

POLICY TITLE	AUTOMATED PERCUTANEOUS AND PERCUTANEOUS ENDOSCOPIC DISCECTOMY
POLICY NUMBER	MP-1.123

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I. POLICY

Percutaneous discectomy is considered **investigational** as a technique of intervertebral disc decompression in patients with back pain and/or radiculopathy related to disc herniation in the lumbar, thoracic, or cervical spine. There is insufficient evidence to support a conclusion concerning the health outcomes or benefits associated with this procedure.

Percutaneous endoscopic discectomy is considered **investigational** as a technique of intervertebral disc decompression in patients with back pain and/or radiculopathy related to disc herniation in the lumbar, thoracic, or cervical spine. There is insufficient evidence to support a conclusion concerning the health outcomes or benefits associated with this procedure.

Cross-reference:

MP-1.124 Percutaneous Intradiscal Electrothermal Annuloplasty, Radiofrequency Annuloplasty, and Biacuplasty

II. PRODUCT VARIATIONS

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This policy is applicable to all programs and products administered by Capital BlueCross unless otherwise indicated below.

FEP PPO: Refer to FEP Medical Policy Manual MP-7.01.18, Automated Percutaneous and Endoscopic Discectomy. The FEP Medical Policy Manual can be found at: <https://www.fepblue.org/benefit-plans/medical-policies-and-utilization-management-guidelines/medical-policies>

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III. DESCRIPTION/BACKGROUND

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Back pain or radiculopathy related to herniated discs is an extremely common condition and a frequent cause of chronic disability. Although many cases of acute low back pain and radiculopathy will resolve with conservative care, a surgical decompression is often considered when the pain is unimproved after several months and is clearly neuropathic in origin, resulting from irritation of the nerve roots. Open surgical treatment typically consists of discectomy in which the extruding disc material is excised. When performed with an operating microscope, the procedure is known as microdiscectomy.

Minimally invasive options have also been researched, in which some portion of the disc material is removed or ablated, although these techniques are not precisely targeted at the offending extruding disc material. Ablative techniques include laser discectomy and radiofrequency decompression. In addition, intradiscal electrothermal annuloplasty is another minimally invasive approach to low back pain. In this technique, radiofrequency energy is used to treat the surrounding disc annulus.

This policy addresses automated percutaneous and endoscopic discectomy, in which the disc decompression is accomplished by the physical removal of disc material rather than its ablation. Traditionally, discectomy is performed manually through an open incision, using cutting forceps to remove nuclear material from within the disc annulus. This technique has been modified by automated devices that involve placement of a probe within the intervertebral disc and aspiration of disc material using a suction cutting device. Endoscopic techniques may be intradiscal or may involve the extraction of non-contained and sequestered disc fragments from inside the spinal canal using an interlaminar or transforaminal approach. Following insertion of the endoscope, the decompression is performed under visual control.

Regulatory Status

The DeKompressor® Percutaneous Discectomy Probe (Stryker), Herniatome Percutaneous Discectomy Device (Gallini Medical Devices), and the Nucleotome® (Clarus Medical) are examples of percutaneous discectomy devices that received clearance from the U.S. Food and Drug Administration (FDA) through the 510(k) process. The FDA indication for these products is for “aspiration of disc material during percutaneous discectomies in the lumbar, thoracic and cervical regions of the spine.” FDA product code: HRX.

A variety of endoscopes and associated surgical instruments have received marketing clearance through the FDA’s 510(k) process.

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IV. RATIONALE

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Summary of Evidence

For individuals who have herniated intervertebral disc(s) who receive automated percutaneous discectomy, the evidence includes randomized controlled trials (RCTs) and systematic reviews of RCTs. Relevant outcomes are symptoms, functional outcomes, quality of life, and treatment-related morbidity. The published evidence from small RCTs is insufficient to evaluate the impact of automated percutaneous discectomy on net health outcomes. Well-designed and executed RCTs are needed to determine the benefits and risks of this procedure. The evidence is insufficient to determine the effects of the technology on health outcomes.

For individuals who have herniated intervertebral disc(s) who receive percutaneous endoscopic discectomy, the evidence includes a number of RCTs and systematic reviews of RCTs. Relevant outcomes are symptoms, functional outcomes, quality of life, and treatment-related morbidity. Many of the RCTs were conducted at a single center in Europe. Some trials have reported outcomes at least as good as traditional approaches with an open incision, while 1 RCT from a different center in Europe reported a trend toward increased complications and reherniations using an endoscopic approach. There are few reports from the United States. Results from a number of moderately large ongoing RCTs are anticipated in the next 2 to 3 years. The evidence is insufficient to determine the effects of the technology on health outcomes.

V. DEFINITIONS

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ABLATION is the removal of a part, pathway, or function by surgery, chemical destruction, electrocautery or radiofrequency.

INTERVERTEBRAL DISC is the fibrocartilaginous tissue between the vertebral bodies. The outer portion is the annulus fibrosus; the inner portion is the nucleus pulposus. The disc is the shock absorber, or cushion, and permits movement.

MINIMALLY INVASIVE PROCEDURES ALSO called minimal access procedures used to perform spinal surgeries. These may include the following: (Note; this is not an all-inclusive list.)

- ALIF – anterior lumbar interbody fusion
- AxiaLIF – axial approach to interbody fusion which is performed perpendicular to the long axis of the spine with access through the sacrum. Also called anterior para-axial, trans-sacral or paracoccygeal interbody fusion performed with the AxiaLIF® and AxiaLIF 2 Level systems.
- DLIF - Direct lateral interbody fusion
- IDET – intradiscal electrothermal annuloplasty
- IG-MLD – image-guided minimally invasive lumbar decompression.
- LASE – annuloplasty using a laser-assisted spinal endoscopy

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- LTIF – lateral transposas interbody fusion
- MEDL – microendoscopic decompressive laminotomy
- MILD – microscopic muscle-preserving interlaminar decompression involves a small skin incision at the interspinous level and partial drilling of the spinous process.
- PELA – percutaneous endoscopic laser annuloplasty.
- PLD – percutaneous lumbar discectomy
- PIRFT – percutaneous intradiscal radiofrequency thermocoagulation
- PLIF – posterior lumbar interbody fusion
- TLIF – transforaminal interbody fusion
- XLIF –Extreme lateral interbody fusion

THERMOCOAGULATION is the use of high-frequency currents to produce coagulation to destroy tissue.

STENOSIS is a constriction or narrowing of a passage or orifice.

VI. BENEFIT VARIATIONS

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The existence of this medical policy does not mean that this service is a covered benefit under the member's contract. Benefit determinations should be based in all cases on the applicable contract language. Medical policies do not constitute a description of benefits. A member's individual or group customer benefits govern which services are covered, which are excluded, and which are subject to benefit limits and which require preauthorization. Members and providers should consult the member's benefit information or contact Capital BlueCross for benefit information.

VII. DISCLAIMER

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Capital BlueCross medical policies are developed to assist in administering a member's benefits, do not constitute medical advice and are subject to change. Treating providers are solely responsible for medical advice and treatment of members. Members should discuss any medical policy related to their coverage or condition with their provider and consult their benefit information to determine if the service is covered. If there is a discrepancy between this medical policy and a member's benefit information, the benefit information will govern. Capital BlueCross considers the information contained in this medical policy to be proprietary and it may only be disseminated as permitted by law.

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VIII. CODING INFORMATION

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Note: This list of codes may not be all-inclusive, and codes are subject to change at any time. The identification of a code in this section does not denote coverage as coverage is determined by the terms of member benefit information. In addition, not all covered services are eligible for separate reimbursement.

Investigational, therefore not covered:

CPT Codes®							
0274T	0275T	62287	62380				

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HCPCS Code	Description
C2614	Probe, percutaneous lumbar discectomy

IX. REFERENCES

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Taber’s Cyclopedia Medical Dictionary, 20th edition.

X. POLICY HISTORY

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MP 1.123	CAC 7/26/11 New policy, Adopt BCBSA for Percutaneous Discectomy. Policy statement remains investigational. Other minimally invasive procedures extracted from CBC MP 1.021 Image-Guided Minimally Invasive Lumbar Decompression for Spinal Stenosis (formerly Minimally Invasive Disc Procedures) and separated into individual policies. See MP 1.124 Percutaneous Intradiscal Electrothermal (IDET) Annuloplasty and Percutaneous Intradiscal Radiofrequency Annuloplasty, MP 1.125 Decompression of the Intervertebral Disc Using Laser Energy (Laser Discectomy) or Radiofrequency Coblation (Nucleoplasty) and MP 1.126
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	Minimally Invasive Lumbar Interbody Fusion.
	CAC 6/26/12 Minor revision. Endoscopic discectomy added as investigational. Policy title revised. 07/9/12 FEP variation revised to refer to the FEP medical policy manual.
	01/30/2013- CPT code added to policy
	CAC 5/21/13 Minor review
	03/06/2013- Coding reviewed
	CAC 6/4/13 –To remain as a Consensus review. Added “and/or radiculopathy” to the policy statements. References updated. Administrative code review complete.
	CAC 7/22/14 Consensus. No change to policy statements. References updated. Rationale added. Added reference to Novitas LCD Services That Are Not Reasonable and Necessary (L31686).
	CAC 7/21/15 Consensus review. No change to the policy statements. References and rationale updated. Coding reviewed.
	11/2/15 Administrative change. LCD number changed from L31686 to L35094 due to Novitas update to ICD-10.
	CAC 7/26/16 Consensus review. No change to the policy statements. Reference and rationale updated. Coding reviewed.
	Administrative Update 11/23/16 Variation reformatting
	Administrative Update 1/1/17: New code 62380 added; effective 1/1/17
	CAC 9/26/17 Consensus review. Title changed to “Automated Percutaneous and Percutaneous Endoscopic Discectomy.” Clarification added to the endoscopic discectomy policy statement which now reads, “Percutaneous endoscopic discectomy...” Medicare variation added. Description/Background, Rationale and Reference sections updated. Coding reviewed.
	1/1/18 Admin Update: Medicare variations removed from Commercial Policies.
	8/13/18 Consensus review. No change to policy statements. Rationale condensed. References reviewed.
	10/11/18 Retirement. Please refer to TurningPoint Healthcare for management of these services effective 1/1/2019.*

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