Decompression of Intervertebral Discs Using Laser Energy (Laser Discectomy) or Radiofrequency Energy (Nucleoplasty)

Published: 11/01/2025

Next Review: 07/2026

Last Review: 09/2025

IMPORTANT REMINDER

The Medicare Advantage Medical Policy manual is not intended to override the member Evidence of Coverage (EOC), which defines the insured's benefits, nor is it intended to dictate how providers are to practice medicine. Physicians and other health care providers are expected to exercise their medical judgment in providing the most appropriate care for the individual member, including care that may be both medically reasonable and necessary.

The Medicare Advantage medical policies are designed to provide guidance regarding the decision-making process for the coverage or non-coverage of services or procedures in accordance with the member EOC and Centers of Medicare and Medicaid Services (CMS) policies and manuals, along with general CMS rules and regulations. In the event of a conflict, applicable CMS policy or EOC language will take precedence over the Medicare Advantage Medical Policy. In the absence of a specific CMS coverage determination for a requested service, item or procedure, the health plan may apply CMS regulations, as well as their Medical Policy Manual or other applicable utilization management vendor criteria developed with an objective, evidence-based process using scientific evidence, current generally accepted standards of medical practice, and authoritative clinical practice guidelines.

Some services or items may appear to be medically indicated for an individual but they may also be a direct exclusion of Medicare or the member's benefit plan. Medicare and member EOCs exclude from coverage, among other things, services or procedures considered to be investigational (experimental) or cosmetic, as well as services or items considered not medically reasonable and necessary under Title XVIII of the Social Security Act, §1862(a)(1)(A). In some cases, providers may bill members for these non-covered services or procedures. Providers are encouraged to inform members in advance when they may be financially responsible for the cost of non-covered or excluded services. Members, their appointed representative, or a treating provider can request coverage of a service or item by submitting a pre-service organization determination prior to services being rendered.

DESCRIPTION

Ablation of the nucleus pulposus using laser energy (laser discectomy) and radiofrequency energy (coblation or nucleoplasty) is being evaluated as a technique for decompression of the intervertebral disc as a treatment of back pain. In some cases, chemonucleolysis is used as an adjunct to disc nucleoplasty.

MEDICARE ADVANTAGE POLICY CRITERIA

Note: This policy does not address percutaneous and endoscopic discectomy, which is considered in a separate medical policy (see Cross References below).

CMS Coverage Manuals

None

National Coverage Determinations (NCDs)

For Medicare Coverage Determinations and Articles, see the Medicare Coverage Database

For percutaneous intradiscal ***techniques that use a radiofrequency (RF) energy source (i.e., disc nucleoplasty)***:

- ✓ Thermal Intradiscal Procedures (TIPs) (150.11) *(disc nucleoplasty is non-covered, according to the NCD 150.11. Services related to or required as a result of non-covered services are not covered services under Medicare.[1] Therefore, if chemonucleolysis [CPT code 62292] is performed in conjunction with or as an adjunct to percutaneous disc decompression procedures including, but not limited to disc nucleoplasty, both services are considered non-covered.)*

Note: Percutaneous disc decompression or nucleoplasty procedures that do **not** use a RF energy source are not addressed within this NCD. See below.

Noridian Healthcare Solutions (Noridian) Local Coverage Determinations (LCDs) and Articles

For Medicare Coverage Determinations and Articles, see the Medicare Coverage Database

None

Medical Policy Manual

Medicare coverage guidance is not available for decompression of nucleus pulposus of an of intervertebral disc by any method, including those that use a laser energy source. Therefore, the health plan's medical policy is applicable.

For the percutaneous ***decompression of nucleus pulposus of an of intervertebral disc by any method (CPT code 62287), including those that use a laser energy source***:

Decompression of Intervertebral Discs Using Laser Energy (Laser Discectomy) or Radiofrequency Energy (Nucleoplasty), Surgery, Policy No. 131 *(see "NOTE" below)*

NOTE: If a procedure or device lacks scientific evidence regarding safety and efficacy because it is investigational or experimental, the service is noncovered as not reasonable and necessary to treat illness or injury. (*Medicare IOM Pub. No. 100-04, Ch. 23, §30 A*). According to Title XVIII of the Social Security Act, §1862(a)(1)(A), only medically reasonable and necessary services are covered by Medicare. In the absence of a NCD, LCD, or other coverage guideline, CMS guidelines allow a Medicare Advantage Organization (MAO) to make coverage determinations, applying an ***objective, evidence-based process, based on authoritative evidence***. (*Medicare IOM Pub. No. 100-16, Ch. 4, §90.5*). The Medicare Advantage Medical Policy - Medicine Policy No. M-149 - provides further details regarding the plan's evidence-assessment process (see Cross References).

POLICY GUIDELINES

REGULATORY STATUS

Several laser devices have received U.S. Food and Drug Administration (FDA) 510(k) clearance for incision, excision, resection, ablation, vaporization, and coagulation of tissue. Intended uses described in FDA summaries include a wide variety of procedures, including percutaneous discectomy.

- Trimedyne Holmium Laser System Ho1mium: Yttrium Aluminum Garnet (Ho1mium:YAG) (Trimedyne, Inc.) received 510(k) clearance in 2002;

- Revolix Duo Laser System (Lisa Laser Products) in 2007; and
- Quanta System LITHO Laser System (Quanta System SpA) in 2009.
- Perc-D SpineWands™ (ArthroCare) in 2001. It is used in conjunction with the ArthroCare Coblation System 2000 for ablation, coagulation, and decompression of disc material to treat symptomatic patients with contained herniated discs. Smith & Nephew acquired ArthroCare in 2014.

All were cleared based on equivalence with predicate devices for percutaneous laser disc decompression/discectomy, including foraminoplasty, percutaneous cervical disc decompression/discectomy, and percutaneous thoracic disc decompression/discectomy.

Note, the fact a service or procedure has been issued a CPT/HCPCS code or is FDA approved for a specific indication does not, in itself, make the procedure medically reasonable and necessary. The FDA determines safety and effectiveness of a device or drug, but does not establish medical necessity. While Medicare may adopt FDA determinations regarding safety and effectiveness, CMS or Medicare contractors evaluate whether or not the drug or device is reasonable and necessary for the Medicare population under §1862(a)(1)(A).

CROSS REFERENCES

1. Investigational (Experimental) Services, New and Emerging Medical Technologies and Procedures, and Other Non-Covered Services, Medicine, Policy No. M-149
2. Automated Percutaneous and Percutaneous Endoscopic Discectomy, Surgery, Policy No. M-145

REFERENCES

1. Medicare Benefit Policy Manual, Chapter 16 - General Exclusions From Coverage, §180 - Services Related to and Required as a Result of Services Which Are Not Covered Under Medicare
2. NCD for Laser Procedures (140.5) [Last Cited 09/18/2024] *(This reference can be found on the Medicare Coverage Database website)* Coverage of procedures performed with a laser is at contractor discretion.

CODING

NOTE: HCPCS code S2348 is a Medicare Status "I" code, and therefore, is not valid for Medicare or Medicare Advantage use.

CPT code 62287 specifically describes a percutaneous aspiration or decompression procedure of the lumbar spine. This code does not distinguish between a laser decompression procedure (addressed in this policy) and an aspiration procedure (addressed in a separate medical policy). Also note this code is specifically limited to the lumbar region.

Codes	Number	Description
CPT	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
	62292	Injection procedure for chemonucleolysis including discography, intervertebral disc, single or multiple levels, lumbar

Codes	Number	Description
HCPCS	S2348	Decompression procedure, percutaneous, of nucleus pulposus of intervertebral disc, using radiofrequency energy, single or multiple levels, lumbar *(Not valid for Medicare purposes)*