on 5-3-13
- Request for lumbar discogram on 5-6-13
- 5-8-13 UR
- Denial letter on 5-8-13
- 5-23-13, office visit
- 5-29-13 UR
- 5-31-13, office visit

**PATIENT CLINICAL HISTORY [SUMMARY]:**

12-7-12, the claimant rates her neck and lower back pain that radiates down both arms and legs a 9/10. She complains of numbness and tingling in both arms radiating down into her hands and both legs. She has constipation. Exam shows DTRs are hypoactive. Changing from sitting to standing position is done with marked difficulty. Lumbar ROM is limited. There is evidence of tenderness and spasm. SLR does reproduce radiculopathy. Plan: Off work. Continue HEP. RTC 5 weeks. Current meds are HTZ, Norco, Multivitamins, Lisinopril, Crestor, Ultram, Naprosyn, and Flexeril.

12-17-12 certifies that there is no known conflict between the reviewer, the IRO and/or any officer/employee of the IRO with any person or entity that is a party to the dispute; and a copy of this IRO decision was sent to all of the parties via U.S. Postal Service or otherwise transmitted in the manner indicated above on Dec/17/2012; and a health care provider licensed to practice in Texas performed the independent review.

1-17-13, the claimant complains of constant neck pain at 8-9/10 with radiation to both arms. She complains of frequent headaches related to the neck pain. She complains of tingling in both hands with weakness in both arms. Low back pain is constant at 8-9/10 with radiation in both legs. She complains of numbness in both legs with weakness, left greater than right. Exam shows DTRs are normoactive. Changing from sitting to standing position is done with mild difficulty. Lumbar ROM is very limited. There is evidence of tenderness and spasm. SLR does reproduce radiculopathy that goes to both lower extremities, left greater than right. Plan: Prescribed Norco. Off work. Continue HEP. RTC 1 month.

1-17-13, performed an addendum. The pain continues to be severe. She is being referred to a designated doctor examination for determination of Maximum Medical Improvement. The IRO denied the discogram. She states that she called the ombudsman, but the ombudsman has not called her back. She has had no answer to her questions. The pain continues to be severe in the lumbar spine as it was in the past. She states that she is taking two pills for her blood pressure. She is aware that today her blood pressure is very high, both the systolic and the diastolic readings.

2-5-13, performed a Designated Doctor Evaluation. She certified the claimant has reached Maximum Medical Improvement on 10-11-12 and awarded the claimant 24% Impairment Rating.

2-15-13 EMG/NCV of the bilateral upper and lower extremities, showed chronic L5 radiculopathy likely related to prior injury and definitively associated with present event. Although, further clinical correlation is recommended to make the determination. "Double crush syndrome" bilateral carpal tunnel syndrome with bilateral C6-7 radiculopathy on the left more so than right.

2-28-13, the claimant complains of worsened pain in the neck and lower back that she rates an 8/10. She has radiation to both arms and legs. Plan: Add Hydrochlorothiazide caps.

3-13-13, the claimant complains of worsened pain in the neck and lower back that she rates a 7-8/10. She has radiating pain into her arms and legs with numbness and tingling. Impression: Radiculopathy, lumbar. Pain, cervical. Plan: Norco, Ultram, Naprosyn, and Flexeril.

4-19-13, the claimant complains of worsened pain in the neck and lower back that she rates a 9/10. She has radiation of pain into her legs. She has numbness and tingling in her legs and hands with weakness in her legs. Exam shows DTRs are hypoactive. Changing from sitting to standing position is done with mild difficulty. Lumbar ROM is limited. There is evidence of tenderness and spasm. Plan: Off work. Continue HEP. Norco, Ultram, Naprosyn and Flexeril.

Denial letter for discogram L2-3 and L3-4 with post CT scan on 5-2-13.

Order for discogram with post CT on 5-3-13.

Request for lumbar discogram on 5-6-13.

5-8-13 UR, the reviewer reported that ODG does not recommend discography as part of the preoperative evaluation for lumbar surgery. Recent high quality studies have shown that concordant pain is of limited diagnostic value.

Denial letter for discogram L2-3 and L3-4 with post CT scan on 5-8-13.

5-23-13, the claimant complains of worsened pain in the lower back, mid back and neck that she rates an 8/10. She has radiation of pain into her legs with weakness in her legs. Her lower back pain goes to the buttocks and legs. Exam shows DTRs are normoactive. Changing from sitting to standing position is done with marked difficulty. Lumbar ROM is limited. There is evidence of tenderness and spasm. SLR does reproduce radiculopathy bilaterally. Impression: Obesity NOS. Radiculopathy, lumbar. Herniated cervical disc. Pain, cervical. Plan: Off work. RTC 1 month. See regarding cervical surgery. Add Lamisil 250 mg.

5-29-13 UR, notes the case was discussed It was noted that reported that the discogram was because the claimant was having discogenic pain with radiculopathy. The reviewer reported that did not provide an adequate medical rationale supporting the use of discography on outlier basis to ODG recommendations.

5-31-13, the claimant is a woman with the complaint of neck and back injury on xx/xx/xx. Exam shows decreased neck ROM. Tilting the head to the right or left causes radicular symptomatology in the arms, down to the forearms. Plan: has her off work. Recommended she be considered for an ACDF at C4-5 and C5-6.

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

Medical records reflect a claimant with complaints of low back pain. There has been a recommendation for discography due to reported discogenic pain to see if the claimant would be a surgical candidate. ODG notes that discography is not recommended. Current literature reflects that discography has limited diagnostic value. Therefore, based on the records provided, the requested Discogram L2-3 and L3-4 w/ Post CT scan CPT 62290, 72295, 72132 is not reasonable or medically necessary.

**Per ODG 2013 discography:** 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 on that disc (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) (Manchikanti, 2009) 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) More in vitro evidence that discography may cause disc degeneration. (Gruber, 2012) 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 screening tool to assist surgical decision making, 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)**