

Policy #: 140

Original policy date: 11/1/2009

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**Title**

**Radiofrequency Facet Joint Denervation**

**Description**

Percutaneous radiofrequency (RF) facet denervation is used to treat neck or back pain originating in facet joints with degenerative changes. Diagnosis of facet joint pain is confirmed by response to nerve blocks. Patients generally are sedated for the RF procedure. Under local anesthetic and with fluoroscopic guidance, a needle is directed to the median branch of the dorsal ganglion in the facet joint, where multiple thermal lesions are produced by a radiofrequency generator. The goal of facet denervation is long-term pain relief. However, the nerves regenerate, and repeat procedures may be required.

Pulsed radiofrequency consists of short bursts of electrical current of high voltage in the radiofrequency range but without heating the tissue enough to cause coagulation. It is suggested as a possibly safer alternative to thermal radiofrequency facet denervation. Temperatures do not exceed 42°C at the probe tip versus temperatures in the 60°s C reached in thermal RF denervation, and tissues may cool between pulses. It is postulated that transmission across small unmyelinated nerve fibers is disrupted but not permanently damaged, while large myelinated fibers are not affected.

**When services are covered for commercial products (excluding Medicare HMO Blue, Medicare PPO Blue, and Medicare PFFS PlusRx)**

We cover **radiofrequency denervation** of cervical facet joints (C3-4 and below) and lumbar facet joints when all of the following criteria are met:<sup>1</sup>

- No prior spinal fusion surgery in the vertebral level being treated, and
- Low back (lumbosacral) or neck (cervical) pain, suggestive of facet joint origin as evidenced by absence of nerve root compression as documented in the medical record on history, physical and radiographic evaluations; and the pain is not radicular, and
- Pain has failed to respond to three (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
- A trial of controlled diagnostic medial branch blocks (3 separate positive blocks or placebo controlled series of blocks) under fluoroscopic guidance has resulted in at least a 50% reduction in pain; and
- If there has been a prior successful radiofrequency (RF) denervation, a minimum time of six (6) months has elapsed since prior RF treatment (per side, per anatomical level of the spine.)

**When services are not covered for commercial products (excluding Medicare HMO Blue, Medicare PPO Blue, and Medicare PFFS PlusRx)**

We do not cover **radiofrequency denervation** for the treatment chronic spinal/back pain for all uses that do not meet the criteria noted above, including but not limited to treatment of thoracic facet or sacroiliac (SI) joint pain, since it is considered investigational<sup>1</sup> and therefore does not meet the Blue Cross Blue Shield of Massachusetts Medical Technology Assessment Guidelines, #350.

**When services are covered for Medicare HMO Blue, Medicare PPO Blue, and Blue Medicare PFFS PlusRx**

We cover **radiofrequency facet joint** for the following in accordance with local Medicare guidelines when substantiated by the results of previous diagnostic and therapeutic paravertebral facet joint blockade:<sup>2</sup>

- Hypertrophic arthropathy of the facet joints causing back and/or neck pain;
- Back or neck pain following whiplash/post-traumatic injury;
- Back pain greater than leg pain;
- Neck pain greater than arm pain;
- Back or neck pain associated with suspected motion segment instability/hypermobility or pseudoarthrosis following fusion; or
- Pain of cervicogenic headache.

**Note:** For those candidates considered for denervation, the medical record should reflect the following:

- Failure of conservative therapy,
- Appropriate diagnostic paravertebral facet joint/nerve block studies have been performed that document the specific joint level affected,
- Documentation of significant but not long-lasting pain relief from the paravertebral facet joint/nerve blocks:
  - Significant pain relief is defined as greater than or equal to  $\geq 50\%$  initially with the ability to perform previously painful maneuvers, and persistent pain relief is defined as a minimum of six (6) weeks of  $\geq 50\%$  relief with the continued ability to perform previously painful maneuvers.

**When services are not covered for commercial products and for Medicare HMO Blue, Medicare PPO Blue, and Blue Medicare PFFS PlusRx**

We do not cover **pulsed radiofrequency denervation** for the treatment of chronic spinal/back pain, since it is considered investigational<sup>1,2</sup> and does not meet the Blue Cross Blue Shield of Massachusetts Medical Technology Assessment Guidelines, #350.

**Individual consideration**

All our medical policies are written for the majority of people with a given condition. Each policy is based on medical science. For many of our medical policies, each individual's unique clinical circumstances may be considered in light of current scientific literature. For consideration of an individual patient, physicians may send relevant clinical information to:

**For services already billed**

Blue Cross Blue Shield of Massachusetts  
Provider Appeals  
PO Box 986065  
Boston, MA 02298

**Prior to performance of service**

Blue Cross Blue Shield of Massachusetts  
Case Creation/Medical Policy  
One Enterprise Drive  
Quincy, MA 02171  
Tel: 1-800-327-6716  
Fax: 1-888-641-5330

**Authorization Information**

**For Managed Care members:**

- No authorization is required for this service; see *Managed Care Guidelines* for additional requirements.

**For Indemnity and PPO members:**

- No authorization is required for this service; see *Indemnity and PPO Guidelines* for additional requirements.

## Managed Care Guidelines

All authorization requirements are determined by the individual's subscriber certificate, explanation of coverage, or summary plan description, however;

- **For Medicare HMO Blue members:** The service must meet the criteria for coverage noted in this policy, be medically necessary, prescribed by a plan physician and provided by a network provider.
- **For Medicare HMO Blue members:** Referrals are required for all visits to a specialist.
- For all other Managed Care plans, any specialist visit requires a referral, except for visits performed by OB/GYN specialists.
- Authorization is required for an inpatient admission.

## Indemnity and PPO Guidelines

All authorization requirements are determined by the individual's subscriber certificate, explanation of coverage, or summary plan description, however;

- Authorization is required for an inpatient admission.
- Authorizations are not required for most outpatient services as determined by the individual's subscriber certificate.
- Referrals to a specialist are not required.

## Other information

For our Medical Technology Assessment Guidelines, see document #350.

## Coding information

*Procedure codes are from current CPT, HCPCS Level II, Revenue Code, and/or ICD-9-CM manuals, as recommended by the American Medical Association, Centers for Medicare and Medicaid Services and American Hospital Associations. Blue Cross Blue Shield Association national codes may be developed when appropriate.*

*The following codes are included below for informational purposes. Inclusion or exclusion of a code does not constitute or imply member coverage or provider reimbursement. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage as it applies to an individual member.*

### CPT codes:

- **64622:** destruction by neurolytic agent, paravertebral facet joint nerve; lumbar or sacral, single level
- **64623:** destruction by neurolytic agent, paravertebral facet joint nerve; lumbar or sacral, each additional level
- **64626:** destruction by neurolytic agent, paravertebral facet joint nerve; cervical or thoracic, single level
- **64627:** destruction by neurolytic agent, paravertebral facet joint nerve; cervical or thoracic, each additional level
- **77003:** fluoroscopic guidance and localization of needle or catheter tip for spine or paraspinous diagnostic or therapeutic injection procedures (epidural, transforaminal epidural, subarachnoid, paravertebral facet joint, paravertebral facet joint nerve, or sacroiliac joint), including neurolytic agent destruction
- **77012:** computed tomography guidance for needle placement (eg, biopsy, aspiration, injection, localization device), radiological supervision and interpretation

### Facility coding

#### ICD-9 CM procedure codes:

- **03.96:** percutaneous denervation of facet

## Policy update history

New policy, effective 11/1/2009.

## References

### References for footnote 1:

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3. Levin JH. Prospective, double-blind, randomized placebo-controlled trials in interventional spine: what the highest quality literature tells us. *Spine J* 2008 Sep 11 [Epub ahead of print]
4. California Technology Assessment Forum (CTAF). Percutaneous radiofrequency neurotomy for treatment of chronic pain from the upper cervical (C2-3) spine. A Technology Assessment. San Francisco, CA: CTAF; June 20, 2007.
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9. Cohen SP, Stojanovic MP, Crooks M et al. Lumbar zygapophysial (facet) joint radiofrequency denervation success as a function of pain relief during diagnostic medial branch blocks: a multicenter analysis. *Spine J* 2008; 8(3):498-504.
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11. Schofferman J, Kine G. Effectiveness of repeated radiofrequency neurotomy for lumbar facet pain. *Spine* 2004; 29(21):2471-3.
12. Haspelslagh SR, Van Suijlekom HA, Lame IE et al. Randomised controlled trial of cervical radiofrequency lesions as a treatment for cervicogenic headache. *BMC Anesthesiol* 2006; 6:1.
13. Van Zundert J, Patijn J, Kessels A et al. Pulsed radiofrequency adjacent to the cervical root ganglion in chronic cervical radicular pain: a double-blind sham controlled randomized clinical trial. *Pain* 2007; 127(1-2):173-82.
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This document is designed for informational purposes only and is not an authorization, or an explanation of benefits, or a contract. Receipt of benefits is subject to satisfaction of all terms and conditions of the coverage. Medical technology is constantly changing, and we reserve the right to review and update our policies periodically.

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## Footnotes

<sup>1</sup> Based on the BCBSA national medical policy 7.01.116, Radiofrequency Facet Joint Denervation, issued 3/2009.

<sup>2</sup> Based on the NHIC-Medicare Local Coverage Determination L26593, Paravertebral Facet Joint/Nerve Denervation, issued 6/1/2009.

[http://www.cms.hhs.gov/mcd/viewlcd.asp?lcd\\_id=26593&lcd\\_version=11&show=all](http://www.cms.hhs.gov/mcd/viewlcd.asp?lcd_id=26593&lcd_version=11&show=all)