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## Subject: Neurolysis/Ablation

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### DESCRIPTION:

Percutaneous radiofrequency (RF) facet neurolysis/ablation/denervation is used to treat neck and back pain originating in facet joints with degenerative changes. Diagnosis of facet joint pain is confirmed by response to nerve blocks. The goal of facet denervation is long-term pain relief. However, the nerves regenerate and, therefore, repeat procedures may be required.

Trigeminal neuralgia is one of the most common forms of severe facial pain. It is generally caused by neurovascular compression. Well established TN treatment protocols for trigeminal neuralgia include pharmacotherapy, neurotoxin denervation, nerve ablation and microvascular decompression, with high rates of relief.

**Summary and Analysis of Evidence:** UpToDate review “Interventional therapies for chronic pain” (Copenhaver et al, 2025) states, “the most common indications for radiofrequency neurotomy/radiofrequency ablation (RFN) are axial neck or back pain when the facet joints have been identified as the etiology of pain (eg, non-radicular axial spine pain with possible paraspinal tenderness in the location of the facet joints) ... efficacy of neurolytic procedures and the potential for adverse effects vary based on the speed with which the individual's nerves regenerate and whether regeneration results in normal neural function, acute neuritis, or chronic aberrant sensory changes. Various studies, including randomized controlled trials, have found that RFA procedures may be highly effective for pain relief. As an example, reported rates of positive outcome (ie, >50 percent pain relief at more than three months) are seen in more than 65 percent in patients who had effective diagnostic blocks prior to RFA. If pain recurs, repeat RFA can be performed. Studies have found that repeat medial branch RFA was successful in up to 65 to 90 percent of patients after an initially successful block.”

The American Society of Interventional Pain Physicians (ASIPP) 2020 consensus guideline for facet joint interventions (Manchikanti et al) states that for the cervical spine, “the level of evidence is II with moderate strength of recommendation for cervical radiofrequency ablation with the inclusion of one randomized controlled trial with positive results and two observational studies with long-term improvement”. For the thoracic spine, the guideline states “the level of evidence is III with weak to moderate strength of recommendation with emerging evidence for thoracic radiofrequency ablation with the inclusion of one relevant randomized controlled trial and three observational studies.” For the lumbar

spine, the guideline states “The level of evidence is II with moderate strength of recommendation for lumbar radiofrequency ablation with inclusion of 11 relevant randomized controlled trials (RCTs) with 2 negative studies and 4 studies with long-term improvement.”

UpToDate review “Trigeminal neuralgia” (Ho et al, 2025) states, “percutaneous ablation procedures may be preferred when imaging shows no neurovascular contact ... other ablative strategies for refractory idiopathic TN include radiosurgery with gamma knife or rhizotomy with radiofrequency, balloon, or glycerol ... patients with medically refractory TN symptoms who are felt to be at a high surgical risk due to concomitant medical comorbidities may be candidates for percutaneous ablation procedures like gamma knife stereotactic radiosurgery or radiofrequency thermocoagulation rhizotomy.”

Texakalidis et al (2019) conducted a meta-analysis of 14 studies that covered more than 2,500 participants, comparing clinical efficacy of three treatments for trigeminal neuralgia: radiofrequency denervation, glycerol rhizotomy, and balloon compression. Radiofrequency denervation was associated with higher likelihood of distribution of trigeminal anesthesia and immediate pain relief. The authors concluded that radiofrequency denervation is as good as, or better than, other widely used treatments for trigeminal neuralgia.

There is insufficient published clinical evidence to support the safety and effectiveness of the following denervation interventions:

- Destruction of peripheral nerves of the extremities (Arnold et al, 2024; Finneran et al, 2020; McLean et al, 2020)
- Destruction of a nerve plexus or other truncal nerve (eg, brachial plexus, pudendal nerve) (Hampton et al, 2023; Shah et al, 2021)
- Destruction of the intercostal nerve (Eldredge et al, 2023; Gabriel et al, 2020; Humble 2015)
- Destruction of the genicular nerve branches (UpToDate, “Investigational approaches to the management of osteoarthritis”, Yu, 2025); Liu et al, 2022; American Academy of Orthopedic Surgeons, 2021; Chen, Mullen et al, 2021)
- Destruction of the nerves innervating the sacroiliac joint (UpToDate “Subacute and chronic low back pain: Nonsurgical interventional treatment”, Chou, 2025); Chou et al, 2021; Chappell et al, 2020; Chen et al, 2019; Juch et al, 2017; van Tilburg et al, 2016)
- Destruction of the pudendal nerve (Conic et al, 2025; Collard et al, 2021; Petrov-Kondratov et al, 2017)
- Destruction of the celiac plexus (Kong et al, 2022; Galafassi et al, 2020)
- Destruction of the superior hypogastric plexus (Bagchi et al, 2022; Fisher et al, 2021; Rocha et al, 2020)

## POSITION STATEMENT:

### Paravertebral facet joint neurolysis/ablation

#### Facet joint pain

Non-pulsed radiofrequency neurolysis (ablation) of the paravertebral facet joints for pain suggestive of facet joint origin **meets the definition of medical necessity** when all of the following are met:

- No prior spinal fusion surgery in the vertebral level being treated, **AND**

- Disabling back pain suggestive of facet joint origin, **AND**
- No nerve root compression documented in the medical record or on radiographic evaluations, **AND**
- The pain is not radicular, **AND**
- Pain has failed to respond to 3 months of conservative management, which may consist of therapies such as nonsteroidal anti-inflammatory medications, acetaminophen, manipulation, physical therapy, and a home exercise program, **AND**
- There has been a successful trial of controlled medial branch blocks, consisting of:
  - 2 separate positive blocks on 2 different days, **OR**
  - A placebo-controlled series of blocks, under fluoroscopic guidance, that has resulted in at least a 50% reduction in pain for the duration of the local anesthetic used, **AND**
- If there has been a prior successful radiofrequency denervation, a minimum time of 6 months has elapsed since prior radiofrequency treatment\*

**\*NOTE:** If there has been a prior successful radiofrequency denervation, additional diagnostic medial branch blocks for the same level of the spine are not required.

### **Trigeminal nerve neurolysis/ablation**

Non-pulsed radiofrequency neurolysis (ablation) of the trigeminal nerve **meets the definition of medical necessity** when all of the following are met:

- Member is diagnosed with trigeminal neuralgia, **AND**
- Failure of at least 3 months of conservative treatment with medications, **OR** inability to tolerate side effects of the medications

All other methods of facet neurolysis and trigeminal nerve neurolysis are considered **experimental or investigational**, including but not limited to pulsed radiofrequency neurolysis, cooled radiofrequency neurolysis, laser neurolysis, chemical neurolysis and cryoneurolysis.

Radiofrequency neurolysis (all types), laser neurolysis, and cryoneurolysis are considered **experimental or investigational** for all other nerves, joints, and conditions, including but not limited to pain associated with the sacroiliac joint (SI) joints and osteoarthritis. The available scientific evidence does not support conclusions regarding safety, effectiveness, and net outcomes.

### **BILLING/CODING INFORMATION:**

The following codes may be used to describe neurolysis:

**NOTE:** Per CPT coding guidelines, codes 64633, 64634, 64635, and 64636 exclude pulsed radiofrequency methods.

## CPT Coding

0440T	Ablation, percutaneous, cryoablation, includes imaging guidance; upper extremity distal/peripheral nerve <b>(investigational)</b>
0441T	Ablation, percutaneous, cryoablation, includes imaging guidance; lower extremity distal/peripheral nerve <b>(investigational)</b>
0442T	Ablation, percutaneous, cryoablation, includes imaging guidance; nerve plexus or other truncal nerve (eg, brachial plexus, pudendal nerve) <b>(investigational)</b>
64600	Destruction by neurolytic agent, trigeminal nerve; supraorbital, infraorbital, mental, or inferior alveolar branch
64605	Destruction by neurolytic agent, trigeminal nerve; second and third division branches at foramen ovale
64610	Destruction by neurolytic agent, trigeminal nerve; second and third division branches at foramen ovale under radiologic monitoring
64620	Destruction by neurolytic agent, intercostal nerve <b>(investigational)</b>
64624	Destruction by neurolytic agent, genicular nerve branches including imaging guidance, when performed <b>(investigational)</b>
64625	Radiofrequency ablation, nerves innervating the sacroiliac joint, with image guidance (ie, fluoroscopy or computed tomography) <b>(investigational)</b>
64630	Destruction by neurolytic agent; pudendal nerve <b>(investigational)</b>
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)
64640	Destruction by neurolytic agent, other peripheral nerve or branch
64680	Destruction by neurolytic agent, with or without radiologic monitoring; celiac plexus <b>(investigational)</b>
64681	Destruction by neurolytic agent, with or without radiologic monitoring; superior hypogastric plexus <b>(investigational)</b>

## HCPCS Coding

C9809	Cryoablation needle (e.g., iovera system), including needle/tip and all disposable system components, non-opioid medical device (must be a qualifying medicare non-opioid medical device for post-surgical pain relief in accordance with section 4135 of the caa, 2023) <b>(Investigational)</b>
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### ICD-10 Diagnosis Codes That Support Medical Necessity (64633, 64634, 64635, 64636)

M47.011 – M47.014	Anterior spinal artery compression syndromes, occipital, cervical, cervicothoracic, thoracic regions
M47.015 -- M47.016	Anterior spinal artery compression syndromes, thoracolumbar, lumbar regions
M47.021 – M47.022	Vertebral artery compression syndromes, occipital and cervical regions
M47.11 – M47.14	Other spondylosis with myelopathy, occipital, cervical, cervicothoracic, thoracic regions
M47.15 – M47.16	Other spondylosis with myelopathy, thoracolumbar, lumbar regions
M47.21 – M47.24	Other spondylosis with radiculopathy, occipital, cervical, cervicothoracic, thoracic regions
M47.25 – M47.28	Other spondylosis with radiculopathy, thoracolumbar, lumbar, lumbosacral, sacral and sacrococcygeal regions
M47.811 – M47.814	Spondylosis without myelopathy or radiculopathy, occipital, cervical, cervicothoracic, thoracic regions
M47.815 -- M47.818	Spondylosis without myelopathy or radiculopathy, thoracolumbar, lumbar, lumbosacral, sacral and sacrococcygeal regions
M47.891 – M47.894	Other spondylosis, occipital, cervical, cervicothoracic, thoracic regions
M47.895 -- M47.898	Other spondylosis, thoracolumbar, lumbar, lumbosacral, sacral and sacrococcygeal regions
M54.2	Cervicalgia
M54.31 – M54.32	Sciatica
M54.40 – M54.42	Lumbago with sciatica
M54.50, M54.51, M54.59	Low back pain, including vertebrogenic low back pain
M54.6	Pain in thoracic spine
M96.1	Post-laminectomy syndrome, not elsewhere classified

### ICD-10 Diagnosis Codes That Support Medical Necessity for trigeminal neuralgia (64400, 64405, 64410)

G50.0, G50.8, G50.9	Disorders of trigeminal nerve
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### REIMBURSEMENT INFORMATION:

**Percutaneous non-pulsed radiofrequency neurolysis for facet joint pain is limited to two (2) facet neurolysis procedures per region, every 12 months, with code limitations as follows:**

**64633 and 64634** in any combination, up to 12 in 12 months.

**64635 and 64636** in any combination, up to 12 in 12 months.

**Percutaneous non-pulsed radiofrequency neurolysis for trigeminal neuralgia is limited to one (1) procedure per branch, per 12 months, with code limitations as follows:**

**Code 64600** is limited to 1 per 12 months.

**Code 64605** is limited to 1 per 12 months.

**Code 64610** is limited to 1 per 12 months.

**NOTE:** Services in excess of the limitations shown above are subject to medical review of documentation. The following information is required documentation to support medical necessity: physician history and physical, radiology study reports, physician progress notes with documentation of conservative treatment, treatment plan including narrative, physician operative report. Documentation must support “Position Statement” criteria and provide rationale for additional procedures.

**LOINC Codes:**

<b>Documentation Table</b>	<b>LOINC Codes</b>	<b>LOINC Time Frame Modifier Code</b>	<b>LOINC Time Frame Modifier Codes Narrative</b>
Physician history and physical	28626-0	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim.
Attending physician progress note	18741-9	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim.
Radiology	18726-0	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim.
Treatment plan, plan of treatment	18776-5	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim.
Physical therapy initial assessment	18735-1	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim.
Physical therapy progress note	11508-9	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim.
Current, discharge, or administered medications	34483-8	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim.
Physician operative report	28573-4	18805-2	Include all data of the selected type that represents observations made six months or

			fewer before starting date of service for the claim.
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## PROGRAM EXCEPTIONS:

**Federal Employee Program (FEP):** Follow FEP guidelines.

**State Account Organization (SAO):** Follow SAO guidelines.

**Medicare Advantage Products:** The following National Coverage Determination (NCD) was reviewed on the last guideline review date: Induced Lesions of Nerve Tracts (160.1), located at cms.gov.

The following Local Coverage Determinations (LCD) was reviewed on the last guideline reviewed date: Facet Joint Interventions for Pain Management (L33930), located at cms.gov.

If this Medical Coverage Guideline contains a step therapy requirement, in compliance with Florida law 627.42393, members or providers may request a step therapy protocol exemption to this requirement if based on medical necessity. The process for requesting a protocol exemption can be found at [Coverage Protocol Exemption Request](#).

## DEFINITIONS:

**Cryoneurolysis:** destruction of a nerve with the use of extreme cold; also called cryosurgery, cryoablation, cryodenervation (e.g., iovera treatment)

**Facet joint:** each of four joints formed above and below and on either side of a vertebra by bony projections (articular processes). The smooth surface at the end of the bony projections is called a facet. Each vertebra has a bony projection on either side which angles downward on its lower side and a bony projection that angles upward on either side. The lower projections of one vertebra meet the upper projections of the vertebra below it, forming facet joints.

**Genicular nerve:** a sensory nerve that surrounds the knee and provides innervation for the joint.

**Laser ablation:** destruction of a nerve with a powerful beam of light that produces intense heat when focused at close range.

**Medial branch block:** injection of local anesthetic near the very small nerve branches that control sensation to the facet joints.

**Neurolysis, ablation, denervation, rhizotomy, neurotomy, or neuroablation:** destruction of a nerve.

**Radiofrequency neurolysis (radiofrequency lesioning):** destruction of a nerve with the use of heat.

## RELATED GUIDELINES:

[Nerve Block Injections, 02-61000-29](#)

[Facet Joint Injections, 02-61000-30](#)

## OTHER:

None applicable.

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19. Blue Cross Blue Shield Association Evidence Positioning System®. 7.01.116 -- Facet Joint Denervation, 12/24.
20. Blue Cross Blue Shield Association Evidence Positioning System®. 7.01.147 - Minimally Invasive Ablation Procedures for Morton and Other Peripheral Neuromas, 08/24.
21. Blue Cross Blue Shield Association Evidence Positioning System®. 7.01.154 - Ablation of Peripheral Nerves to Treat Pain, 10/24.
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## COMMITTEE APPROVAL:

This Medical Coverage Guideline (MCG) was approved by the Florida Blue Medical Policy and Coverage Committee on 03/27/25.

## GUIDELINE UPDATE INFORMATION:

11/15/07	New Medical Coverage Guideline.
05/15/09	Scheduled review; update to description section to include medical necessity management statement, update position statement to include coverage criteria, and update to reimbursement statement limitations.
09/15/09	Update position statement.
07/15/10	Revisions consisting of Billing and Coding section changes to include coding guidelines.
11/15/10	Revision; MCG title changed to "Neurolysis"; updated description section to include chemical neurolysis for foot pain; updated position statement to include coverage criteria for neurolysis for foot pain; revised CPT coding to include 64632; revised coding notes; updated ICD-9 coding to include 355.5, 355.6, 355.79, 355.8 and 728.71; added related ICD-10 codes; revised reimbursement section; added Medicare exception; added MCG 02-61000-29 as a related guideline; updated references; reformatted guideline.
05/15/11	Scheduled review; position statement unchanged; references updated.
07/15/11	Revision; formatting changes.
10/15/11	Revision; added experimental/investigational coverage statement for neurolysis of sacroiliac (SI) joints; formatting changes.
01/01/12	Annual HCPCS coding update. Added 64633, 64634, 64635 and 64636. Deleted 64622, 64623, 64626 and 64627. Updated Coding Notes and Reimbursement Information sections.
03/15/12	Scheduled review. Revised description section, position statement and ICD9/ICD10 coding sections; deleted Medicare Advantage Program Exception; updated references and reformatted guideline.
07/15/12	Revision; added program exception for Medicare Advantage products.
03/15/13	Scheduled review. Revised position statement (chemical neurolysis is E/I for facet neurolysis). Revised description, ICD10 coding and Medicare Advantage program exception (added ICD9 and HCPCS codes). Updated references and reformatted guideline.
05/11/14	Revision: Program Exceptions section updated.
07/01/15	Scheduled review. Revised description and position statement. Updated references.
10/01/15	Revision; updated ICD10 coding section.
11/01/15	Revision: ICD-9 Codes deleted.
07/01/16	Quarterly CPT/HCPCS update. Added codes 0440T, 0441T, AND 0442T.
08/15/16	Revision; updated ICD10 coding section.
10/01/16	ICD-10 coding update: added code G57.63.
02/15/17	Revision; updated Reimbursement Information section.
04/15/17	Revision: updated pain relief criteria and frequency of treatment criteria for facet joint neurolysis. Updated references.
06/15/17	Revision: added codes 64620 and 64630.
10/15/17	Revision: Revised MCG title and description section. Added clarifying language to Position Statement regarding when neurolysis is considered E/I. Revised ICD10 coding section, Reimbursement Information section, and definitions. Updated references.
07/15/18	Scheduled review. Revised criteria and frequency of treatment. Updated references.



08/15/18	Revision: added coverage statement (E/I) for intralesional alcohol injections for treatment of Morton's neuroma. Updated program exceptions section and references.
03/15/19	Revision: updated frequency of treatment section and references.
07/15/19	Scheduled review. Revised home exercise program requirements. Updated references.
09/01/19	Revision: clarified what constitutes an "active" modality.
01/01/20	Annual CPT/HCPCS coding update. Added 64624, 64625.
04/15/20	Revision; updated reimbursement information section.
05/15/20	Revision; updated ICD10 coding section.
06/15/20	Revision: added codes C9752, C9753 (investigational). Updated references.
07/15/20	Scheduled review. Maintained position statement and updated references.
12/15/20	Unscheduled review. Maintained position statement, revised definitions and updated references.
05/15/21	Revision. Added Intracept procedure for clarity; revised ICD10 coding.
06/15/21	Scheduled review. Maintained position statement and updated references.
10/01/21	ICD10 coding update: added codes M54.50, M54.51, M54.59; deleted code M54.5.
01/01/22	Annual CPT/HCPCS coding update. Added 64628, 64629. Deleted C9752, C9753.
02/15/22	Deleted codes 64628, 64629 (refer to MCG 02-61000-20, Percutaneous Intradiscal Electrothermal Annuloplasty, Radiofrequency Annuloplasty, and Biacuplasty).
08/15/22	Revision. Updated CPT coding (added codes 64600, 64605, 64610, 64680, 64681).
06/10/23	Scheduled review. Revised description, position statement, ICD10 coding, CPT coding, Reimbursement Information section, Billing and Coding Information section, and Medicare Advantage program exception. Updated references.
08/21/23	Update to Program Exceptions section.
04/15/24	Scheduled review. Revised description, maintained position statement, and updated references.
06/15/24	Revision. Updated criteria for controlled medial branch blocks.
01/01/25	Annual CPT/HCPCS coding update. Added C9809.
04/15/25	Scheduled review. Revised description, maintained position statement and updated references.