



CLINICAL GUIDELINES

CMM-209: Regional Sympathetic Blocks

Effective: August 04, 2026

VERSION 1.0.2026



EviCore healthcare Clinical Decision Support Tool Diagnostic Strategies: This tool addresses common symptoms and symptom complexes. Imaging requests for individuals with atypical symptoms or clinical presentations that are not specifically addressed will require physician review. Consultation with the referring physician, specialist, and/or individual's Primary Care Physician (PCP) may provide additional insight.

EviCore's Clinical Review Criteria ("CRC") and related content is made available for the limited uses of: reference; and individual use, only limited to facilitating the determination of medically necessary and appropriate clinical treatment by clinicians for specific delegated patients under their care. The CRC and related content is proprietary information of EviCore, and copyrighted to the full extent of the law. Except as expressly permitted, you may not modify, copy, reproduce, republish, upload, post, transmit, hyperlink to or from, or distribute in any way the CRC, nor may you sell, transfer, distribute, assign, lease, reproduce, or otherwise use the CRC in commerce, in a manner that competes with us or infringes upon our rights, or for any public or commercial endeavor without our prior and express written consent.

CPT® (Current Procedural Terminology) is a registered trademark of the American Medical Association (AMA). CPT® five-digit codes, nomenclature and other data are copyright 2026 American Medical Association. All Rights Reserved. No fee schedules, basic units, relative values or related listings are included in the CPT® book. AMA does not directly or indirectly practice medicine or dispense medical services. AMA assumes no liability for the data contained herein or not contained herein.

Table of Contents

Guideline	Page
Definitions.....	3
General Guidelines.....	5
Indications.....	8
Non-Indications.....	11
Codes (CMM-209).....	13
References (CMM-209).....	15

Definitions

Guideline	Page
Definitions.....	4

Definitions

CMM.PN.DF.209**v1.0.2026****Complex Regional Pain Syndrome (CRPS) (as defined by the International Association for the Study of Pain [IASP])**

a variety of painful conditions following injury, which appear regionally having a distal predominance of abnormal findings, exceeding in both magnitude and duration, the expected clinical course of the inciting event; and often resulting in significant impairment of motor function, and showing variable progression over time. In addition to injury, CRPS can also occur as a result of various medical disorders or illnesses.

Regional Sympathetic Blocks: (i.e., stellate ganglion blocks and lumbar sympathetic blocks)

the injection of local anesthetic along the sympathetic ganglia using image guidance to reduce sympathetic nervous system activity.

General Guidelines

Guideline	Page
General Guidelines.....	6

General Guidelines

CMM.PN.GG.209

v1.0.2026

Application of Guideline

- The guideline criteria are not applicable to injections/blocks of other autonomic nerves (e.g., sphenopalatine ganglion, carotid sinus, superior hypogastric plexus, celiac plexus, Gasserian ganglion [trigeminal nerve], splanchnic nerve, Ganglion of Impar, rami communicans).
- All regional sympathetic blocks in recalcitrant cases of CRPS should be performed with the intent of facilitating involvement and advancement in an active rehabilitation/functional restoration program.
 - This is due to insufficient evidence that regional sympathetic blocks (stellate ganglion blocks and lumbar sympathetic chain blocks) performed as an isolated treatment alter the long-term outcome of CRPS.
- The determination of medical necessity for regional sympathetic blocks is always made on a case-by-case basis.

Injectates

- When criteria have been met, regional sympathetic blocks are considered **medically necessary** when performed with an anesthetic, corticosteroid, and/or contrast agent.

Image Guidance

- When criteria have been met, stellate ganglion blocks are considered **medically necessary** when performed using fluoroscopic- or ultrasound-guidance.
- When criteria have been met, lumbar sympathetic chain blocks are considered **medically necessary** when performed using fluoroscopic-guidance.

Frequency & Number of Injections/Procedures

- When criteria have been met, only one invasive modality or procedure performed on the same date of service is considered **medically necessary**.
- When criteria have been met, no more than four (4) diagnostic regional sympathetic blocks are considered **medically necessary** within two (2) weeks.
- When criteria have been met, therapeutic regional sympathetic blocks are considered **medically necessary** no more frequent than once every seven (7) days.
- When criteria have been met, up to a total of 10 (4 diagnostic, 6 therapeutic) regional sympathetic blocks are considered **medically necessary** during a rolling 12-month period.

Health Equity Considerations

Health equity is the highest level of health for all individuals; health inequity is the avoidable difference in health status or distribution of health resources due to the social conditions in which individuals are born, grow, live, work, and age. Social determinants of health are the conditions in the environment that affect a wide range of health, functioning, and quality of life outcomes and risks. Examples include the following: safe housing, transportation, and neighborhoods; racism, discrimination, and violence; education, job opportunities, and income; access to nutritious foods and physical activity opportunities; access to clean air and water; and language and literacy skills.

Indications

Guideline	Page
Indications.....	9

Indications

CMM.PN.IN.209

v1.0.2026

Initial Diagnostic Regional Sympathetic Block

An initial diagnostic regional sympathetic block is considered **medically necessary** when BOTH of the following criteria have been met:

- Performed to establish the presence or absence of sympathetically mediated complex regional pain syndrome (CRPS)
- Diagnostic criteria for CRPS have been met as follows:
 - Presence of continuing pain that is disproportionate to any inciting event
 - Must report at least one (1) symptom in at least THREE (3) of the following categories:
 - Sensory: reports of hyperesthesia (increased sensitivity to sensory stimuli) and/or allodynia (pain to light touch)
 - Vasomotor: reports of temperature asymmetry, skin color changes, and/or skin color asymmetry
 - Sudomotor/edema: reports of edema, sweating changes, and/or sweating asymmetry
 - Motor/trophic: reports of decreased range of motion, motor dysfunction (weakness, tremor, dystonia), and/or trophic changes (hair, nails, skin)
 - Must display at least one (1) sign on physical exam at the time of evaluation in at least TWO (2) of the following categories:
 - Sensory: evidence of hyperalgesia (pain to pinprick) and/or allodynia (pain to light touch)
 - Vasomotor: evidence of temperature asymmetry, skin color changes, and/or asymmetry
 - Sudomotor/edema: evidence of edema, sweating changes, and/or sweating asymmetry
 - Motor/trophic: evidence of decreased range of motion, motor dysfunction (weakness, tremor, dystonia) and/or trophic changes (hair, nails, skin)
 - There are no other medical or psychological diagnoses that are concordant with the presenting symptoms, signs, and results of relevant studies (e.g., imaging, electrodiagnostic testing, laboratory testing, etc.).
 - The diagnosis is limited to only the extremities and not to the head, face, neck, trunk, perineum, pelvis, or abdominal viscera.

Additional Diagnostic Regional Sympathetic Blocks

Up to three (3) additional regional sympathetic blocks are considered **medically necessary** to diagnose the individual's pain when BOTH of the following criteria have been met:

- The initial diagnostic regional sympathetic block resulted in a positive response with documented pain relief of at least 50% and documented concomitant increase in function for the duration of the local anesthetic used.
- The additional diagnostic regional sympathetic blocks are performed within the first two (2) weeks following the initial diagnostic regional sympathetic block.

Therapeutic Regional Sympathetic Blocks

Therapeutic regional sympathetic blocks are considered **medically necessary** when ALL of the following criteria have been met:

- The prior therapeutic regional sympathetic block resulted in a positive response as evidenced by ALL of the following:
 - decreased use of pain medication
 - increased functional ability (e.g., increased range of motion, strength, and use of the extremity in activities of daily living)
 - increased tolerance to touch (e.g., decreased allodynia)
- Conservative treatment includes BOTH of the following:
 - The therapeutic regional sympathetic block is provided as part of a comprehensive pain management program.
 - The individual has ongoing participation in an active rehabilitation/functional restoration program.

Non-Indications

Guideline	Page
Non-Indications.....	12

Non-Indications

CMM.PN.NI.209

v1.0.2026

Not Medically Necessary

- Regional sympathetic blocks performed without meeting the criteria in the **Definitions**, the **General Guidelines**, and the **Indications** sections are considered **not medically necessary**.
- Regional sympathetic blocks are considered **not medically necessary** when performed for a diagnosis of CRPS in the head, face, neck, trunk, perineum, pelvis, or abdominal viscera.

Experimental, Investigational, or Unproven (EIU)

- Regional sympathetic blocks are considered **experimental, investigational, or unproven** when performed by EITHER of the following methods:
 - radiofrequency ablation (RFA)
 - chemical neurolysis (with phenol [carbolic acid] or ethyl alcohol injections)

Codes (CMM-209)

Guideline	Page
Codes (CMM-209).....	14

Codes (CMM-209)

CMM.PN.PC.209
v1.0.2026

The inclusion of any code in this table does not imply that the code is under management or requires prior authorization. Refer to the applicable health plan for management details. Prior authorization of a code listed in this table is not a guarantee of payment. The Certificate of Coverage or Evidence of Coverage policy outlines the terms and conditions of the member's health insurance policy.

Code	Code Description/Definition
64510	Injection, anesthetic agent; stellate ganglion (cervical sympathetic)
64520	Injection, anesthetic agent; lumbar or thoracic (paravertebral sympathetic)

CMM-209: Regional Sympathetic Blocks

References (CMM-209)

Guideline	Page
References (CMM-209).....	16

References (CMM-209)

CMM.PN.RF.209

v1.0.2026

1. Ackerman W, Zhang J. Efficacy of stellate ganglion blockade for the management of type 1 complex regional pain syndrome. *S Med J*. 2006;99(10):1084-1088.
2. American Medical Association. *Current Procedural Terminology*. 2025 AMA CPT® Professional Edition. ©2025 American Medical Association: Chicago, IL.
3. Benzon HT, Elmofty D, Shankar H, et al. Use of corticosteroids for adult chronic pain interventions: sympathetic and peripheral nerve blocks, trigger point injections - guidelines from the American Society of Regional Anesthesia and Pain Medicine, the American Academy of Pain Medicine, the American Society of Interventional Pain Physicians, the International Pain and Spine Intervention Society, and the North American Spine Society. *Reg Anesth Pain Med*. doi:10.1136/rapm-2024-105593.
4. Cepeda M, Lau J, Carr D. Defining the therapeutic role of local anesthetic sympathetic blockade in complex regional pain syndrome: a narrative and systematic review. *Clin J Pain*. 2002;18:216-233.
5. Chou R, Huffman L; American Pain Society. American College of Physicians. Medications for acute and chronic low back pain: a review of the evidence for an American Pain Society/American College of Physicians clinical practice guideline. *Ann Intern Med*. 2007;147(7):505-514. doi:10.7326/0003-4819-147-7-200710020-00008.
6. Chou R, Deyo R, Friedly J, et al. Nonpharmacologic therapies for low back pain: a systematic review for an American College of Physicians Clinical Practice Guideline. *Ann Intern Med*. 2017;166(7):493-505. doi:10.7326/M16-2459.
7. Chou R, Qaseem A, Snow V, et al. Clinical Efficacy Assessment Subcommittee of the American College of Physicians. American College of Physicians. American Pain Society Low Back Pain Guidelines Panel. Diagnosis and treatment of low back pain: a joint clinical practice guideline from the American College of Physicians and the American Pain Society. *Ann Intern Med*. 2007;147(7):478-491.
8. Chou R. Using evidence in pain practice: Part I: Assessing quality of systematic reviews and clinical practice guidelines. *Pain Med*. 2008;9(5):518-530.
9. Dworkin R, O'Connor A, Kent J et al. Interventional management of neuropathic pain: NeuPSIG recommendations. *Pain*. 2013;154(11):2249-2261. doi:10.1016/j.pain.2013.06.004.
10. Furlan A, Mailis A, Papagapiou M. Are we paying a high price for surgical sympathectomy? A systemic literature review of late complications. *J Pain*. 2000;1:245-257.
11. Gill JS. CH 83: Sympathetic Blocks. In: Bajwa ZH, Wootton RJ, Warfield CA, eds. *Principles and Practice of Pain Medicine*. 3rd ed. edition. McGraw-Hill Education; 2017.
12. Gofeld M, Shankar H, Benzon H. Chapter 84: Fluoroscopy and Ultrasound-Guided Sympathetic Blocks. Section IX: Other Nerve Blocks in Pain Medicine. In: *Essentials of Pain Medicine*. 4th ed. Elsevier. 2018:789-804.e2.
13. Harden RN, McCabe CS, Goebel A, et al. Complex Regional Pain Syndrome: Practical Diagnostic and Treatment Guidelines, 5th ed. *Pain Med*. 2022;23(Suppl 1):S1-S53. doi:10.1093/pm/pnac046.
14. Hartrick C, Kovan J, Naismith P. Outcome prediction following sympathetic block for complex regional pain syndrome. *Pain Pract*. 2004;4:222-228.
15. Harvey AM. Classification of chronic pain—descriptions of chronic pain syndromes and definitions of pain terms. *Clin J Pain*. 1995;11(2):179.
16. Janig W, Baron R. Complex regional pain syndrome: mystery explained? *Lancet Neurol*. 2003;2:687-697.
17. Leis S, Weber M, Schmelz M, Birklein F. Facilitated neurogenic inflammation in unaffected limbs of patients with complex regional pain syndrome. *Neurosci Lett*. 2004;359:163-166.
18. O'Connell N, Wand B, Gibson W, Carr D, Birklein F, Stanton T. Local anaesthetic sympathetic blockade for complex regional pain syndrome. *Cochrane Database Syst Rev*. 2016. doi:10.1002/14651858.cd004598.pub4.
19. Ozturk E, Mohur H, Arslan N, et al. Quantitative three-phase bone scintigraphy in the evaluation of intravenous regional blockade treatment in patients with stage-I reflex sympathetic dystrophy of upper extremity. *Ann of Nucl Med*. 2004;18(8):653-658.

20. Paraskevas K, Michaloglou A, Briana D, Samara M. Treatment of complex regional pain syndrome type I of the hand with a series of intravenous regional sympathetic blocks with guanethidine and lidocaine. *Clin Rheumatol*. 2005;7:1-7.
21. Perez R, Kwakkel G, Zuurmond W, de Lange J. Treatment of reflex sympathetic dystrophy (CRPS type 1): a research synthesis of 21 randomized clinical trials. *J Pain Symptom Manage*. 2001;21:511-526.
22. Schurmann M, Gradi G, Wizgal I, et al. Clinical and physiologic evaluation of stellate ganglion blockade for complex regional pain syndrome type I. *Clin J Pain*. 2001;17:94-100.
23. Severens J, Oerlemans H, Weegels A, et al. Cost-effectiveness analysis of adjuvant physical or occupational therapy for patients with reflex sympathetic dystrophy. *Arch Phys Med Rehabil*. 1999;80:1038-1043.
24. Sharma A, Williams K, Raja S. Advances in treatment of complex regional pain syndrome: recent insights on a perplexing disease. *Curr Opin Anaesthesiol*. 2006;19:566-572.
25. Stanton-Hicks M. A report on the 2nd IASP Research Symposium, Cardiff, Wales. Complex regional pain syndrome: current research on mechanisms and diagnosis. In: *International Association for the Study of Pain*. Special Interest Group on Pain and the Sympathetic Nervous System. 2000;1-2.
26. Stanton-Hicks M, Baron R, et al. Consensus report: complex regional pain syndromes: guidelines for therapy. *Clin J Pain*. 1998;14:155-166.
27. Stanton-Hicks M, Burton A, Bruehl S, et al. An updated interdisciplinary clinical pathway for CRPS: report of an expert panel. *Pain Pract*. 2005;84(3):S4-S16.
28. Stanton-Hicks M. Complex regional pain syndrome: manifestations and the role of neurostimulation in its management. *J Pain Symptom Manage*. 2006;(4 Suppl):S20-S24.
29. Straube S, Derry S, Moore RA, Cole P. Cervico-thoracic or lumbar sympathectomy for neuropathic pain and complex regional pain syndrome. *Cochrane Database Syst Rev*. 2013;2013(9):CD002918. Published 2013 Sep 2. doi:10.1002/14651858.CD002918.pub3.
30. Suresh S, Wheeler M, Patel A. Case series: IV regional anesthesia with ketorolac and lidocaine: is it effective for the management of complex regional pain syndrome 1 in children and adolescents? *Anesth Analg*. 2003;96:694-695.
31. Turner J, Loeser J, Deyo R, Sanders S. Spinal cord stimulation for patients with failed back surgery syndrome or complex regional pain syndrome: a systematic review of effectiveness and complications. *Pain*. 2004;108:137-147.
32. Varrassi G, Paladini A, Marinangeli F, Racz G. Neural modulation by blocks and infusions. *Pain Pract*. 2006;6:34-38.
33. Wang L, Chen H, Chang P, et al. Axillary brachial plexus block with patient controlled analgesia for complex regional pain syndrome type I: a case report. *Reg Anesth Pain Med*. 2001;26(1):68-71.
34. Zernikow B, Wager J, Brehmer H, Hirschfeld G, Maier C. Invasive Treatments for Complex Regional Pain Syndrome in Children and Adolescents. *Anesthesiology*. 2015;122(3):699-707. doi:10.1097/aln.0000000000000573.