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Notice of Independent Review Decision

DATE: March 31, 2015

IRO CASE #:

DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE:

Right Lumbar Sympathetic Block under Fluoroscopy with IV Sedation 64520
77002

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

The reviewer is certified by the American Board of Anesthesiology with over 40 years of experience.

REVIEW OUTCOME:

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

Upheld (Agree)

Provide a description of the review outcome that clearly states whether medical necessity exists for each of the health care services in dispute.

PATIENT CLINICAL HISTORY [SUMMARY]:

The claimant is a male who was injured when he was pushing a heavy wheelbarrow while working on xx/xx/xx. He was diagnosed with complex regional pain syndrome of the right knee and foot.

11/22/13: Right Knee and Right Leg Ultrasound, Right knee and Right Tib/Fib x-ray reports. ULTRASOUND IMPRESSION: Hydrarthrosis. Fluid around the lateral gastrocnemius area and muscle tendinous junction of the triceps surae. Normal right leg ultrasound. X-RAY IMPRESSION: Examination of the right knee appears to be essentially within normal limits. Examination of the right tib/fib appears to be essentially within normal limits.

01/15/14: The claimant was evaluated with complaints of left leg pain and right knee pain. recommended active therapies to reduce inflammation and pain and to improve the right knee and leg range of motion. An MRI of the right lower leg was recommended.

05/17/14: The claimant was reevaluated. He related that he had not felt much change in the right knee and lower leg since last visit. He reported having instability on the knee. Examination of the right lower extremity demonstrated moderate hypertonicity of the right knee as well as a moderate amount of tenderness at posterior and lateral of the right knee. Soft tissue palpation indicated a moderate amount of muscle tightness and tenderness of the right gastrocnemius. McMurray's sign was present on the right. Apley's distraction test was positive on the right. Reflexes were 2/5 at the left patella, 1+/5 at the right patella, and 2/5 at the bilateral Achilles. Babinski sign was absent bilaterally. Right knee flexion, valgus angle, and external rotation were decreased. Muscle testing was 5/5 except right knee extensors at 4/5 and right foot inversion at 4/5. Sensation revealed right L4 and right L5 hypoesthesia. assessment was that he had reached subacute status. It was noted that he had not been doing therapy due to case being on dispute. recommended starting a therapy regimen, MRI of the right knee, and functional evaluation. He was prescribed Flexeril 10 mg at bedtime #30, gabapentin 100 mg b.i.d. #60, ibuprofen 800 mg t.i.d. #90, and tramadol 50 mg q. 6 h. p.r.n. #40.

05/15/14: MRI Right Knee report. IMPRESSION: Normal MRI examination of the right knee.

05/27/14: The claimant was evaluated. He noted feeling a slight degree of improvement in the severity of his right knee pain and continued to feel about the same level of right lower leg pain. assessment was that the status of his condition had changed as treatment progressed and he was now in a subacute phase. It was noted that he received right knee manual therapy. Therapeutic exercise was performed to improve the range of joint motion in the right knee. Neuromuscular reeducation was given to the right knee. Kinetic activity was administered to the right knee. It was noted that he continued to experience sharp pain and muscular tightness of the right leg, and he was referred to a pain management specialist for medication management.

06/05/14 and 06/06/14: The claimant was seen. He tolerated the following procedures without incident: The right knee received manual therapy. Therapeutic exercise was administered to the right knee consisting of neuromuscular reeducation and kinetic mobilization therapy to the right knee.

06/10/14: The claimant was evaluated. He complained of chronic persistent right foot, right calf, and lower extremity burning pain associated with sensitivity to touch, temperature and color changes included hot and cold sensations in his calf and right foot. He graded his pain as 8/10. His medications included NSAIDs, hydrocodone, and muscle relaxants. On exam, there was negative Homans testing in the right and left calves. He had mild hyperesthesia and allodynia with passive range of motion about the right ankle, which was mildly swollen as compared to the left ankle. No gross dystrophic or atrophic changes were noted. Pinprick sensation was preserved. No ankle clonus was elicited. DTRs were 1+ at the Achilles and patella bilaterally. He was diagnosed with chronic right foot, ankle, and knee pain associated with temperature changes, swelling, sensitivity to

touch, and paroxysmal shooting pain consistent with complex regional pain syndrome following traumatic injury and secondary myofascial pain syndrome of the lumbar spine. He was started on amitriptyline and gabapentin. Sympathetic blockade was recommended with continued active range of motion and home exercise following the achievement of medical management if neuropathic improvement of his pain condition was achieved.

07/29/14: Operative Report. POSTOPERATIVE DIAGNOSIS: Complex regional pain syndrome of the right knee, right foot, and leg following work-related injury. OPERATIONS PERFORMED: Diagnostic/therapeutic right lumbar sympathetic block under fluoroscopy. Injection of contrast for performance of epidurogram.

08/05/14: The claimant was evaluated. He stated that it was the best he had felt regarding his right knee pain since his injury. He was no longer having swelling or sensitivity to touch. He was walking with greater ease. His pain was down to 1/10 or 2/10. His affect was improved, and he was sleeping with amitriptyline at night. He was getting good neuropathic pain relief with the gabapentin. He stated that he was no longer getting shooting and throbbing pain at the end of his work day. He wanted to go ahead with the 2nd block.

09/15/14: A note indicates that the 2nd block was not approved. It was noted that the claimant received greater than 70% pain relief from the previous block. It was further noted that he was off narcotic analgesic completely, off benzodiazepine, and off muscle relaxants. It was noted "now that this delay is well over two weeks since his last block, against the ODG guideline, we are having to raise his gabapentin 600 mg t.i.d., as he is showing swelling, hypesthesia, and pain, which he feels is starting to return for his right knee pain following his work injuries." It was noted that his intake urinalysis was negative for illicit drug use. A 2nd and 3rd sympathetic block was recommended to be done in succession and aggressively with home active range of motion exercises.

11/04/14: Operative Report. POSTOPERATIVE DIAGNOSIS: Complex regional pain syndrome of the right knee and right foot following work-related injury. OPERATIONS PERFORMED: Therapeutic right lumbar sympathetic block under fluoroscopy. Injection of contrast for epidurogram. INDICATIONS: The patient has finally been approved for treatment of his CRPS of his right knee and leg having already received excellent relief with a single sympathetic block. He is performing home active range of motion exercises and is taking medicines as prescribed by myself for neuropathic pain. Continued active range of motion exercise was encouraged.

11/11/14: Operative Report. POSTOPERATIVE DIAGNOSIS: Complex regional pain syndrome of the right knee and right foot following work-related injury. OPERATIONS PERFORMED: Therapeutic right lumbar sympathetic block under fluoroscopy. Injection of contrast. INDICATIONS: The patient presents today reporting significant reduction of pain and improved function following sympathetic blockade. Continued active range of motion exercise was encouraged.

12/11/14: The claimant was evaluated. He reported "improvement of his right knee, leg pain complaint less swelling, less sensitivity, and improved range of motion." It was noted that each block had noted further and further improvement. He had continued with gabapentin. was going to raise his amitriptyline to 50 mg nightly. The ibuprofen was still leaving him with gastritis, and he was asked to discontinue this and take Zantac nightly. He was started on Norco 7.5 mg for breakthrough pain; his intake urinalysis was negative for illicit drug use. It was noted that he was pleased with the progress made regarding his right foot, ankle, and knee pain complaints associated with temperature, swelling, and hyperesthesia; and as a result, the plan was to go ahead with lumbar sympathetic block. If a plateau is reached, then consideration for definitive spinal stimulation would be raised.

01/07/15: The claimant was evaluated. He continued with right foot, ankle pain complaints into his calf following sympathetic blockade with at least 70-80% improvement of his leg pain complaints following sympathetic blockade. noted that further injection therapy consistent with ODG guidelines consistent with his clinical experience based in the treatment of his CRPS was indicated and that each block will be offered as long as further and further improvement is made. He stated that, "This has been quite dramatic considering the effect that this injury occurred back in September 2013." He was taking his medicines compliantly including a neuropathic pain medicine. He was off NSAID as they caused gastritis, and he was taking Norco 7.5 mg 2-3 times per day. The plan was to go ahead with right lumbar sympathetic blockade.

01/09/15: UR. RATIONALE: There was no documented indication of the patient having a pain relief of 50% or greater, associated with functional improvement that would warrant a repeat block. Additionally, there was no documented evidence that the patient underwent intensive PT after the last lumbar sympathetic block.

02/18/15: UR. RATIONALE: ODG states that a lumbar sympathetic block should be followed by intensive physical therapy, and there was no clear evidence that the patient participated in skilled therapy subsequent to the 11/11/14 lumbar sympathetic block. Thus, the medical necessity of the request is not substantiated, and the previous determination is upheld.

02/27/15: A note states that: The claimant exhausted all prior physical therapy rehabilitative medical treatment options. He had been educated on home exercise therapy. stated, "In fact, under the work compensation system, it is impossible to get ongoing skills, physical therapy in conjunction with treatment such as sympathetic blockades. Sympathetic blocks are indicated once the patient had had confirmed harden criteria by a board certified fellowship pain specialist whereby the patient has responded favorably with increased function, decreased medication use, improved pain control, with sympathetic blockade." It was noted that the claimant felt his pain was getting worse and worse. It was ascending. On this date, they measured over a 4 degree temperature change between his right foot and his left foot utilizing infrared thermometer' that was his right foot and ankle were 86 degrees Fahrenheit, and his left (the unaffected limb)

was 91 degrees, as measured on the medial aspect of the foot. His gabapentin had been raised to 800 t.i.d., and his affect and sleep had improved with amitriptyline. It was noted that the claimant was highly motivated and had been compliant with his medications. stated, "Looking for reasons such as not ongoing PT is a travesty. We do not ever get approved. Work compensation is a separate process for PT, but the patient for CRPS as long as they are doing home exercise therapy in my 20 years experience, we often see distend and significant improvement, which has had following previous sympathetic blockade." It was noted that he walked with antalgic limp and gait and his pain scores were back up to 7 to 8/10. They were going to raise his Norco to 10 mg due to the delay. Note was made that the claimant was also reporting cramping in his thigh and upper back area consistent with spread or proximal ipsilateral spread of CRPS. also stated, "Furthermore contrary to the doctor's determination, home exercise therapy and active range of motion exercises were documented on my operative note on November 04, 2014.

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

The previous adverse decisions are upheld. There is no documentation of the amount of pain relief following the second lumbar sympathetic nerve block, which was performed on 11/4/2014. There is a report on that day, but not subsequently, that he was performing active home exercises. stated at the time of the third block on 11/11/14 - and within the time period of the effects of the local anesthetic used for this third block - that "pain relief is significant." The amount of functional pain relief is not documented. The statement is that "continued active range of motion is encouraged." It is not stated whether this is a programmed active range of motion, or even that it was actually implemented. No physical therapy is documented.

On 12/11/14, the Claimant is said to have further improvement, yet he is started on Norco 7.5 mg for breakthrough pain, which is only one month after the third nerve block. Again, there is no quantitative documentation of an active home physical therapy follow-up – how much time and how intense was the home exercise program – as well as no intensive physical therapy. In fact it appears that no physical therapy was requested after any of the sympathetic nerve blocks, despite the ODG criteria recommending that these nerve blocks are followed by intensive physical therapy to get the maximum benefit out of the invasive procedures.

On 01/07/15, he is stated to have 70-80% pain relief, with no documentation of functional improvement or of an active home exercise program. It was stated to only be "encouraged." He was taking the Norco 7.5 mg. two to three times per day.

On 2/27/15, the Norco was increased to 10 mg. This is more than the amount of Norco generally prescribed for breakthrough pain. Thus, the Claimant is described in the physical examination as essentially having no significant or long lasting beneficial results from the last two lumbar sympathetic nerve blocks.

Therefore, the request for Right Lumbar Sympathetic Block under Fluoroscopy with IV Sedation 64520 77002 is not medically necessary.

ODG:

<p>Lumbar sympathetic block</p>	<p>Recommended as indicated below. Useful for diagnosis and treatment of pain of the pelvis and lower extremity secondary to CRPS-I and II. This block is commonly used for differential diagnosis and is the preferred treatment of sympathetic pain involving the lower extremity. For diagnostic testing, use three blocks over a 3-14 day period. For a positive response, pain relief should be 50% or greater for the duration of the local anesthetic and pain relief should be associated with functional improvement. Should be followed by intensive physical therapy. (Colorado, 2002)</p>
<p>CRPS, sympathetic blocks (therapeutic)</p>	<p>Recommend local anesthetic sympathetic blocks for limited, select cases, as indicated below. Not recommend IV regional anesthesia blocks.</p> <p>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.</p> <p>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.</p> <p>General information on sympathetic procedures <i>Current literature:</i> 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</p>

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 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

	<p>therapy and physical rehabilitation.</p> <p>(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.</p> <p>(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.</p> <p>(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.</p> <p>(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.</p> <p>(9) A formal test of the therapeutic blocks should be documented (preferably using skin temperature).</p> <p>(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)</p>
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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)