Clinical Policy: Disc Decompression Procedures

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Plan Effective Date: 01/2018
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Coding Implications
Revision Log

Description

Microdiscectomy or open discectomy (MD/OD) are the standard procedures for symptomatic lumbar disc herniation, and they involve removal of the portion of the intervertebral disc compressing the nerve root or spinal cord (or both) with or without the aid of a headlight loupe or microscope magnification. Potential advantages of newer minimally invasive discectomy (MID) procedures over standard MD/OD include less blood loss, less postoperative pain, shorter hospitalization and earlier return to work.[1]

Policy/Criteria

I. It is the policy of PA Health and Wellness® (PHW) that open discectomy and microdiscectomy are **medically necessary** when meeting all of the following:

- **A.** Age ≥ 18 years;
- **B.** Diagnosis of herniated lumbar disc;
- **C.** Nerve root compression confirmed by imaging and one of the following:
  1. Radiculopathy with motor deficit and one of the following:
     a. Severe weakness in a nerve root distribution, as evidenced by: a score of ≤ 3 on the Medical Research Council 0 to 5 muscle strength scale, or the inability to ambulate;
     b. Mild to moderate weakness in a nerve root distribution, as evidenced by a score of 4 on the Medical Research Council 0 to 5 muscle strength scale and one of the following:
        i. Worsening weakness or motor deficit;
        ii. Member/enrollee has failed to respond to conservative therapy, within the last year, including all of the following:
            a) ≥ four weeks physical therapy or prescribed home exercise program, or documentation of member/enrollee's inability to tolerate;
            b) ≥ four weeks activity modification;
            c) One of the following:
               1. Nonsteroidal anti-inflammatory drug (NSAID) or acetaminophen ≥ three weeks unless contraindicated or not tolerated;
               2. Epidural steroid injection;
  2. Radiculopathy with sensory deficit as evidenced by pain, parasthesias or numbness in a nerve root distribution, and member/enrollee has failed to respond to conservative therapy including all the following:
     a. ≥ four weeks physical therapy or prescribed home exercise program, or documentation of member/enrollee's inability to tolerate;
     b. ≥ four weeks activity modification;
     c. One of the following:
        i. NSAID or acetaminophen ≥ three weeks unless contraindicated or not tolerated;
        ii. Epidural steroid injection.

II. It is the policy of PHW that the following minimally invasive procedures for spinal decompression have not been proven superior to other existing technologies:
- **A.** Percutaneous lumbar discectomy (manual or automated [APLD] and/or MILD);
- **B.** Percutaneous laser discectomy (PLD);
- **C.** Laser-assisted disc decompression (LADD);
- **D.** Percutaneous laser disc decompression (PLDD);
- **E.** Percutaneous nuclectomy;
- **F.** Percutaneous endoscopic discectomy;
- **G.** Endoscopic laser percutaneous discectomy or LASE;
- **H.** Endoscopic spinal surgery system;
- **I.** Interspinous/interlaminar process stabilization/spacer device.

Background

A variety of discectomy techniques are available[1]:

- The traditional open discectomy (OD) is performed with a standard surgical incision, often with the aid of eyepiece (loupe) magnification. It frequently involves a laminectomy (removal of the vertebral lamina to relieve pressure on nerve roots).
- Microdiscectomy (MD) is a refinement of open discectomy and involves a smaller incision in the back, with visualization through an operating microscope. This may include a laminotomy or hemilaminectomy in order to adequately visualize the disc, followed by removal of the disc fragment compressing the affected nerve or nerves.
- Minimally invasive discectomy (MID) techniques include percutaneous manual nucleotomy, automated percutaneous lumbar discectomy, laser discectomy, endoscopic discectomy, microendoscopic discectomy, coblation nucleoplasty, and the disc DeKompressor. Tubular or trochar discectomy is a less invasive technique in which a tubular retractor is inserted over a guidewire, gaining access to the disc by muscle splitting rather than muscle incision and detachment.

MID procedures involve smaller incisions and surgery with the aid of indirect visualization. Some techniques employ lasers to vaporize parts of the disc or automated techniques for removing portions of the disc. There is the potential advantage of quicker recovery from surgery compared to standard OD or MD.[1]

A systematic review of MID versus MD/OD for symptomatic lumbar disc herniation found MID may be inferior in terms of relief of leg pain, low back pain and re-hospitalization. Additionally, MID may be associated with lower risk of infection and shorter hospital stay, but more research is needed due to inconsistent evidence.[2]

Evaniew and colleagues came to a similar conclusion in their 2014 systematic review of MID versus open surgery for cervical and lumbar discectomy.[3] They state that moderate-quality evidence suggests no advantage of MID in short- and long-term function, and low-quality evidence shows no advantage in short-and long-term pain.[3] At this time the risks due to the more technically complicated MID and potential for inadequate decompression render more conventional spinal decompression procedures the preferred choice.

Chou echoes the findings of the systematic reviews, stating that definitive evidence of advantages of MID techniques is needed before adopting them over OD or MD.[1]

The National Institute for Health and Clinical Excellence (NICE)
According to NICE, evidence regarding automated percutaneous mechanical lumbar discectomy does not show any major safety concerns at this time.[4] Evidence of efficacy is limited and "based on uncontrolled case series of heterogeneous groups of patients, but evidence from small randomized controlled trials shows conflicting results."[4] Special arrangements should be used for consent and audit or research due to the incertitude regarding the efficacy of this procedure.[4]

Coding Implications
This clinical policy references Current Procedural Terminology (CPT®). CPT® is a registered trademark of the American Medical Association. All CPT codes and descriptions are copyrighted 2024, American Medical Association. All rights reserved. CPT codes and CPT descriptions are from the current manuals and those included herein are not intended to be all-inclusive and are included for informational purposes only. Codes referenced in this clinical policy are for informational purposes only. Inclusion or exclusion of any codes does not guarantee coverage. Providers should reference the most up-to-date sources of professional coding guidance prior to the submission of claims for reimbursement of covered services.

CPT Codes That Support Coverage Criteria

CPT® Codes	Description
62287*	Decompression procedure, percutaneous, of nucleus pulposus of intervertebral disc, any method utilizing needle based technique to remove disc material under fluoroscopic imaging or other form of indirect visualization, with discography and/or epidural injection(s) at the treated level(s), when performed, single or multiple levels, lumbar

* Important Note: This code encompasses various disc procedures, not all of which are considered medically necessary by PA Health and Wellness. To determine medical necessity, the actual procedure to be performed must be specified.

CPT Codes That Do Not Support Coverage Criteria

CPT® Codes	Description
0275T	Percutaneous laminotomy/laminectomy (interlaminar approach) for decompression of neural elements, (with or without ligamentous resection, discectomy, facetectomy and/or foraminotomy), any method, under indirect image guidance (eg, fluoroscopic, CT), single or multiple levels, unilateral or bilateral; lumbar
22867	Insertion of interlaminar/interspinous process stabilization/distraction device, without fusion, including image guidance when performed, with open decompression, lumbar; single level
22868	Insertion of interlaminar/interspinous process stabilization/distraction device, without fusion, including image guidance when performed, with open decompression, lumbar; second level. (List separately in addition to code for primary procedure)

CPT® Codes	Description
22869	Insertion of interlaminar/interspinous process stabilization/distraction device, without open decompression or fusion, including image guidance when performed, lumbar; single level
22870	Insertion of interlaminar/interspinous process stabilization/distraction device, without open decompression or fusion, including image guidance when performed, lumbar; second level (List separately in addition to code for primary procedure)

HCPCS Codes That Support Coverage Criteria

HCPCS Codes	Description
S2350	Diskectomy, anterior, with decompression of spinal cord and/or nerve root(s), including osteophytectomy; lumbar, single interspace
S2351	Diskectomy, anterior, with decompression of spinal cord and/or nerve root(s), including osteophytectomy; lumbar, each additional interspace (list separately in addition to code for primary procedure)

HCPCS Codes That Do Not Support Coverage Criteria

HCPCS Codes	Description
C1821	Interspinous process distraction device (implantable)
S2348	Decompression procedure, percutaneous, of nucleus pulposus of intervertebral disc, using radiofrequency energy, single or multiple levels, lumbar

Reviews, Revisions, and Approvals	Revision Date	Approval Date
Revised I.C.1.a. from a score of < 2 on the Medical Research Council 0 to 5 muscle strength scale to a score of < 3 per 2017 IQ criteria. Codes updated.	06/18	
Revised I.C.1.a. from a score of < 2 on the Medical Research Council 0 to 5 muscle strength scale to a score of < 3 per 2017 IQ criteria. Codes updated. Annual review; updated the investigational listing of percutaneous lumbar discectomy to specifically mention MILD. Coding reviewed. Specified that CPT 0275T is a code that does not support coverage criteria.	10/19	
References reviewed and updated. Reviewed by specialist. Added interspinous/interlaminor process stabilization device as investigational. Added C1821 as HCPCS code not supporting medical necessity and CPT codes 22867, 22868, 22869, and 22870 as not supporting medical necessity.	10/2020	12/7/2020
Changed policy statement in II. Regarding minimally invasive procedures from "investigational" to stating that the listed procedures are not superior to other technologies and added "and/or MILD)" to section II. A. Codes and references reviewed and updated.	9/29/2021	

Reviews, Revisions, and Approvals	Revision Date	Approval Date
Annual review. Added code S2348 to table of HCPCS codes that do not support coverage criteria. References reviewed and updated. Changed, "review date," in the header to, "date of last revision," and, "date," in the revision log header to, "revision date."	9/21/2022	01/19/2023
Annual review. Minor rewording in Description and Background sections with no impact on criteria. ICD-10 codes removed. Removed "unilateral" for radiculopathy in Criteria I.C.1. Updated muscle strength score in Criteria I.C.1.a. from < 3 to ≤ 3. Updated muscle strength score in Criteria I.C.1.b. from 3 or 4 to 4. Added "within the last year" for conservative therapy in Criteria I.C.1.b.ii. Updated physical therapy from ≥ six weeks to ≥ four weeks in Criteria I.C.1.b.ii.a). Updated activity modification from ≥ six weeks to ≥ four weeks in Criteria I.C.1.b.ii.b). Updated Criteria I.C.1.b.ii.c) to specify one of the following: 1) NSAID or acetaminophen ≥ 3 weeks unless contraindicated or not tolerated 2) Epidural steroid injection. Removed "unilateral" for radiculopathy in Criteria I.C.2. Updated physical therapy from ≥ six weeks to ≥ four weeks in Criteria I.C.2.a. Updated activity modification from ≥ six weeks to ≥ four weeks in Criteria I.C.2.b. Updated Criteria I.C.2.c. to specify one of the following: i. NSAID or acetaminophen ≥ 3 weeks unless contraindicated or not tolerated ii. Epidural steroid injection. References reviewed and updated. Reviewed by external specialist.	06/2024	09/2024
Annual review. Updated language in Criteria I.C.1.b.ii. for clarity. Updated Criteria I.C.1.b.ii.a) regarding physical therapy…Updated language in Criteria I.C.2. for clarity. Updated Criteria I.C.2.a. regarding physical therapy…Reviewed codes and descriptions. References reviewed and updated. Reviewed by internal specialists.	05/2025	

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