Cohere Medical Policy - Intradiscal Biacuplasty, Percutaneous Intradiscal Radiofrequency Thermocoagulation (PIRFT), or Intradiscal Electrothermal Therapy (IDET)

Clinical Guidelines for Medical Necessity Review

Version: 3
Cohere Health UMC Approval Date: July 24, 2025
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Next Annual Review: July 24, 2026

Important Notices

Notices & Disclaimers:

GUIDELINES SOLELY FOR COHERE'S USE IN PERFORMING MEDICAL NECESSITY REVIEWS AND ARE NOT INTENDED TO INFORM OR ALTER CLINICAL DECISION MAKING OF END USERS.

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Other Notices:

Fee schedules, relative value units, conversion factors and/or related components are not assigned by the AMA, are not part of CPT, and the AMA is not recommending their use. The AMA does not directly or indirectly practice medicine or dispense medical services. The AMA assumes no liability for data contained or not contained herein.

Guideline Information:

Specialty Area: Musculoskeletal Care
Policy Name: Intradiscal Biacuplasty, Percutaneous Intradiscal Radiofrequency Thermocoagulation (PIRFT), or Intradiscal Electrothermal Therapy (IDET)
Type: [**X**] Adult (18+ yo) | [**X**] Pediatric (0-17yo)

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Medical Necessity Criteria

Service: Intradiscal Biacuplasty, Percutaneous Intradiscal Radiofrequency Thermocoagulation (PIRFT), or Intradiscal Electrothermal Therapy (IDET)

Cohere Health takes an evidence-based approach to reviewing imaging and procedure requests, meaning that sufficient clinical information must be provided at the time of submission to determine medical necessity. Documentation must include a recent and detailed history, physical examination related to the onset or change in symptoms, relevant lab results, prior imaging, and details of previous treatments. Advanced imaging or procedures should be requested after a clinical evaluation by the treating provider, which may include referral to a specialist.

- When a specific clinical indication is not explicitly addressed in the Cohere Health medical policy, medical necessity will be determined based on established clinical best practices, as supported by evidence-based literature, peer-reviewed sources, professional society guidelines, and state or national recommendations, unless otherwise directed by the health plan.
- Requests submitted without clinical documentation, or those that do not align with the provided clinical information—such as mismatched procedure, laterality, body part, or CPT code—may be denied for lack of medical necessity due to insufficient or inconsistent clinical information.
- When there are multiple diagnostic or therapeutic procedures requested simultaneously or within the past three months, each will be reviewed independently. Clinical documentation must clearly justify all of the following:
    - The medical necessity of each individual request
    - Why prior imaging or procedures were inconclusive, or why additional/follow-up studies are needed
    - How the results will impact patient management or treatment decisions

- Requests involving adjacent or contiguous body parts may be considered not medically necessary if the documentation demonstrates that the patient's primary symptoms can be adequately assessed with a single study or procedure.

Description

Intradiscal biacuplasty, percutaneous intradiscal radiofrequency thermocoagulation (PIRFT), or intradiscal electrothermal therapy (IDET) are all procedures that involve the application of heat to intervertebral discs to stabilize joints and relieve pain. Intradiscal biacuplasty and PIRFT use radiofrequency energy to generate heat using either two probes applied to opposite sides of the disc or a single probe applied to the center of the disc, respectively, while IDET uses a thermal catheter to apply heat directly.[1,2] Percutaneous disc decompression procedures, including percutaneous endoscopic laser discectomy (PELD), percutaneous lumbar disc decompression (PLDD), and target percutaneous laser disc decompression (T-PLDD), are procedures in which a small portion of disc tissue is ablated to relieve intradiscal pressure and decrease pain.[3]

Medical Necessity Criteria

Indications

Intradiscal Biacuplasty, Percutaneous Intradiscal Radiofrequency Thermocoagulation (PIRFT), or Intradiscal Electrothermal Therapy (IDET) is considered appropriate if **ANY** of the following is **TRUE**:

- This procedure is clinically unproven and not medically necessary. There is inconclusive evidence of its effectiveness.

Non-Indications

Intradiscal Biacuplasty, Percutaneous Intradiscal Radiofrequency Thermocoagulation (PIRFT), or Intradiscal Electrothermal Therapy (IDET) is not considered appropriate if **ANY** of the following is **TRUE**:

- This is not applicable, as there are no indications.

Level of Care Criteria

None

Procedure Codes (CPT/HCPCS)

CPT/HCPCS Code	Code Description
22526	Bilateral percutaneous intradiscal electrothermal annuloplasty of a single level of spine using fluoroscopic guidance; Unilateral percutaneous intradiscal electrothermal annuloplasty of a single level of spine using fluoroscopic guidance
22527	Bilateral percutaneous intradiscal electrothermal annuloplasty of a single additional level using fluoroscopic guidance; Bilateral percutaneous intradiscal electrothermal annuloplasty of multiple additional levels using fluoroscopic guidance; Unilateral percutaneous intradiscal electrothermal annuloplasty of multiple additional levels using fluoroscopic guidance; Unilateral percutaneous intradiscal electrothermal annuloplasty of single additional level using fluoroscopic guidance
62287	Decompression procedure, percutaneous, of nucleus pulposus of intervertebral disc, any method, single or multiple levels, lumbar (e.g., manual or automated percutaneous discectomy, percutaneous laser discectomy.
S2348	Decompression procedure, percutaneous, of nucleus pulposus of intervertebral disc, using radiofrequency energy, single or multiple levels, lumbar

Medical Evidence

Helm et al. (2017) conducted a systematic review of 49 studies to evaluate the effectiveness of thermal annular procedures (TAPs) in treating chronic refractory discogenic pain. The primary outcome measures were at least 40% pain relief and functional improvement. Two randomized control trials (RCTs) with positive results indicated strong evidence (Level I) supporting the efficacy of biacuplasty for treating chronic, refractory discogenic pain. For intradiscal electrothermal therapy (IDET), one high-quality RCT demonstrating efficacy and one moderate-quality RCT suggesting no benefit provided moderate evidence (Level III) for its use. Evidence supporting the use of discTRODE was limited, categorized as Level V.[2]

Epstein (2016) noted that targeted disc decompression procedures are generally ineffective in relieving pain, with relatively low success rates (60-70%) and relatively high reoperation rates (38%). Notably, the low success and high reoperation rates are inferior to reported success and reoperation rates after alternative procedures, including microdiskectomy. The author also reviewed studies showing that disc decompression procedures may require longer recovery times and may not effectively remove foraminal lumbar disc herniation, necessitating later revision surgery to address persistent leg pain.[3]

Lu et al. (2014) performed a systematic review of current non-surgical management of discogenic low back pain. Eleven RCTs focused on injections, ablative techniques, and traction therapy were included in the review. Six clinical studies reported no significant differences between active and sham/placebo treatments. Five studies that included intradiscal biacuplasty demonstrated significant differences in clinical outcomes favoring intervention over sham treatment. There were no apparent advantages of PIRFT over sham control. Assessing the selection criteria for studies on intradiscal biacuplasty, along with a stratified analysis of results from RCTs on intradiscal electrothermal therapy (IDET), the authors raised doubts as to whether conclusions from these RCTs can be applied to the broader

population of patients with discogenic pain. The authors concluded that additional research is needed to establish the efficacy of these treatments.[4]

Several professional medical societies have issued evidence-based guidance documents noting the lack of well-controlled, appropriately powered clinical trial studies supporting thermal intradiscal procedures. In 2009, the American Pain Society issued two guidelines on interventional therapies for low back pain. In both of these, the level of evidence for intradiscal electrothermal therapy and PIRFT was classified as poor. The authors concluded that there was no clear evidence of benefit to support procedures involving application of energy to degenerated discs, primarily because of conflicting trial results, sparse data, lack of placebo-controlled trials, methodological shortcomings, and clinical heterogeneity.[5,6] In 2015, Hooten and Cohen published a clinically focused Mayo Clinic review on the evaluation and treatment of low back pain, which also noted that evidence for intradiscal thermal procedures, including IDET and biacuplasty, is limited at best.[7] In their 2020 evidence-based clinical guideline for the diagnosis and treatment of low back pain, the North American Spine Society (NASS) gave biacuplasty a grade of C (poor quality evidence) and PIRFT a grade of I (insufficient evidence for a recommendation).[8] In 2013, the American Society of Interventional Pain Physicians updated their comprehensive evidence-based guidelines for interventional techniques in chronic spinal pain, noting that the evidence for IDET and biacuplasty was limited-to-fair, with few studies supporting their use and even fewer being of high quality.[9] Two 2016 National Institute of Health and Care Excellence (NICE) interventional procedure guidances similarly noted that evidence for the efficacy of such procedures is inconsistent and of poor quality or limited in quantity and quality.[10,11]

References

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Policy Revision History/Information

Original Date: December 1, 2023		
Review History		
Version 2	04/26/2024	Policy criteria reviewed and updated per medical literature.
Version 3	07/24/2025	Annual Review Added in CPT code 62287 (moved from spinal decompression policy) No changes to medical necessity criteria Updated Medical Evidence Section