Automated Percutaneous and Endoscopic Discectomy

Traditionally, discectomy and microdiscectomy are performed manually through an open incision. Percutaneous discectomy describes techniques by which disc decompression is accomplished by the physical removal of disc material rather than its ablation. These techniques have been modified by the use of automated devices that involve placement of a probe within the intervertebral disc and aspiration of disc material using a suction cutting device. Removal of disc herniations under endoscopic visualization is also being investigated.

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 (RF) 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. 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 transfornaminal approach. Following insertion of the endoscope, the decompression is performed under visual control.

Regulatory Status:

The DeKompressor® Percutaneous Discectomy Probe (Stryker) 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. Both have the same labeled intended use: “for use in aspiration of disc material during percutaneous discectomies in the lumbar, thoracic and cervical regions of the spine.”

A variety of endoscopes and associated surgical instruments have received marketing clearance through the FDA’s 510(k) process.
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Related Policies:
Intradiscal Electrothermal (IDET) Annuloplasty and Percutaneous Intradiscal Radiofrequency Annuloplasty
Decompression of the Intervertebral Disc Using Laser Energy (Laser Discectomy) or Radiofrequency Coblation (Nucleoplasty)

***Note: This Medical Policy is complex and technical. For questions concerning the technical language and/or specific clinical indications for its use, please consult your physician.

Policy
Automated Percutaneous Discectomy is considered investigational for all applications. BCBSNC does not provide coverage for investigational services or procedures.

Endoscopic discectomy is considered investigational for all applications. BCBSNC does not provide coverage for investigational services or procedures.

Benefits Application
This medical policy relates only to the services or supplies described herein. Please refer to the Member's Benefit Booklet for availability of benefits. Member's benefits may vary according to benefit design; therefore member benefit language should be reviewed before applying the terms of this medical policy.

When Automated Percutaneous and Endoscopic Discectomy are covered
Not applicable

When Automated Percutaneous and Endoscopic Discectomy are not covered
Automated 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.

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.

Policy Guidelines
The evidence for automated percutaneous discectomy in individuals who have herniated intervertebral disc(s) 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 is insufficient to evaluate the impact of automated percutaneous discectomy on net health outcomes. Evidence from small RCTs does not support the use of this procedure. 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.

The evidence for endoscopic discectomy in individuals who have herniated intervertebral disc(s) 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 an 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. Reporting from a number of moderately large ongoing...
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RCTs is anticipated in the next 2 to 3 years. The evidence is insufficient to determine the effects of the technology on health outcomes.

Billing/Coding/Physician Documentation Information

This policy may apply to the following codes. Inclusion of a code in this section does not guarantee that it will be reimbursed. For further information on reimbursement guidelines, please see Administrative Policies on the Blue Cross Blue Shield of North Carolina web site at www.bcbsnc.com. They are listed in the Category Search on the Medical Policy search page.

*Applicable service codes: 62287, 0274T, 0275T*

BCBSNC may request medical records for determination of medical necessity. When medical records are requested, letters of support and/or explanation are often useful, but are not sufficient documentation unless all specific information needed to make a medical necessity determination is included.

Scientific Background and Reference Sources

**Herniated Lumbar Disc, Percutaneous**

Consultant review - 7/8/2001


BCBSA Medical Policy Reference Manual, 7.01.18, 4/15/02


**Percutaneous Lumbar Discectomy**


**Percutaneous Discectomy**
Automated Percutaneous and Endoscopic Discectomy

Medical Director 8/2011

Automated Percutaneous and Endoscopic Discectomy


Medical Director – 3/2012


Policy Implementation/Update Information

Percutaneous Lumbar Discectomy

7/6/09  "Herniated Lumbar Disc, Percutaneous" policy separated into individual policies by topic. Percutaneous Lumbar Discectomy is considered investigational. Specialty Matched Consultant review 5/28/09. No change to policy statement. "Description" revised. Rationale updated in "Policy Guidelines" section. References added. (btw)

6/22/10  Policy Number(s) removed (amw)


Percutaneous Discectomy

8/16/11  “Lumbar” removed from title and throughout policy as appropriate to include percutaneous discectomy for all spinal levels. Added CPT 0274T and 0275T to “Billing/Coding” section. Medical Director review 8/2/2010. (btw)

1/24/12  Added HCPCS code S2348 to Billing/Coding section. Reference added. (btw)

Automated Percutaneous and Endoscopic Discectomy

3/30/12  Title changed from Percutaneous Discectomy to Automated Percutaneous and Endoscopic Discectomy. Description section revised and information related to endoscopic discectomy added. “Endoscopic discectomy is considered investigational as a technique of intervertebral disc decompression in patients with back pain related to disc herniation in...
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the lumbar, thoracic, or cervical spine.” Removed the following codes from the Billing/Coding section; 0274T, 0275T, and S2348 as they are not specific to this policy. Medical Director review 3/30/2012. Notification given. Policy effective 7/1/2012. (btw)

7/1/13 Specialty Matched Consultant Advisory Panel review 5/15/2013. Updated Description section. Added 0274T and 0275T back to Billing/Coding section since percutaneous discectomy is a component of these codes. Added “and/or radiculopathy” to both When Not Covered statements for clarification. No change to policy intent. Reference added. (btw)


Medical policy is not an authorization, certification, explanation of benefits or a contract. Benefits and eligibility are determined before medical guidelines and payment guidelines are applied. Benefits are determined by the group contract and subscriber certificate that is in effect at the time services are rendered. This document is solely provided for informational purposes only and is based on research of current medical literature and review of common medical practices in the treatment and diagnosis of disease. Medical practices and knowledge are constantly changing and BCBSNC reserves the right to review and revise its medical policies periodically.