

Medical Treatment Guidelines

Washington State Department of Labor and Industries

Guideline on diagnostic facet medial nerve branch blocks and facet neurotomy

Literature review on facet neurotomy

The current medical literature was reviewed for randomized, double blind control trials on facet neurotomy in the treatment of cervical or lumbar facet (zygapophyseal) pain. Certain elements were consistently noted in the articles reviewed. Multiple authors recognized that a comprehensive physical examination and diagnostic work up was essential to exclude any reversible, structural pathology that could be the cause of the reported pain. Diagnostic medial branch nerve blocks were administered using not more than 0.5 ml of either a short acting or a long acting local anesthetic. Documentation of pain relief following each block corresponded to the expected duration of the local anesthetic injected. Strict adherence to established inclusion and exclusion criteria led to the selection of individuals with a clear diagnosis of medial branch mediated nerve pain that may benefit from a facet neurotomy.

Documentation of pain relief following diagnostic medial nerve branch block or facet joint block

No pain medication should be taken for four hours prior to each diagnostic medial nerve branch block for facet joint block. No IV sedation should be administered before or during a diagnostic block except in an extreme case of anxiety. Prior to the block, pain should be reproducible with positioning of the patient, to at least a "4" on a 0-10 pain scale.

After each diagnostic block the injured worker must document the level of pain relief obtained using the *Neurotomy Workup Pain Relief Report Form* found in this Provider Bulletin. The form may be copied as needed. The injured worker is to engage in the activities that previously produced pain and document the level of pain relief obtained every 15 minutes for a minimum of six hours following each block, or until their usual level of pain returns, whichever occurs first. The worker is to return the completed form to the physician at the next scheduled office visit. Place a copy of the *Pain Relief Report Form* in the medical record, send a copy to the department, and another copy to the department's utilization review vendor if a facet neurotomy is requested.

Reactivation and maximum medical improvement following a facet neurotomy

Prior to a facet neurotomy, a formal plan for reactivation must be developed and agreed upon by the injured worker. If indicated, vocational assessment and/or plan development should be considered prior to the procedure. Progressive reactivation, as appropriate based on the injured worker's condition, may include up to four weeks of outpatient physical therapy or occupational therapy, or work hardening.

A facet neurotomy should be the final procedure performed before an injured worker is expected to be at maximum medical improvement. Payment for repeat facet neurotomy at the same level and the same side will not be authorized. It is important that the injured worker receive a facet neurotomy when it will provide the maximum functional benefit. In almost all cases, that will be when the injured worker is about to return to work or enter vocational rehabilitation. For these reasons, at the conclusion of the post procedure reactivation period, the injured worker should be at maximum medical improvement.

Medical Treatment Guidelines

Washington State Department of Labor and Industries

Number of Payable Facet Neurotomies is Limited

The department will pay for **only one** facet neurotomy per level side and only on cervical or lumbar vertebrae. Payment for cervical or lumbar diagnostic medial nerve branch blocks and facet Neurotomies is limited to no more than 2 joint level bilaterally or 3 joint levels unilaterally on the same day.

What procedures are non-covered?

The department will not pay for the following procedures:

- Dorsal rhizotomy.
- Thoracic neurotomy.
- SI joint neurotomy.
- Dorsal root ganglionectomy, or
- Transection or avulsion of other extradural spinal nerves.

Medical Treatment Guidelines

Washington State Department of Labor and Industries

Criteria for cervical or lumbar facet neurotomy

Conservative care	Clinical findings	
	Subjective/ objective	Diagnostic tests
<p>Failure of 6 months of non-invasive therapy such as physical therapy, medications, or manual therapy (mobilization/manipulation).</p> <p style="text-align: center;">AND</p>	<p>Non-radicular neck or back pain.</p> <p style="text-align: center;">AND</p> <p>Segmental pain or tenderness at the level of the potentially involved facet and not more than 2 joint levels bilaterally or 3 joint levels unilaterally.</p> <p style="text-align: center;">AND</p> <p>Neurologically intact for the region involved.</p> <p style="text-align: center;">OR</p> <p>If neurologic deficit is present, it should be addressed in the treatment plan.</p> <p style="text-align: right;">AND</p>	<p>Diagnostic testing as required to rule out any correctable structural lesion to include CT or MRI.</p> <p>Diagnostic blocks should not involve more than 2 joint levels bilaterally or 3 joint levels unilaterally.</p> <p style="text-align: center;">AND</p> <p>Minimum of at least 2 differential local anesthetic blocks. One block must be of the medial branch of the dorsal ramus innervating the targeted facet joints; the other block may be an intraarticular facet joint block.</p> <p style="text-align: center;">AND</p> <p>Differential blocks may be either 0.5 ml total volume of a short acting local anesthetic (2% to 4% lidocaine); or 0.5 ml total volume of a long acting local anesthetic (0.5% to 0.75% bupivacaine).</p> <p style="text-align: center;">AND</p> <p>Steroid may be used with a local anesthetic for the intraarticular block but total volume of both local and steroid should not exceed 0.5 ml for cervical injection and 0.75 ml for lumbar injection.</p> <p style="text-align: center;">AND</p> <p>Minimum of 80% pain relief following each block while performing activities that previously provoked pain. Documentation of pain relief should be a patient-generated report in real-time, every 15 minutes for the first six hours following the block.</p> <p style="text-align: center;">AND</p> <p>Duration of pain relief should be consistent with the expected duration of the local anesthetic injected (at least 1 hour for short acting and at least 2 hours for long acting local anesthetic).</p> <p style="text-align: center;">AND/OR</p> <p>Placebo controlled blocks may be used to resolve any ambiguity of results of local anesthetic blocks.</p>

Exclusion Criteria that would require UR physician review:

- Radiculopathy.
- Anticipated cervical, thoracic, lumbar surgery, or surgery for any other condition.
- Previous fusion at the targeted level.
- Diagnosed with a psychiatric condition likely to interfere with diagnostic accuracy of the workup protocol or with recovery following the anticipated procedure.
- Multiple, focal, chronic pain syndromes (e.g., CRPS, fibromyalgia, chronic fatigue syndrome).
- IV sedation during a diagnostic block.

Medical Treatment Guidelines

Washington State Department of Labor and Industries

Facet neurotomy workup pain relief report form

Directions: This form is to be completed by the patient, or someone recording the patient's responses, in "real time" following the administration of a facet block. **Pain relief level should be recorded while doing activities that previously caused pain.**

Please fill in the date and time of your block was performed, then circle the time the block was completed on the time chart. Every 15 minutes put a check mark in the time chart box that most accurately describes the degree of your pain relief. Continue to put check marks in the appropriate time chart box **every fifteen minutes for a full 6 hours** following the block. This form needs to be returned to the physician who performed your block at your next scheduled visit, since it will become part of your medical record.

Name: _____

Date of block: _____

Time of block _____

My pain is:

Time (Circle the time of the block)	100% Totally gone	80% Pretty much gone	50% Half way gone	20% Barely gone	0% Usual level, no relief	Time	100% Totally gone	80% Pretty much gone	50% Half way gone	20% Barely gone	0% Usual level, no relief
8:00 am						4:00 pm					
8:15						4:15					
8:30						4:30					
8:45						4:45					
9:00 am						5:00 pm					
9:15						5:15					
9:30						5:30					
9:45						5:45					
10:00am						6:00 pm					
10:15						6:15					
10:30						6:30					
10:45						6:45					
11:00am						7:00 pm					
11:15						7:15					
11:30						7:30					
11:45						7:45					
12:00pm						8:00 pm					
12:15						8:15					
12:30						8:30					
12:45						8:45					
1:00 pm						9:00 pm					
1:15						9:15					
1:30						9:30					
1:45						9:45					
2:00 pm						10:00pm					
2:15						10:15					
2:30						10:30					
2:45						10:45					
3:00 pm						11:00pm					
3:15						11:15					
3:30						11:30					
3:45						11:45					

Medical Treatment Guidelines

Washington State Department of Labor and Industries

References

1. Van Kleef M, Barendse G, Kessels A, Voets H, Weber W. Randomized trial of radiofrequency lumbar facet denervation for chronic low back pain. *Spine* 1999;24:1937-1942.
2. Lord S, Barnsley L, Wallis B, McDonald G, Bogduk N. Percutaneous radio-frequency neurotomy for chronic cervical joint-joint pain. *N Engl J Med* 1996;335:1721-1726.
3. Niemisto L, Kalso E, Malmivaara A, Seitsalo S, Hurri H. Radiofrequency denervation for neck and back pain. A systematic review of randomized controlled trials (Cochrane Review). *The Cochrane Library* 2003;1.
4. Dreyfuss P, Halbrook B, Pauza K, Joshi A, McLarty J, Bogduk N. Efficacy and validity of radiofrequency neurotomy for chronic lumbar zygapophysial joint pain. *Spine* 2000;25:1270-1277.
5. Barlocher C, Krauss J, Seiler R. Kryorhizotomy: an alternative technique for lumbar medial branch rhizotomy in lumbar facet syndrome. *J. Neurosurg: Spine* 2003;98:14-20.
6. Wetzel F, Phillips F, Aprill C, Bernard T, LaRocca H. Extradural sensory rhizotomy in the management of chronic lumbar radiculopathy. *Spine* 1997;22:2283-2291.
7. Stovner L, Kolstad F, Helde G. Radiofrequency denervation of facet joints C2-C6 in cervicogenic headache: a randomized, double-blind, sham-controlled study. *Cephalalgia* 2004;24:821-830.