



Specialty Independent Review Organization

Date notice sent to all parties: 8/23/2018

DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE:

The item in dispute is the prospective medical necessity of a right lumbar sympathetic block with intravenous sedation under fluoroscopy.

A DESCRIPTION OF THE QUALIFICATIONS FOR EACH PHYSICIAN OR OTHER HEALTH CARE PROVIDER WHO REVIEWED THE DECISION:

The reviewer is a Medical Doctor who is board certified in Anesthesiology.

REVIEW OUTCOME:

Upon independent review, the reviewer finds that the previous adverse determination/adverse determinations should be:

- Upheld (Agree)
- Overturned (Disagree)
- Partially Overturned (Agree in part/Disagree in part)

The reviewer agrees with the previous adverse determination regarding the prospective medical necessity of a right lumbar sympathetic block with intravenous sedation under fluoroscopy.

PATIENT CLINICAL HISTORY [SUMMARY]:

The patient is a XXXX who sustained an injury while working as a XXXX. Based on documentation, the claimant strained XXXX right knee when getting XXXX. Injury includes the right knee only. Significant past medical history is positive for hypertension, chest pain/angina, diabetes, obesity, a left knee arthroscopy in XXXX, and a third degree burn injury. The claimant's height is XXXX inches with a weight of XXXX and a BMI of XXXX. As related to the knee, treatment has been an extensive and has included diagnostic studies, physical therapy, steroid injections, an ACL reconstruction to the right knee in XXXX and XXXX and then due to continued degeneration at the right knee secondary to the injury, a total knee replacement to the right knee done in XXXX. After completion of postop physical therapy, some help to a moderate degree was noted, but the claimant still requires a walker for ambulation. Based on physical exam dated XXXX the claimant has suffered from ongoing diffuse pain around the right knee with increased warmth, swelling, and purplish discoloration around the inferior aspect of the knee. Hyper ST around the midline incision exists. Pain rated as a constant 5 to 7 out of 10 and described as 'aching, sharp, shooting, stabbing and throbbing exacerbated by weight-bearing'.

ANALYSIS AND EXPLANATION OF THE DECISION INCLUDE CLINICAL BASIS, FINDINGS, AND CONCLUSIONS USED TO SUPPORT THE DECISION:

Per evidence-based guidelines, and the records submitted, this request is non-certified. Patient continues to have pain in the right lower extremity. Per ODG, a sympathetic block is only recommended when there is evidence that the Budapest (Harden) criteria have been evaluated for and fulfilled, and all other diagnoses have been ruled out. The claimant was having continued symptoms in the right lower extremity to include pain and paresthesia, but there is no documentation to support all other diagnoses have been ruled out or that the Budapest criteria has been evaluated for and fulfilled to warrant the requested procedure. The request for right lumbar sympathetic block with intravenous sedation under fluoroscopy is not certified. Furthermore, there was no documentation the patient had significant anxiety to want the requested sedation. The request is not supported by the ODG; therefore, this request is not medically necessary.

Official Disability Guidelines- Treatment for Worker's Compensation, Online Edition
Chapter: Low Back- Lumbar and Thoracic

Recommend local anesthetic sympathetic blocks for limited, select cases, as indicated below. Not recommend IV regional anesthesia blocks.

Local anesthetic sympathetic blocks:

Recommended for limited, select cases, primarily for diagnosis of sympathetically mediated pain and therapeutically as an adjunct to facilitate physical therapy/ functional restoration. When used for therapeutic purposes the procedure is not considered a stand-alone treatment. The role of sympathetic blocks for treatment of CRPS is largely empirical (with a general lack of evidence-based research for support) but can be clinically important in individual cases in which the procedure ameliorates pain and improves function, allowing for a less painful "window of opportunity" for rehabilitation techniques. (Harden, 2013) Use of sympathetic blocks should be balanced against the side effect ratio and evidence of limited response to treatment. See CRPS, diagnostic tests.

IV regional anesthesia: Not recommended due to lack of evidence for use. This procedure is a technique that allows placement of medications directly in the effected extremity but current literature indicates efficacy is poor. (Harden, 2013) There is no role for IV diagnostic blocks with phentolamine or IVRA with guanethidine. Other procedures include IV regional blocks with lidocaine, lidocaine-methyl-prednisolone, droperidol, ketanserin, atropine, bretylium clonidine, and reserpine. If used, there must be evidence that current CRPS criteria have been met and all other diagnoses have been ruled out. Evidence of sympathetically mediated pain should be provided (see the recommendations below). The reason for the necessity of this procedure over-and-above a standard sympathetic block should also be provided. (Perez, 2010) (Harden, 2013) (Tran, 2010) See also CRPS, treatment.

General information on sympathetic procedures

Current literature: A recent study indicated that there was low quality literature to support this procedure (some evidence of effect, but conclusions were limited by study design, divergent CRPS diagnostic criteria, differing injection techniques and lack of consistent criteria for positive response). Results were inconsistent and/or extrapolation of questionable reliability with

inconclusive evidence to recommend for or against the intervention. (Dworkin, 2013) Other studies have found evidence non-conclusive for this procedure or that low-quality evidence showed this procedure was not effective. (O'Connell, 2013) (Tran, 2010) The blocks are thought to be most beneficial when used early in the disease as an adjunct to rehabilitation with physical or occupational therapy. No controlled trials have shown any significant benefit from sympathetic blockade. (Dworkin 2013) (O'Connell, 2013) (Tran, 2010) (van Eijs, 2012) (Perez, 2010) (van Eijs, 2011) (Nelson, 2006) (Varrassi, 2006) (Cepeda, 2005) (Hartrick, 2004) (Grabow, 2005) (Cepeda, 2002) (Forouzanfar, 2002) (Sharma, 2006)

Historical basis for use: The use of sympathetic blocks for diagnostic and therapeutic purposes in the management of CRPS is based on a previous hypothesis concerning the involvement of the sympathetic nervous system in the pathophysiological mechanism of the disease. (van Eijs, 2012) It has been determined that a sympathetic mechanism is only present in a small subset of patients, and less than 1/3 of patients with CRPS are likely to respond to sympathetic blockade. See Sympathetically maintained pain (SMP).

Predictors of response: Researchers have suggested the following are predictors of poor response to blocks: (1) Long duration of symptoms prior to intervention; (2) Elevated anxiety levels; (3) Poor coping skills; (4) Litigation; (5) Allodynia and hypoesthesia. At this time there are no symptoms or signs that predict treatment success. (Hartrick, 2004) (Nelson, 2006) (van Eijs, 2012)

Interpretation of block results: There is a lack of consensus in terms of defining a successful sympathetic block. Based on consensus, a current suggestion of successful block is one that demonstrates an adequate and sustained increase in skin temperature ($\geq 1.5^{\circ}\text{C}$ and/or an increase in temperature to $> 34^{\circ}\text{C}$) without evidence of thermal or tactile sensory block. A Horner's sign is should be documented for upper extremity blocks.

Recommendations (based on consensus guidelines) for use of sympathetic blocks (diagnostic block recommendations are included here, as well as in CRPS, diagnostic tests):

(1) There should be evidence that all other diagnoses have been ruled out before consideration of use.

(2) There should be evidence that the Budapest (Harden) criteria have been evaluated for and fulfilled.

(3) If a sympathetic block is utilized for diagnosis, there should be evidence that this block fulfills criteria for success including that skin temperature after the block shows sustained increase ($\geq 1.5^{\circ}\text{C}$ and/or an increase in temperature to $> 34^{\circ}\text{C}$) without evidence of thermal or tactile sensory block. Documentation of motor and/or sensory block should occur. This is particularly important in the diagnostic phase to avoid overestimation of the sympathetic component of pain. A Horner's sign should be documented for upper extremity blocks. The use of sedation with the block can influence results, and this should be documented if utilized. (Krumova, 2011) (Schurmann, 2001)

(4) Therapeutic use of sympathetic blocks is only recommended in cases that have positive response to diagnostic blocks and diagnostic criteria are fulfilled (See #1-3). These blocks are only recommended if there is evidence of lack of response to conservative treatment including pharmacologic therapy and physical rehabilitation.

(5) In the initial therapeutic phase, maximum sustained relief is generally obtained after 3 to 6 blocks. These blocks are generally given in fairly quick succession in the first two weeks of treatment with tapering to once a week. Continuing treatment longer than 2 to 3 weeks is unusual.

(6) In the therapeutic phase repeat blocks should only be undertaken if there is evidence of increased range of motion, pain and medication use reduction, and increased tolerance of activity and touch (decreased allodynia) is documented to permit participation in physical therapy/occupational therapy. Sympathetic blocks are not a stand-alone treatment.

(7) There should be evidence that physical or occupational therapy is incorporated with the duration of symptom relief of the block during the therapeutic phase.

(8) In acute exacerbations of patients who have documented evidence of sympathetically mediated pain (see #1-3), 1 to 3 blocks may be required for treatment.

(9) A formal test of the therapeutic blocks should be documented (preferably using skin temperature).

(Burton, 2006) (Stanton-Hicks, 2004) (Stanton-Hicks, 2006) (International Research Foundation for RSD/CRPS, 2003) (Colorado, 2006) (Washington, 2002) (Rho, 2002) (Perez, 2010) (van Eijs, 2011)

A DESCRIPTION AND THE SOURCE OF THE SCREENING CRITERIA OR OTHER CLINICAL BASIS USED TO MAKE THE DECISION:

- ACOEM- AMERICAN COLLEGE OF OCCUPATIONAL & ENVIRONMENTAL MEDICINE UM KNOWLEDGEBASE**
- AHCPR- AGENCY FOR HEALTHCARE RESEARCH & QUALITY GUIDELINES**
- DWC- DIVISION OF WORKERS COMPENSATION POLICIES OR GUIDELINES**
- EUROPEAN GUIDELINES FOR MANAGEMENT OF CHRONIC LOW BACK PAIN**
 - INTERQUAL CRITERIA**
- MEDICAL JUDGEMENT, CLINICAL EXPERIENCE, AND EXPERTISE IN ACCORDANCE WITH ACCEPTED MEDICAL STANDARDS**
 - MERCY CENTER CONSENSUS CONFERENCE GUIDELINES**
 - MILLIMAN CARE GUIDELINES**
- ODG- OFFICIAL DISABILITY GUIDELINES & TREATMENT GUIDELINES**
 - PRESSLEY REED, THE MEDICAL DISABILITY ADVISOR**
- TEXAS GUIDELINES FOR CHIROPRACTIC QUALITY ASSURANCE & PRACTICE PARAMETERS**
 - TEXAS TACADA GUIDELINES**
 - TMF SCREENING CRITERIA MANUAL**
- PEER REVIEWED NATIONALLY ACCEPTED MEDICAL LITERATURE (PROVIDE A DESCRIPTION)**
 - OTHER EVIDENCE BASED, SCIENTIFICALLY VALID, OUTCOME FOCUSED GUIDELINES (PROVIDE A DESCRIPTION)**