



**IRO#**  
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**DATE OF REVIEW:** 12/03/2007

**IRO CASE #:**

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

L4-5, L5-S1 discogram with L5-S1 right ESI

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

This case was reviewed by a Texas licensed MD, specializing in Orthopedic Surgery.

**REVIEW OUTCOME:**

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

Upheld

Health Care Service(s) in Dispute	CPT Codes	Date of Service(s)	Outcome of Independent Review
L4-5, L5-S1 discogram with L5-S1 right ESI	64483, 77003-26, 62290, 62290-59, 72295-26, 72295-26	Upon approval-	Upheld

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

Documentation :	Date:
MRI Lumbar spine –Center	07/26/07
Office Visit –MD - Care	08/24/07
Office Visit - MD – Care	09/18/07
Surgery Preauthorization form – L4-5, L5-S1 Discogram & ESI –MD	10/02/07
Utilization physician review form - L4-5, L5-S1 Discogram & ESI –	10/03/07
Surgery Preauthorization form – L4-5, L5-S1 Discogram & ESI –MD	10/08/07
Utilization Review – Adverse determination L4-5, L5-S1 Discogram & ESI – Review criteria cited – specifics not included –	10/08/07
Utilization Appeal Review – Adverse determination L4-5, L5-S1 Discogram & ESI – Review criteria and specifics cited –	10/11/07

**PATIENT CLINICAL HISTORY [SUMMARY]:**

Claimant is a female who heard a pop in her back with pain radiation into right buttock and positive thigh but not below the knee. Straight leg raises are negative. Reflexes, motor and sensory are intact. Pain intensity is

1/10 for the leg and 3-4/10 for her back. Prolonged sitting and standing increases her low back pain. Dose Pac Medrol did not help and Celebrex was not tolerated because it made her lymph nodes swell. Physical therapy helped the pain. Her date of injury was 07/12/07. Plain x-rays reveal a collapsed L5-S1 disc space. MRI reveals an L5-S1, 3-4mm central protrusion with an annular tear.

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

Criteria for ESI include unresponsiveness to conservative measures which includes physical therapy (PT). This patient had a good response to P.T. It is unknown if the patient is on a home exercise program (HEP). Another criterion is the presence of radiculopathy. There is no documentation of objective signs of radiculopathy. This requires a distribution of pain, numbness and/or parenthesis in a dermatomal pattern. A root tension sign is usually positive (AMA Guides, 5<sup>th</sup> ed., p 382). The protrusion seen on MRI does not efface the S1 nerve root and barely indents the dural sac.

The findings do not meet the ODG criteria which are as follows: Not recommended. Original recommendations that suggested a "series of three injections" generally did so prior to the advent of fluoroscopic guidance. These previous recommendations were based primarily on case studies and anecdotal evidence (Class IV and V data). ([Abram, 1999](#)) ([Warr, 1972](#)) ([Hickey, 1987](#)) Contemporary research studies with higher levels of evidence (including two controlled trials) have suggested that on average, two or less ESIs are required in patients with successful outcomes from the use of ESIs to treat disc related lumbar radiculopathy. ([Lutz, 1998](#)) ([Vad, 2002](#)) ([Riew, 2000](#)) While all of these latter studies have utilized repeat injections, there has been no evidence-based research to explain why this practice is required, or the mechanism for possible action. Since the introduction of fluoroscopically guided ESIs, it has been suggested that there is little evidence to repeat an accurately placed epidural injection in the presence of mono-radiculopathy, regardless of whether there is partial or no response. ([McLain, 2005](#)) A recent randomized controlled trial of blind ESIs found no evidence to support repeat injections, because at six weeks there was no significant difference found between the ESI group and a placebo controlled group in terms of any measured parameter. ([Price, 2005](#)) A repeat injection has been suggested if there is question of accurate dermatomal diagnosis, if pain may be secondary to a different generator, or in the case of multilevel pathology. ([McLain, 2005](#)) There is a lack of support for 2nd epidural steroid injection if the 1st is not effective. ([Cuckler, 1985](#)) With fluoroscopic guidance, there is little support to do a second epidural if there is no response to the first injection. There is little to no guidance in current literature to suggest the basis for the recommendation of a third ESI, and the routine use of this practice is not recommended.

Discography is controversial and not accepted as a diagnostic tool for doing a fusion other than as a confirmatory test for a level to be fused( when all other qualifications for a fusion are met). A positive discogram does not equate to surgery (NASS, Contemporary Concepts in Spine Care, p1-10, 2001). They are not accurate (positive in asymptomatic control back subjects and a high positive rate in chronic pain and patients with abnormal psychological profile). Also, discography does not identify the symptomatic high intensity zone (ACOEM, Chap 12, p304, 2004). Also, it is not without complications (infection, nerve injury, vessel injury, spinal fluid leakage) although they are uncommon. The Agency for Healthcare Policy and Research states there is limited evidence that discography can help select patients who would benefit from spinal fusion. What is clear from 40 plus years of discography research is that not everyone who reports pain when a disc is injected has the same clinical problem. The best indicator that these patients do not have the same illness is that each of successive approach to the treatment of patient with a "positive discogram" has failed to give consistently good results (Carragee, Stanford University, Spine, Vol 24, p 372, 1999). Per ODG accessed online 11-29-07, discography is 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. ([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](#)) 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.

Therefore, based upon the above rationale and citations, the procedures of L5-S1 ESI and discography of L4-5 and L5-S1 are not certified.

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

ODG:

ODG, Treatment, Discography-series of three and Epidural Steroid Injections

**TEXAS DEPARTMENT OF INSURANCE COMPLAINT PROCESS:** the Texas Department of Insurance requires Independent Review Organizations to be licensed to perform Independent Review in Texas. To contact the Texas Department of Insurance regarding any complaint, you may call or write the Texas Department of Insurance. The telephone number is 1-800-578-4677 or in writing at: Texas Department of Insurance, PO Box 149104 Austin TX, 78714. In accordance with Rule 102.4(h), a copy of this Independent Review Organization (IRO) Decision was sent to the carrier, the requestor and claimant via facsimile or U.S. Postal Service from the office of the IRO on 12/03/2007.