



Facet Joint Radiofrequency Ablation (RFA) – Single Service

Clinical Guidelines for Medical Necessity Review

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Important Notices

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Guideline Information:

Specialty Area: Diseases & Disorders of the Musculoskeletal System (M00-M99)

Guideline Name: Facet Joint Radiofrequency Ablation (RFA) (Single Service)

Literature review current through: December 15, 2023

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Type: Adult (18+ yo) | Pediatric (0-17yo)

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Medical Necessity Criteria

Service: Facet Joint Radiofrequency Ablation (RFA)

General Guidelines

- **Units, Frequency, & Duration:** None.
- **Criteria for Subsequent Requests:** The procedure can be performed no more than two times per spinal region annually. The initial procedure must result in a pain improvement of at least 50% for at least six months. In these cases, a repeat procedure may be medically necessary.¹⁻³
- **Recommended Clinical Approach:** Facet joint denervation is a minimally invasive procedure using thermal energy that originates from a radiofrequency current. The current goes to the facet joint to relieve the nerve supply. The procedure is to treat facet joint pain diagnosed by facet or medial branch blocks (MBBs). The procedure “is used to thermally remove the medial branch nerve by using electrical current to create thermal energy to coagulate the adjacent tissues around the targeted medial branch nerve.” The procedure is also known as radiofrequency neurotomy (RFN), facet or radiofrequency neurotomy, and medial branch radiofrequency neurotomy.^{2,4}
- **Exclusions:** Non-thermal modalities for facet joint denervation, including chemical, low-grade thermal energy (less than 80 degrees Celsius), laser neurolysis, and cryoablation.²

Medical Necessity Criteria

Indications

- **Facet Joint Radiofrequency Ablation (RFA)** of a facet joint (medial branch) nerve is considered appropriate if **ALL** of the following are **TRUE**:
- ◆ **ALL** of the following are **TRUE**:^{1,3-6}
 - Moderate to severe chronic neck or low back pain⁷; **AND**
 - The pain is predominantly axial; **AND**
 - The pain causes a functional disability or a pain level of greater than or equal to 6 (scale of 0 to 10); **AND**
 - Failure of conservative management for greater than 3 months, including **ALL** of the following⁸:
 - Oral steroids or anti-inflammatory medication; **AND**
 - Physical therapy; **AND**

- Untreated radiculopathy (except caused by facet joint synovial cyst) and neurogenic claudication have been ruled out; **AND**
- ◆ A radiology study has ruled out non-facet pathology that can explain the source of the patient's pain; **AND**
- ◆ The denervation procedure to be performed is the creation of a thermal radiofrequency lesion⁹; **AND**
- ◆ The request is for **ANY** of the following:
 - **Initial RFA request** requiring **ALL** of the following:
 - Greater than or equal to two medically necessary diagnostic facet joint injections/medial branch blocks (MBBs); **AND**
 - Each diagnostic injection/MBB provided greater than or equal to 80% sustained relief of primary (index) pain (with the duration of relief being consistent with the agent used)¹⁻²; **OR**
 - The repeat RFA request at the same anatomic site (same level and side), requiring **ALL** of the following:
 - The previous RFA provided greater than or equal to 50% improvement in pain for greater than or equal to 6 months²; **AND**
 - The previous RFA provided greater than or equal to 50% improvement in ability to perform previously painful movements and ADL's as compared to baseline measurements using the same scale.

Non-Indications

→ **Facet Joint Radiofrequency Ablation (RFA)** of a cervical, thoracic, or lumbar paravertebral facet joint (medial branch) nerve is not considered appropriate if **ANY** of the following is **TRUE**:²

- ◆ Coagulopathy; **OR**
- ◆ Current infection; **OR**
- ◆ Non-thermal modalities for facet joint denervation including chemical, low-grade thermal, pulsed radiofrequency energy (less than 80 degrees Celsius), laser neurolysis, and cryoablation; **OR**
- ◆ Rhizotomy at more than two level facet joints is requested; **OR**
- ◆ More than two radiofrequency sessions per spinal region (cervical, thoracic, or lumbar) in a rolling 12-month period; **OR**
- ◆ Endoscopic rhizotomy.

Level of Care Criteria

Inpatient or Outpatient

Procedure Codes (HCPCS/CPT)

HCPCS/CPT Code	Code Description
64633	Destruction by neurolytic agent, paravertebral facet joint nerve(s), with imaging guidance (fluoroscopy or CT); cervical or thoracic, single facet joint
64634	Destruction by neurolytic agent, paravertebral facet joint nerve(s), with imaging guidance (fluoroscopy or CT); cervical or thoracic, each additional facet joint (List separately in addition to code for primary procedure)
64635	Destruction by neurolytic agent, paravertebral facet joint nerve(s), with imaging guidance (fluoroscopy or CT); lumbar or sacral, single facet joint
64636	Destruction by neurolytic agent, paravertebral facet joint nerve(s), with imaging guidance (fluoroscopy or CT); lumbar or sacral, each additional facet joint (List separately in addition to code for primary procedure)

Medical Evidence

Manchikanti et al. (2015) performed a systematic review to analyze the clinical efficacy of therapeutic facet joint interventions for individuals with chronic spinal pain. A literature review from 1966 through March 2015 yielded 21 randomized control trials (RCTs) that met inclusion criteria, including five observational studies. Long-term efficacy is supported by Level II evidence of RFA neurotomy and facet joint nerve blocks for the lumbar, cervical, and lumbar spine. Intraarticular injections have a Level III (lumbar) and Level IV (cervical and thoracic). The primary outcome measure was short-term (six months or less) and long-term (six months or more) pain relief. Secondary outcome measures included functional status improvement, psychological status, ability to return to work, and reducing opioid usage.¹⁰

Lee et al. (2017) performed a meta-analysis of RCTs to study the effects of RFA denervation in patients with low back pain (LBP) that derives from the facet joints and has not responded to conservative treatment. A total of 454 patients with RFA denervation are included. Pain reduced with the best response identified in the first 12 months post-procedure vs. patients who underwent epidural nerve blocks or sham procedures.¹¹

National and Professional Organizations

The American Society of Interventional Pain Physicians (ASIPP) published guidelines for *Facet Joint Interventions in the Management of Chronic Spinal Pain*. The following support is in the medical literature:⁵

- Lumbar radiofrequency ablation (RFA) is supported by 11 RCTs; four studies demonstrated long-term improvement.
- Cervical RFA is supported by one RCT; two observational studies demonstrate long-term improvement.
- Thoracic RFA is supported however, evidence is emerging, including one RCT and three observational studies.

The American Society of Regional Anesthesia and Pain Medicine (ASRA) published guidelines for *Interventions for Lumbar Facet Joint Pain*. The guidelines were developed in collaboration with a multispecialty, international working group. The group supports lumbar medical branch RFA as MBB is more predictive than intra-articular injections.³

The North American Spine Society (NASS) published guidance on *Facet Joint Interventions*. Therapeutic medial branch RFN is recommended for the treatment of facet joint pain. Long-term outcomes demonstrate positive treatment effects, especially in patients with a dual confirmatory diagnostic MBB. Repeat procedures also show a high level of success when the response

to the previous procedure was effective for at least three months. Guidelines are also available for the *Diagnosis and Treatment of Low Back Pain*. Thermal radiofrequency ablation is supported. The Society also notes the need for randomized control trials (RCTs) that focus on various interventions, including injections and neurotomy.^{1,12}

The National Institute for Health and Care Excellence (NICE) has guidance on *Low Back Pain and Sciatica*. Referral for radiofrequency denervation is recommended for individuals with CLBP when non-surgical treatment is unsuccessful, the source of pain relates to the medial branch nerve, and pain is moderate to severe (five or more on a visual analog scale or equivalent). Radiofrequency denervation is recommended in individuals with CLBP following positive outcomes from a diagnostic medial branch block. Imaging is not recommended for individuals with LBP who present with specific facet joint pain.¹³

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