

MEDICAL POLICY

MEDICAL POLICY DETAILS	
Medical Policy Title	INTERVERTEBRAL DISC DECOMPRESSION: LASER (LASER DISCECTOMY) AND RADIOFREQUENCY COBLATION (DISC NUCLEOPLASTY™) TECHNIQUES
Policy Number	7.01.62
Category	Technology Assessment
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Product Disclaimer	<ul style="list-style-type: none"> • If a product excludes coverage for a service, it is not covered, and medical policy criteria do not apply. • If a commercial product (including an Essential Plan product) or a Medicaid product covers a specific service, medical policy criteria apply to the benefit. • If a Medicare product covers a specific service, and there is no national or local Medicare coverage decision for the service, medical policy criteria apply to the benefit.

POLICY STATEMENT

Based upon our criteria and assessment of the peer-reviewed literature, decompression of the intervertebral disc using endoscopic and/or percutaneous laser (laser discectomy) or radiofrequency energy (Disc Nucleoplasty™) has not been medically proven to be effective and, therefore, is considered **investigational**.

Refer to Corporate Medical Policy #7.01.16 regarding Automated Percutaneous and Endoscopic Discectomy.

Refer to Corporate Medical Policy #7.01.17 regarding Percutaneous Intradiscal Electrothermal Annuloplasty (IDET/IDTA, PIRFT, biacuplasty).

Refer to Corporate Medical Policy #11.01.03 regarding Experimental and Investigational Services.

POLICY GUIDELINES

The Federal Employee Health Benefit Program (FEHBP/FEP) requires that procedures, devices or laboratory tests approved by the U.S. Food and Drug Administration (FDA) may not be considered investigational and thus these procedures, devices or laboratory tests may be assessed only on the basis of their medical necessity.

DESCRIPTION

A variety of techniques have been developed to treat low back pain related to disc disease. Decompression of the intervertebral disc is accomplished by removing or ablating herniated disc material. A number of procedures have been developed as alternatives to open and microsurgical techniques.

Laser discectomy and radiofrequency ablation are newer percutaneous techniques for disc decompression. Laser discectomy delivers laser energy to the nucleus under fluoroscopic guidance to ablate tissue. Radiofrequency ablation or disc nucleoplasty™ uses bipolar radiofrequency energy in a process called coblation technology; small, multiple electrodes ablate tissue with a low-temperature plasma field of ionized particles. The particles break organic molecular bonds within the tissue, creating small channels in the disc.

RATIONALE

FDA-approved indications for the Homium YAG laser includes discectomy. Arthrocare's Perc-D SpineWand has FDA 510K premarket approval for use with the ArthroCare System 2000 for ablation, coagulation, and decompression of disk material.

In 2016, the National Institute for Health and Care Excellence (NICE) updated its guidance on laser lumbar discectomy for the treatment of sciatica. The guidance stated that current evidence "is inadequate in quantity and quality." NICE also

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updated its guidance on percutaneous disc decompression using coblation for lower back pain and sciatica in 2016. NICE stated: “Current evidence on percutaneous coblation of the intervertebral disc for low back pain and sciatica raises no major safety concerns. The evidence on efficacy is adequate and includes large numbers of patients with appropriate follow-up periods.” The guidance also noted that the patient should be informed of the range of treatment options available.

While numerous case series and uncontrolled studies have reported improvements in pain levels and functioning following laser discectomy, the lack of well-designed and -conducted controlled trials limits interpretation of reported data. The evidence is insufficient to determine the effect of the technology on health outcomes.

For nucleoplasty, there are two randomized controlled trials (RCT), in addition to several uncontrolled studies. These RCTs are limited by the lack of blinding, an inadequate control condition in one, and inadequate data reporting in the second. The available evidence is insufficient to permit conclusions concerning the effect of these procedures on health outcomes, due to multiple confounding factors that may bias results. High-quality, randomized trials with adequate follow-up (at least 1 year), which control for selection bias, the placebo effect, and variability in the natural history of low back pain, are needed. The evidence is insufficient to determine the effect of the technology on health outcomes.

Complications include bending of the instrument tip, post-operative dermatomal dysesthesia, reflex sympathetic dystrophy, nerve root injury, vascular injuries, sigmoid artery injury, and spondylodiscitis. Cost effectiveness, based on 1996 data, indicates that the average hospital cost for percutaneous laser discectomy was approximately 35% of the average hospital cost for open discectomy. Evidence is limited for short- or long-term efficacy for radiofrequency disc decompression nucleoplasty. Complications include new numbness and tingling, increased intensity of pre-procedure back pain, and new areas of back pain. Cost effectiveness has not been evaluated. Guideline authors note that claims of satisfactory results with fewer serious complications from percutaneous disc decompression remain controversial.

CODES

- *Eligibility for reimbursement is based upon the benefits set forth in the member’s subscriber contract.*
- *CODES MAY NOT BE COVERED UNDER ALL CIRCUMSTANCES. PLEASE READ THE POLICY AND GUIDELINES STATEMENTS CAREFULLY.*
- *Codes may not be all inclusive as the AMA and CMS code updates may occur more frequently than policy updates.*
- *Code Key: Experimental/Investigational = (E/I), Not medically necessary/ appropriate = (NMN).*

CPT Codes

Code	Description
62287 (E/I)	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 levels(s), when performed, single or multiple levels, lumbar

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HCPCS Codes

Code	Description
S2348 (E/I)	Decompression procedure, percutaneous, of nucleus pulposus of intervertebral disc, using radiofrequency energy, single or multiple levels, lumbar

ICD10 Codes

Code	Description
M51.06	Intervertebral disc disorders with myelopathy, lumbar
M51.16	Intervertebral disc disorders with radiculopathy, lumbar

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Code	Description
M51.17	Intervertebral disc disorders with radiculopathy, lumbosacral region
M51.26	Other intervertebral disc displacement, lumbar region
M51.27	Other intervertebral disc displacement, lumbosacral region
M51.36	Other intervertebral disc degeneration, lumbar region
M51.37	Other intervertebral disc degeneration, lumbosacral region

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*Key Article

KEY WORDS

Coblation, Decompression, Discectomy, Laser, Radiofrequency

CMS COVERAGE FOR MEDICARE PRODUCT MEMBERS

There is currently a National Coverage Determination (NCD) for thermal intradiscal procedures and a NCD for laser procedures. Please refer to the following NCD websites for Medicare Members:

<http://www.cms.gov/medicare-coverage-database/details/ncd-details.aspx?NCDId=324&ncdver=1&CoverageSelection=Both&ArticleType=All&PolicyType=Final&s=New+York+-+Upstate&CptHcpcsCode=36514&bc=gAAAABAAAAAA&>

<http://www.cms.gov/medicare-coverage-database/details/ncd-details.aspx?NCDId=69&ncdver=1&CoverageSelection=Both&ArticleType=All&PolicyType=Final&s=New+York+-+Upstate&CptHcpcsCode=36514&bc=gAAAABAAAAAA%3d%3d&>