



5068 West Plano Parkway Suite 122
Plano, Texas 75093
Phone: (972) 931-5100

Notice of Independent Review Decision

DATE OF REVIEW: 11/06/2008

IRO CASE #:

DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE:

Lumbar discogram/CT above/below T10-11 level

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 Physical Medicine & Rehabilitation. The physician advisor has the following additional qualifications, if applicable:

ABMS Physical Medicine & Rehabilitation

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
Lumbar discogram/CT above/below T10-11 level	72295,72133,76376,77003		

PATIENT CLINICAL HISTORY (SUMMARY):

The records available for review document that a discogram was accomplished on 8/28/03 to evaluate the T10-T11 and T11-T12 discs. This study disclosed findings consistent with concordant pain at the T10-T11 disc.

A spinal fusion to the T10-T11 level was accomplished on 9/30/03 with instrumentation.

A thoracic CT scan/myelogram was accomplished on 3/31/04. This study disclosed findings consistent with previous surgery to the T10-T11 level, but there was a concern that the fusion was not fully solid.

A thoracic MRI was accomplished on 10/27/06. This study disclosed findings consistent with previous surgery to the thoracic spine region. The report did not describe the presence of a compressive lesion upon any of the neural elements in the thoracic spine.

A CT scan was obtained of the thoracic spine on 2/26/07. This study disclosed findings consistent with a possible pseudoarthrosis at the T10-T11 level.

A CT scan of the thoracic spine was accomplished on 6/6/07, and this study disclosed findings consistent with previous surgery to the T10-T11 level.

A thoracic MRI was accomplished on 7/12/07. This study did not disclose the presence of a compressive lesion upon any of the neural elements in the thoracic spine.

A CT scan of the thoracic spine was accomplished on 5/12/08, and this study disclosed findings consistent with increased bony bridging across the T10-T11 space compared to a CT scan accomplished on 2/26/07.

Item in dispute: Thoracic discogram at the disc level above and the disc level below the previous surgical site at the T10-T11 level.

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

At the present time, medical necessity for the requested diagnostic study is not established. For the most part, Official Disability Guidelines do not support a medical necessity for consideration of a discogram in the assessment of spinal disorders. There are however, rare instances whereby the above noted reference will support discography for the evaluation of spinal disorders. It would appear that consideration is being given for possible surgical intervention to the thoracic spine in the future. In this particular case, there is no documentation to indicate that a psychological assessment has been completed. For the described medical situation, the above noted reference would not support a medical necessity for the requested diagnostic study without a psychological assessment having been accomplished to determine if there are any psychological barriers to recovery, which could affect the results of a discogram. A discogram is a subjective test, and the above noted reference indicates that a psychological assessment must be completed prior to consideration of discography. There is no documentation to indicate that a psychological assessment has been completed in this particular case.

As a result, at the present time, based upon the documentation available for review, the above noted reference would not support a medical necessity for the requested diagnostic study.

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

ODG: 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 (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](#)) 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](#)) 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