POLICY STATEMENT:

Based upon our criteria and assessment of the peer-reviewed literature, decompression of the intervertebral disc using 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:

I. This policy does not address chemonucleolysis with chymopapain.

II. 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.

Literature consists of uncontrolled trials. No randomized, placebo controlled trials of laser discectomy or radiofrequency ablation permitting comparison with outcomes of conventional surgery, including microdiscectomy, and conservative management have been published. Such trials are important to control for the placebo effect and for the variable natural history of low back pain.

A 2007 updated Cochrane review of surgical interventions for lumbar disc prolapse concluded that three small randomized controlled trials of laser discectomy do not provide conclusive evidence of its efficacy.
A 2007 evidence-based practice guideline in the management of chronic spinal pain, from the American Society of Interventional Pain Physicians, created to provide recommendations to clinicians in the U.S., concluded that the evidence is moderate for short-term and limited for long-term relief of pain with percutaneous laser discectomy.

Goupille et al. (2008) reviewed the literature on laser disc decompression and concluded that “although the concept of laser disc nucleotomy is appealing, this treatment cannot be considered validated for disc herniation-associated radiculopathy resistant to medical treatment.” They cite the lack of consensus regarding technique, that methodology and conclusions of published studies are questionable, and absence of controlled studies in their discussion.

Complications include tip of the instrument bending, postoperative dermatomal dysesthesia, reflex sympathetic dystrophy, nerve root injury, vascular injuries, sigmoid artery injury, and spondylodiscitis. Cost effectiveness based on 1996 data indicates 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:

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

- 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 the use of an endoscope, with discography and/or epidural injection(s) at the treated levels(s), when performed, single or multiple levels, lumbar

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HCPCS:

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

ICD:

722.52 Degeneration of lumbar intervertebral disc, lumbar or lumbosacral intervertebral disc
722.73 Intervertebral disc disorder with myelopathy, lumbar region

ICD10:

- M51.06 Intervertebral disc disorders with myelopathy, lumbar
- M51.07 Intervertebral disc disorders with myelopathy, lumbosacral region
- M51.16 Intervertebral disc disorders with radiculopathy, lumbar
- 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
REFERENCES:


SUBJECT: INTERVERTEBRAL DISC DECOMPRESSION: LASER (LASER DISCECTOMY) AND RADIOFREQUENCY COBLATION (DISC NUCLEOPLASTY™) TECHNIQUES

POLICY NUMBER: 7.01.62

CATEGORY: Technology Assessment

EFFECTIVE DATE: 02/19/04

REVISED DATE: 10/20/04, 09/15/05, 07/20/06, 05/17/07, 04/17/08, 03/19/09, 01/21/10, 01/20/11, 01/19/12, 01/17/13, 01/16/14, 12/18/14, 12/17/15, 12/15/16, 12/21/17

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Proprietary Information of Excellus Health Plan, Inc.


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:
