Medical Coverage Policy

Effective Date.....11/15/2023
Next Review Date.....11/15/2024
Coverage Policy Number..... 0393

Discography

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Overview

This Coverage Policy addresses discography, also referred to as stimulation discography, or a discogram, an imaging test used to determine if a specific disc is causing back pain.

Coverage Policy

Lumbar provocative discography, including post discography computed tomography (CT) assessment, is considered medically necessary for the preoperative evaluation of discogenic back pain, when ALL of the following criteria for a single level lumbar fusion have been met:

- unremitting pain with significant functional impairment of at least twelve months duration
- failure of at least six (6) consecutive months of structured*, physician-supervised conservative medical management, which includes **ALL** of the following components:
    - exercise, including core stabilization exercises
    - nonsteroidal and/or steroidal medication (unless contraindicated)
    - physical therapy, including passive and active treatment modalities
    - activity/lifestyle modification
    - participation in three (3) or more individual or group cognitive behavioral therapy (CBT) sessions provided by a licensed healthcare professional, with competence in principles and practice of CBT, (e.g., PT, OT, psychiatrist, psychologist, social worker, psychiatric nurse, other licensed professional) that include ALL of the following elements:
        - disease education
        - activity and lifestyle modification
        - stress management (stress management typically also includes strategies to deal with emotions such as fear, anxiety, sadness that can interfere with pain management)
- complex imaging studies (e.g., computed tomography [CT] scan or magnetic resonance imaging [MRI] scan) do not conclusively demonstrate single level degenerative disc disease as the likely cause of pain
- statement from a primary care physician, neurologist, physiatrist, psychiatrist, psychologist, or other licensed behavioral and/or other medical healthcare provider attesting to the absence of untreated, underlying mental health conditions/issues (e.g., depression, drug and alcohol abuse) as a major contributor to chronic pain

***Note:** Structured medical management consists of medical care that is delivered through regularly scheduled appointments, including follow-up evaluation, with licensed healthcare professionals.

Lumbar discography (e.g., provocative discography, stimulation discography) with or without CT assessment, is considered not medically necessary when performed in connection with ANY other procedure in the lumbar spine, OR in anticipation of any procedure that has been determined to be experimental, investigational or unproven, including, but not limited to ANY of the following:

- intradiscal electrothermal therapy (IDET™)
- disc nucleoplasty, decompression nucleoplasty, or Coblation® Nucleoplasty™
- laser discectomy (e.g., percutaneous, laparoscopic)
- intradiscal injections (e.g., platelet rich plasma, steroid, hyaluronic acid)

Lumbar provocative discography, with or without CT assessment, is considered not medically necessary for ANY other indication.

The following discography procedures are each considered experimental, investigational or unproven:

- cervical discography
- thoracic discography
- functional anesthetic discography (FAD)
- contrast disc analysis mapping

General Background

Low back pain is the most common musculoskeletal problem in the world, and the leading cause of activity limitation and work absenteeism. It is estimated that globally, over 577 million people experience low back pain, and that it is more prevalent in women compared to men (8.01% versus 7.47%, respectively). Low back pain is found in individuals of all ages, and peaks between the ages of 45 and 49 (Wu, et al., 2020a; Duthey, 2013). Risk factors for chronic back pain include obesity, smoking, and a sedentary lifestyle. Persons with lower socioeconomic, employment, and/or educational status are also at a higher risk for chronic low back pain (Karran, et al., 2020).

Provocative Discography
Provocative discography (or discogram) is a minimally invasive diagnostic procedure used to help determine if a person's back pain is caused by a specific disc (the cushioning pads that separate the vertebrae of the spine). It is typically performed on an individual with chronic axial (i.e., mechanical, localized) back pain after other diagnostic interventions have failed to definitively identify the source of the pain, and when surgery is being considered. The procedure involves inserting a needle into the nucleus pulposus of the suspected painful disc under fluoroscopic guidance, followed by the injection of contrast dye into the disc. The injection of contrast dye allows for the determination of pressures within the disc, to help determine if the disc is the cause of the pain. Additional information regarding the shape and integrity of the disc can be obtained by fluoroscopy at the time of injection or with post-injection computed tomography (CT).

It is believed that discography induces pain as a result of the increased pressure from the contrast dye, neurochemical stimulation, and/or an increase in intervertebral pressure. A discogram is considered positive (i.e., an abnormal discogram) if, when the dye is injected into the disc, the individual reports pain that is similar to or exactly like their chronic back pain, accompanied by abnormal imaging of the disc (Gardocki and Park, 2021). These imaging patterns may be described as cotton ball, lobular, irregular, fissured, or ruptured. Cotton ball and lobular imaging patterns are typically considered normal, while irregular, fissured, and ruptured patterns indicate progressive disc degeneration (Devlin, 2021). Some published studies differ in the definition of an abnormal discogram; as a result, the technique and interpretation of the discogram must also be closely evaluated when assessing outcomes. If the discogram does not cause pain or produces pain that is not comparable with the individual's usual pain, then the cause of the pain cannot be attributed to that particular disc.

Discography is often performed to assess whether an individual with painful degenerative disc disease would benefit from single level lumbar fusion. As such, consideration is given to whether the individual is an appropriate candidate for lumbar fusion surgery. Multiple factors are taken into account, including length and severity of back pain, resulting functional impairment, and persistence of symptoms despite a trial of supervised conservative medical management. Conservative management may include exercise, physical therapy, steroidal/nonsteroidal medications, lifestyle modification, and cognitive behavioral therapy (NASS, 2021; Cherkin and Herman, 2018; Brox, et al., 2010; Fairbank, et al., 2005). Please reference Cigna Medical Coverage policy "Lumbar Fusion for Spinal Instability and Degenerative Disc Conditions, Including Sacroiliac Fusion" for additional information.

Discography is typically not used as a baseline imaging study. In clinical practice, a majority of discograms are performed to evaluate the lower three lumbar discs. Lumbar discography is particularly useful as a test to exclude levels from operative intervention. Surgery may be precluded by failing to find a painful disc on discography, finding multiple painful discs, or indeterminate results (Thiyagarajah, et al., 2021). Provocative discography is less frequently performed to assess cervical or thoracic disc pain. The approach for thoracic discography is similar to the lumbar, while cervical discography is approached anteriorly rather than posteriorly.

Discography has been proven to be a safe procedure although there are associated risks. Risks and complications include disc space infection (discitis), nerve root injury, subarachnoid puncture, urticaria, bleeding, nucleus pulposus pulmonary embolism, nausea, increased pain, and spinal headache. Acute lumbar disc herniation as a result of discography has been reported (Poynton, et al., 2005). Thoracic discography also has the inherent risks of pneumothorax and direct spinal cord trauma. Discography is contraindicated for patients with dye sensitivity, spinal cord compression, prior fusion at the level being studied, or who have current local infections (Gardocki and Park, 2021; Stretanski and Vu, 2023). While older studies reported findings of disc disease progression post-discography, results from more recent studies have shown discography does not lead to acceleration of degenerative disc disease or disc herniation (Karaarslan, et al., 2019; McCormick, et al., 2019).

Discography has been proposed for use prior to or in conjunction with various minimally invasive procedures to treat back pain, including intradiscal electrothermal therapy (IDET), nucleoplasty, laser discectomy, and intradiscal injections. Presently there is insufficient evidence in the published medical literature to demonstrate the safety, efficacy, and long term outcomes of these procedures. Please reference Cigna Medical Coverage policy "Minimally Invasive Spine Surgery Procedures and Trigger Point Injections" for additional information.

U.S. Food and Drug Administration (FDA): Discography is a provocative imaging study and thus the procedure itself is not regulated by the FDA. However, several needles and catheters used to access the intervertebral disc during a discogram have been cleared via the FDA 510(k) premarket notification process, as Class II devices. Examples include the DiscCath Needle Set (DiscCath LLC, New York, NY; Sept 2021), and the Pakter Curved Needle Set (Cook Incorporated, Bloomington, IN; Jun 2018).

Cervical Discography
Cervical discography requires an anterior approach and has been recommended for patients with persistent neck pain without localized neurological findings when standard imaging studies are negative. Potential complications are related to the surrounding anatomy and include injury to the trachea, esophagus, carotid artery, discitis, spinal cord injury and pneumothorax. There are no morphologic features apparent on discography of the cervical spine that help make a diagnosis of discogenic pain. The diagnosis relies entirely on the patient's report of concordant pain, and non-

painful control discs must be present. There is a paucity of literature addressing the correlation of imaging findings with cervical discography (Diehn, et al., 2023).

Literature Review: There is limited published evidence evaluating cervical discography. While there is some evidence in the form of case series and systematic reviews to support some utility for cervical discography, evidence from well-designed controlled trials is lacking. There is much debate regarding false-positive results and concerns regarding safety. The current evidence in the published peer-reviewed scientific literature is insufficient and does not lead to strong conclusions regarding clinical utility. Furthermore, what effect, if any, cervical discography has on surgical treatment for discogenic type pain has yet to be proven (Onyewu, et al., 2012; Buenaventura, et al., 2007; Shah, et al., 2005; Zheng, et al., 2004; Grubb and Kelly, 2000; Ohnmeiss, et al., 2000).

Manchikanti et al. (2018) published a systematic review of the diagnostic accuracy of lumbar, cervical, and thoracic discography. As part of the review the authors reviewed eight studies which met their inclusion criteria, five assessed lumbar discography (strength of evidence level 3) and three studies assessed cervical discography (strength of evidence level 4). For cervical and thoracic discography the available literature and value and validity continued to be low.

The results of a systematic review evaluating cervical discography concluded that despite a paucity of evidence and discrepancy among studies, the diagnostic accuracy of cervical discography has moderate validity and moderate predictive value based on modified United States Preventive Services Task Force (USPSTF) criteria (Manchikanti, et al., 2009a). This conclusion was based on Level II-2 evidence which is evidence obtained from at least one properly designed small diagnostic accuracy study. For this systematic review, the authors reviewed a total of 33 studies, three studies which met the inclusion criteria utilizing IASP (International Association for the Study of Pain) criteria: provocation discography with control discs and involving patients with chronic pain of at least three months duration.

Thoracic Discography
Thoracic discography is considered by some providers to be useful in clinical practice for the assessment of thoracic, chest, and upper abdominal pain. Similar to cervical discography, potential complications are related to the surrounding anatomy of the thoracic spine and include pneumothorax, spinal trauma, discitis and bleeding.

Literature Review: The evidence supporting the safety and utility of thoracic discography is limited, consisting mainly of case series and systematic reviews (Buenaventura, et al., 2007; Shah, et al., 2005; Wood, et al., 1999). Within a systematic review published by Manchikanti et al. (2018) evaluating lumbar, cervical and thoracic discography, the authors reported the evidence for thoracic discography was nonexistent. Included in the authors search were only studies utilizing controlled discography with IASP standards or analgesic discography, and only the studies with appropriate assessment and statistical evaluation for diagnostic prevalence. Similar to cervical discography, the limited evidence evaluating thoracic discography does not lead to strong conclusions regarding safety and clinical utility. Currently the evidence is insufficient to support the clinical value of thoracic discography.

Lumbar Discography
The clinical value of lumbar discography has been widely debated. The diagnosis of discogenic pain due to disc degeneration, internal disc disruption or annular tears, for example, is considered difficult by many authors. Not all patients with disc disease experience pain. In addition, it is reported that the ability of patients to separate spinal pain from nonspinal sources of lumbar pain may be questionable (Carragee, et al., 1999). Early published data showed high (37%) false-positive rates in a group of asymptomatic patients; however, more recent authors have reported

lower false-positive rates. Several systematic reviews and case studies have been published evaluating lumbar discography. Although there is no general consensus regarding validity of discography as a diagnostic tool, authors generally agree that lumbar discography is an appropriate diagnostic test with some clinical utility for patients with low back pain, particularly when lumbar surgery is being considered, and when noninvasive diagnostic tests are inconclusive. Further, advances in procedural technique, standardized protocol, and patient selection have significantly reduced procedural risks and rates of false positive results (Gardocki and Park, 2021).

The medical literature suggests the predictive value of provocative discography on surgical outcomes has not yet been firmly established. Discography is often performed prior to arthrodesis, minimally invasive surgery and other intradiscal surgeries. Arthrodesis (spinal fusion) is a surgical method of controlling low back pain attributable to abnormal or unstable vertebrae and pain due to mechanical degeneration and is indicated when degenerative disc disease is limited to a single level. However it has been reported there was no difference in operative outcome between groups of subjects who had preoperative discography and those who did not (Madan, et al., 2002). Discography has also been recommended for use prior to minimally invasive surgeries for patients with contained disc herniation; discography may define disc containment for those candidates (Guyer and Ohnmeiss, 2003). Discography is also often performed in combination with intradiscal electrothermal therapy (IDET) as a treatment for disc pain; however, the long-term results of IDET remain unknown.

Literature Review: Evidence in the published medical literature evaluating lumbar discography consists of systemic reviews, meta-analyses, technology assessments, prospective and retrospective clinical trials, randomized trials, and published reviews (Wu, et al., 2020b; Xi, et al., 2016; Margetic, et al., 2013; Manchikanti, et al., 2013a; Manchikanti, et al., 2013b; Manchikanti, et al., 2009a; Wolfer, et al., 2008; Buenaventura, et al., 2007; Carragee, et al., 2006; Shah, et al., 2005; Cohen, et al., 2005; Guyer and Ohnmeiss, 2003). Many studies lack control groups and randomization. There is no general consensus regarding the clinical utility of lumbar discography; some authors have evaluated diagnostic accuracy and reported the evidence is strong to moderate for discography as an imaging tool for the evaluation of chronic low back pain (Manchikanti, et al, 2009a; Buenaventura, et al., 2007; Shah, et al., 2005) although Carragee et al. (2006) reported diagnostic accuracy is not high and discography has a calculated positive predictive value of 50-60%. Cohen et al. (2005) reported discography is less accurate than MRI in diagnosing herniated nucleus pulposus, although comparable or slightly more sensitive in detecting degenerative disc disease. As demonstrated in a systematic review by Manchikanti et al., (2013b) the evidence supporting diagnostic accuracy of provocation discography, after controlling for various factors which included methodological flaws, lack of standardization, and the absence of well-designed studies, is fair (according to USPSTF criteria: [good, fair, limited or poor]). According to a systematic review published by Manchikanti et al. (2018) "lumbar provocation discography performed according to the IASP criteria may be a useful tool for evaluating chronic lumbar discogenic pain. Based on modified best evidence synthesis, the indicated strength of evidence was Level III for lumbar discography."

In other studies, authors have been concerned about reliability and false-positive results (Wolfer, et al., 2008; Carragee, et al., 2006); some authors have reported high false-positive rates, and others have reported zero false-positive rates. When performed in asymptomatic subjects, the pain provoked by discography cannot be compared to clinical or typical pain; therefore, some studies cannot address true false-positive rates. The patients provoked pain must be similar to the patient's clinical pain for the test to be considered positive.

Additionally, the ability of discography to improve surgical outcomes has yet to be proven (Cohen, et al., 2005) and studies comparing surgical outcomes between patients who have had discography preoperatively with those who have not are few. It is postulated that identification of

a diseased disc as a generator of pain can improve clinical outcomes through better selection of candidates and therapies. In addition it may reduce the likelihood that discs which are not pain generators, are inappropriately treated (Manchikanti, et al., 2009b). When comparing outcomes of fusion procedures lumbar discography is sensitive but lacks specificity (Thiyagarajah, et al., 2021).

The effect of discography on progression of disc degeneration has also gained interest. Carragee et al. (2009) published the results of a prospective matched cohort study evaluating disc degenerative progression over 10 years with (n=50) and without baseline discography (n=52, control). Magnetic resonance imaging was obtained at baseline and at 7-10 years follow-up. The authors noted more frequent and greater degenerative findings, including herniation, end-plate changes, disc grade progression, and annular fissures in the discography group when compared to the matched control group. The authors also noted greater loss of disc height and loss of disc signal in the discography group following annular puncture and injection. In the author's opinion, careful consideration of risk and benefit should be used when recommending procedures involving disc puncture. In 2016, Cueller et al. reported on the comparative incidence of lumbar spine surgery, clinical imaging events, and low back disability events in subjects exposed to discography compared with control subjects over a 10-year follow-up period. At 10-year follow-up, 57 discography subjects and 53 control subjects were able to be included in the final analysis. The authors reported there were 16 lumbar surgeries in the discography group, compared with four in the control group. Medical visits, CT/MRI examinations, work loss, and prolonged back pain episodes were all more frequent in the discography group compared with control subjects (Cueller, et al., 2016).

In an assessment of discography for diagnosis of low back pain, Hayes reviewed seven studies involving sample populations from 36-310 subjects. Comparisons included discography versus no discography prior to surgery (four studies); both groups received discography, then underwent either surgical treatment or nonsurgical management (two studies); pretest/posttest study comparing surgeons' decisions prior to versus after receiving information regarding discography results (one study). Outcomes were measured using Oswestry Disability Index (ODI) scores, quality of life scores (QOL), and change in decision regarding surgery. Follow-up range was six months to six years. Hayes acknowledged the body of evidence is small in size and low in quality and suggests that discography does not lead to improved health outcomes in patients with low back pain being considered for surgery. Two studies suggest discography can lead to serious complications in the long term, including accelerated disc degeneration and increased likelihood of lumbar surgery. According to the authors overall, there is very little evidence supporting the clinical utility of discography (Hayes, 2019).

Evidence in the medical literature supports the use of discography for the following selected conditions (Stretanski and Vu, 2023; Thiyagarajah, et al., 2021; Guyer and Ohnmeiss, 2003):

- for further evaluation of demonstrably abnormal discs when required to assess the extent of the abnormality or correlation of the abnormality with clinical symptoms
- for patients with persistent, severe symptoms in whom other diagnostic tests have failed to reveal clear confirmation of a suspected disc as the source of pain
- for assessment of patients who have failed to respond to previous surgical interventions (i.e., to detect pseudoarthrosis or a symptomatic disc in a posteriorly fused segment and to evaluate for recurrent disc herniation)
- for assessment of discs before fusion
- for assessment of minimally invasive surgical candidates to confirm a contained disc herniation or to investigate dye distribution pattern before chemonucleolysis or other percutaneous procedures

Functional Anesthetic Discography (FAD)
Functional anesthetic discography is a diagnostic procedure that involves injecting an anesthetic agent directly into a spinal disc. Proponents suggest functional anesthetic discography can be used to confirm the presence of injured discs as the source of the patient's low back pain symptoms. According to the manufacturer, functional anesthetic discography is designed to diagnose and potentially treat low back pain caused by degenerative disc disease. Although techniques may vary, during this procedure, under light sedation and x-ray guidance, a small catheter is inserted into the suspected disc and anchored in place with a small balloon. After recovering from light sedation, the patient is asked to engage in physical activity to reproduce pain. Local anesthetic is then injected in the disc believed to be causing the patient's pain. In some cases, administration of intradiscal steroid injection has been proposed in addition to the anesthetic. Reduction in pain is considered diagnostic. If the injection into a specific disc relieves the patient's back pain, the disc can be further evaluated for potential treatment. If the test does not relieve the patient's pain, the physician can investigate other possible causes of pain.

U.S. Food and Drug Administration (FDA): The FAD™ System (originally developed by InnoSpine, Inc., Palo Alto, CA, and later acquired by Kyphon Inc., Sunnyvale, CA) received 510(k) clearance from the FDA in April 2005, as a Class II device. According to the FDA, the intended use of the system is to deliver either a single dose or continuous administration of radiopaque contrast, local anesthetics, and/or saline solution to the intradiscal space. In April 2007 and February 2008, the Discyphor Catheter System (Kyphon, Inc., Sunnyvale, CA), a more recent update to the FAD System, was cleared by the FDA.

Literature Review: Although researchers have investigated the use of functional anesthetic discography for diagnosing discogenic pain, there is insufficient evidence in the published, peer-reviewed scientific literature to support its safety and efficacy at this time. Manchikanti and colleagues (2013b) published an update of the systematic review of the accuracy and utility of lumbar discography in chronic low back pain and reported there was limited evidence supporting FAD or provocation discography with local anesthetic injection.

Contrast Disc Analysis Mapping
The addition of 3D image post-processing, reconstruction and/or mapping of data with markers have been investigated as a method of improving the accuracy and predictive value of discography. However, there is insufficient evidence in the peer-reviewed, published scientific literature to support improved diagnostic utility versus standard provocative discography.

Professional Societies/Organizations
North American Spine Society (NASS): In 2019, NASS issued coverage policy recommendations for the use of discography in the cervical and lumbar spine. Per the recommendations, cervical or lumbar discography is indicated in "the presence of pain and some functional disability for a period of at least 6 months despite conservative therapy. This pain needs to be in a location that could reasonably be caused by the disc (i.e., axial neck or low back, with or without somatic referred pain). In addition, the suspected source of pain identified through other diagnostic imaging testing (e.g., MRI, myelography, CT) needs to be investigated and confirmed and that new or different treatment will be instituted based on the results of the discography. At this time, there are few treatments that would be indicated by a positive discography result; therefore, judicious use of this procedure is indicated" (NASS, 2019).

The NASS guideline outlined the procedural requirements for lumbar discography, as well as consensus guidelines to maximize positive predictive value, minimize false positive tests, and prevent harm:

1. Concordant pain response of ≥ 6/10 on a modified visual analog scale (VAS) 10 point scale.
2. Volume limit of 3 millimeters (ml).
3. Pressurization of the disc to 15-20 psi above opening pressure, but no greater than 50 pounds per square inch (psi).
4. Adjacent disc(s) provide controls.
    a. For one control disc:
        i. Painless response.

    OR

        ii. Non-concordant pain that occurs at a pressure >15 psi over opening pressure.
    b. For two adjacent control discs:
        i. Painless response at both levels.

    OR

        ii. One painless disc AND one disc with non-concordant pain that occurs at a pressure >15 psi over opening pressure.

Regarding cervical spine discography, NASS noted that there is some concern regarding the lack of a standard grading system, as well as the paucity of evidence published. Per NASS, since facet-mediated pain is more prevalent than discogenic pain in the cervical spine, facet-mediated pain should be ruled out with medial branch blocks prior to performing discography in the cervical spine. A disc is considered positive only if stimulation of the target disc reproduces concordant pain with a 7/10 on a visual analogue modified 10 point scale or 70% of most severe pain the patient experiences, and at least one adjacent disc that does not produce pain or produces non-concordant pain with a low volume injection (NASS, 2019).

The 2020 NASS guideline on the diagnosis and treatment of low back (lumbar spine) pain addressed four clinical questions specific to the use of discography. The findings and associated recommendations were as follows (Kreiner, et al., 2020):

- High-level evidence that provocative discography without manometric measurements correlated with pain reproduction in the presence of moderate to severe disc degeneration on MRI/CT discography (Grade of Recommendation: A [Good evidence])
- High-level evidence that provocative discography without manometric pressure measurements correlated with the presence of endplate abnormalities on MRI imaging (Grade of Recommendation: A)
- Conflicting evidence that pressure controlled provocative discography correlates with nuclear transverse relaxation time (T2) signal intensity on magnetic resonance imaging (MRI) in patients with low back pain (Grade of Recommendation: I [Insufficient or conflicting evidence])
- Conflicting evidence that provocative discography without manometric pressure measurements correlates with the presence of a high-intensity zone (HIZ) on MRI imaging (Grade of Recommendation: I)

In both publications discussed above, NASS noted that currently there is not enough high-quality literature available to make a recommendation for or against the use of functional anesthetic discography (Kreiner, et al., 2020; NASS, 2019).

American College of Radiology (ACR): In 2021, the ACR published updated appropriateness criteria for imaging in low back pain. ACR concluded that, although controversial, there was fair evidence supporting the usefulness of lumbar discography for patients with chronic discogenic low back pain, however its use as an initial diagnostic tool in acute uncomplicated low back pain or chronic low back pain without prior management was not supported (ACR, 2021).

The ACR Appropriateness Criteria for Cervical Neck Pain or Cervical Radiculopathy noted that the use of provocative injections in the cervical spine to identify pain is controversial. Plain radiographs MR imaging and CT myelography are more appropriate. Discography is not recommended (ACR, 2018).

American Society of Interventional Pain Physicians (ASIPP): In 2013, ASIPP published updated guidelines on interventional techniques for the management of chronic spinal pain. ASIPP stated that cervical discography is appropriate "only when a treatment is available to test the diagnostic hypothesis of discogenic pain of the cervical spine in individuals who have been properly selected and screened to eliminate other sources of cervical pain". For thoracic discography, ASIPP noted the evidence was limited and few authors have studied the procedure; however the procedure may be indicated to determine if an intervertebral disc is painful or not, in rare circumstances (based on evidence from two moderate quality studies; there was no recent literature included in the update). Regarding the lumbar spine, ASIPP stated the evidence for diagnostic accuracy of lumbar provocation discography was fair and the evidence for lumbar functional anesthetic discography was limited. Lumbar provocation discography was recommended with appropriate indications in patients with low back pain to prove a diagnostic hypothesis of discogenic pain, specifically after exclusion of other sources of lumbar pain (Manchikanti, et al., 2013a).

American Association of Neurological Surgeons (AANS)/Congress of Neurological Surgeons (CNS): The AANS/CNS Joint Section on Disorders of the Spine and Peripheral Nerves published updated guidelines regarding the performance of fusion procedures for degenerative disease of the lumbar spine (Eck, et al., 2014). According to one of these guidelines, it is recommended that lumbar discography not be used as a stand-alone test on which treatment decisions are based for patients with low back pain. If discography is performed as a diagnostic tool to identify the source of the patient's low back pain, it is recommended that both a concordant pain response and morphological abnormalities be present at the pathological level prior to initiating any treatment directed at that level. The authors noted that it is possible an association exists between progression of degenerative disc disease and the performance of a provocative discography study; as a result individuals should be counseled regarding potential development prior to undergoing the test.

Medicare Coverage Determinations

	Contractor	Determination Name/Number	Revision Effective Date
NCD		No Determination found	
LCD		No Determination found	

Note: Please review the current Medicare Policy for the most up-to-date information.
(NCD = National Coverage Determination; LCD = Local Coverage Determination)

Coding Information

Notes:

1. This list of codes may not be all-inclusive.
2. Deleted codes and codes which are not effective at the time the service is rendered may not be eligible for reimbursement.

Lumbar Discography

Considered Medically Necessary when criteria in the applicable policy statements listed above are met:

CPT®* Codes	Description
62290	Injection procedure for discography, each level; lumbar
62292	Injection procedure for chemonucleolysis, including discography, intervertebral disc, single or multiple levels, lumbar
72295	Discography, lumbar, radiological supervision and interpretation

Considered Experimental/Investigational/Unproven when used to report cervical or thoracic discography, functional anesthetic discography (FAD) or contrast disc analysis mapping:

CPT®* Codes	Description
62291	Injection procedure for discography, each level; cervical or thoracic
64999	Unlisted procedure, nervous system
72285	Discography, cervical or thoracic, radiological supervision and interpretation
77003	Fluoroscopic guidance and localization of needle or catheter tip for spine or paraspinous diagnostic or therapeutic injection procedures (epidural or subarachnoid) (List separately in addition to code for primary procedure)

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Revision Details

Type of Revision	Summary of Changes	Date
Annual review	• No policy statement changes.	11/15/2023