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DATE: 1/30/18

IRO CASE #: XXXX

DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE:

Left Lumbar Facet Block L5/S1

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 10 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 <u>each</u> of the health care services in dispute.

PATIENT CLINICAL HISTORY [SUMMARY]:

Claimant is a XX-year-old XX who sustained an injury on XXXX. The injured worker was XXXX when he hurt his lower back.

XXXX: Follow-Up with Dr. XXXX. C/O continued pain the back. Has good days and bad days. Overall symptoms have remained the dame. Pain level of (Visual Analog Scale) 2. ROM remained the same. Radiating pain has remained the same, left side on and off. Current Medications: Gabapentin, metoprolol, isosorb mono, meloxicam, allopurinol, quinapril, pravastatin, niacin, aspirin, fish oil, garlic, folic acid, vitamin D. Sitting SLR right negative. Sitting SLR left positive. Normal gait. MRI on XXXX shows L3-L4 3mm disc herniation contacting L3 nerve. L4-L5 5mm disc herniation compressing the thecal sac and L5 nerve root. Add Motrin 800mg and Robaxin 750mg. Referral for ESI.

XXXX: Office Visit with Dr. XXXX. Able to stand, walk and sit for more than 30 minutes. Pain 2/10. Pain at worst is 7/10. At best 0/10. Dull aching pain in low back with shooting pain that radiates down left leg into calves. Medication, heating pad, and bio freeze help with the pain. Pt has had multiple PT visits with minimal or no relief. Pain is made better by nothing. Made worse by standing or walking. Still working full duty. Toe and Hell Walking are poor on the left. Deep Tendon Reflexes are diminished. Straight Leg Raise is positive on the left.

XXXX: LESI. Left L4-L5 level with 80 mg Kenalog and 5-10cc NS preservative free.

XXXX: Office Visit with Dr. XXXX. Pain level now 0-3/10. At worst 0-3/10. Sharp, soreness comes and goes. Improvement overall in half after his LESI. XX is able to walk, stand, and sit

longer, sleep better, decrease pain medication. XX has less stress.

XXXX: LESI. Left L4-L5 level with 80 mg Kenalog and 5-10cc NS preservative free.

XXXX: Office Visit with Dr. XXXX. Low back pain that radiates down LLE. Pain level now 0-3/10. At worst 0-3/10. Able to stand, walk and sit for more than 30 minutes. Improvement overall in pain greater than 90% after LESI.

XXXX: Follow-Up with Dr. XXXX. States XX is doing better, still has some slight pain. Severe muscle cramps at night. He has had 2 steroid injections, last one 3 weeks ago. XX states his overall symptoms have decreased. Pain level of /. ROM increased. Radiating pain has increased with new occasional pain in left hip; which might be radiating from back.

XXXX: Office Visit with Dr. XXXX. Low back pain that does not radiate. Pain level now 4-6/10. Pain at the worst 0-3/10. Pain at the best 0-3/10. Pain is aching with tightness. Pt reports that after his injections he had an overall pain decrease greater than 90%. XX is still having axial pain and pain again and would like to have another injection. Facet pain on spine rotation/extension/flexion and palpation and axial loading in the lumbar spine. Pain in lumbar facets on the left at the L5/S1. Suggest Lumbar facet block L5/S1 level. Medial branch of the dorsal ramus on the left times one. If successful; RFA with Physical Therapy.

XXXX: UR by Dr. XXXX. Rationale-Clinical presentation should be consistent with facet joint pain, signs and symptoms. The injured worker was diagnosed with sprain of ligaments of lumbar spine, initial encounter. The worker reported 90% improvement in back pain after LESI, indicating that lumbar facets are not responsible for most of the back pain symptoms. Lumbar facet blocks are recommended only with signs and symptoms of lumbar facet pain. Furthermore, sedation is not recommended for diagnostic facet blocks. Not medically necessary.

XXXX: UR by Dr. XXXX. Rationale-The injured worker has complaints of low back pain with left lower extremity radicular symptoms. XX underwent conservative therapy with physical therapy and had 2 LESI's. XX was seen on XXXX and was found to have improvement of low back and left leg symptoms, but had facet tenderness on palpation as well as positive left facet load. These findings were incongruous with prior documented physical exam findings. The injured worker's clinical presentation after the injury was not consistent with facet joint pain according to the documented physical exams. New documented physical exam on XXXX revealed findings consistent with facet pain, however, the documented physical exam was a new finding that was not evident on prior visits. Not medically necessary.

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

The previous adverse decisions are upheld. Based on the records submitted and peer-reviewed guidelines, this request is non-certified. Claimant has complaints of low back pain with left lower extremity radicular symptoms. He underwent conservative therapy with physical therapy and had 2 LESI's. Examination on XXXX showed improvement of low back and left leg symptoms, but continues facet tenderness on palpation as well as positive left facet load. These findings were incongruous with prior documented physical exam findings. Claimant's clinical presentation after the injury was not consistent with facet joint pain according to the documented physical exams. New documented physical exam on XXXX revealed findings consistent with facet pain, however, the documented physical exam was a new finding that was not evident on prior visits. Therefore, the request for Left Lumbar Facet Block L5/S1 is considered not medically necessary.

Facet joint diagnostic blocks (injections)

Recommend no more than one set of medial branch diagnostic blocks prior to facet neurotomy, if neurotomy is chosen as an option for treatment (a procedure that is still considered "under study"). Diagnostic blocks may be performed with the anticipation that if successful, treatment may proceed to facet neurotomy at the diagnosed levels.

See <u>Facet joint pain, signs & symptoms</u>; <u>Facet joint radiofrequency neurotomy</u>; <u>Facet joint medial branch blocks</u> (therapeutic injections); and <u>Facet joint intra-articular injections</u> (therapeutic blocks). See also <u>Neck Chapter</u> and <u>Pain</u> <u>Chapter</u>.

Criteria for the use of diagnostic blocks for facet "mediated" pain: Clinical presentation should be consistent with <u>facet joint pain</u>, <u>signs & symptoms</u>.

- 1. One set of diagnostic medial branch blocks is required with a response of \geq 70%. The pain response should last at least 2 hours for Lidocaine.
- 2. Limited to patients with low-back pain that is non-radicular and at no more than two levels bilaterally.
- 3. There is documentation of failure of conservative treatment (including home exercise, PT and NSAIDs) prior to the procedure for at least 4-6 weeks.
- 4. No more than 2 facet joint levels are injected in one session (see above for medial branch block levels).
- 5. Recommended volume of no more than 0.5 cc of injectate is given to each joint.
- 6. No pain medication from home should be taken for at least 4 hours prior to the diagnostic block and for 4 to 6 hours afterward.
- 7. Opioids should not be given as a "sedative" during the procedure.
- 8. The use of IV sedation (including other agents such as midazolam) may be grounds to negate the results of a diagnostic block, and should only be given in cases of extreme anxiety.
- 9. The patient should document pain relief with an instrument such as a VAS scale, emphasizing the importance of recording the maximum pain relief and maximum duration of pain. The patient should also keep medication use and activity logs to support subjective reports of better pain control.
- 10. Diagnostic facet blocks should not be performed in patients in whom a surgical procedure is anticipated. (Resnick, 2005)
- 11. Diagnostic facet blocks should not be performed in patients who have had a previous fusion procedure at the planned injection level. [Exclusion Criteria that would require UR physician review: Previous fusion at the targeted level. (Franklin, 2008)]

Current research indicates that a minimum of one diagnostic block be performed prior to a neurotomy, and that this be a medial branch block (MBB). Although it is suggested that MBBs and intra-articular blocks appear to provide comparable diagnostic information, the results of placebo-controlled trials of neurotomy found better predictive effect with diagnostic MBBs. In addition, the same nerves are tested with the MBB as are treated with the neurotomy. The use of a confirmatory block has been strongly suggested due to the high rate of false positives with single blocks (range of 25% to 40%) but this does not appear to be

cost effective or to prevent the incidence of false positive response to the neurotomy procedure itself. (<u>Cohen, 2007</u>) (<u>Bogduk, 2000</u>) (<u>Cohen2, 2007</u>) (<u>Manchukonda, 2007</u>) (<u>Dreyfuss, 2000</u>) (<u>Manchikanti2, 2003</u>) (<u>Datta, 2009</u>)

Etiology of false positive blocks: Placebo response (18-32%), use of sedation, liberal use of local anesthetic, and spread of injectate to other pain generators. The concomitant use of sedative during the block can also interfere with an accurate diagnosis. (Cohen, 2007) The use of sedation during diagnostic injections may increase the rate of false-positive blocks and lead to misdiagnoses and unnecessary procedures, but has no effect on satisfaction or outcomes at 1-month. (Cohen, 2014)

MBB procedure: The technique for medial branch blocks in the lumbar region requires a block of 2 medial branch nerves (MBN). The recommendation is the following: (1) L1-L2 (T12 and L1 MBN); (2) L2-L3 (L1 and L2 MBN); (3) L3-L4 (L2 and L3 MBN); (4) L4-L5 (L3 and L4 MBN); (5) L5-S1: the L4 and L5 MBN are blocked, and it is recommended that S1 nerve be blocked at the superior articular process. Blocking two joints such as L3-4 and L4-5 will require blocks of three nerves (L2, L3 and L4). Blocking L4-5 and L5-S1 will require blocks of L3, L4, L5 with the option of blocking S1. (Clemans, 2005) The volume of injectate for diagnostic medial branch blocks must be kept to a minimum (a trace amount of contrast with no more than 0.5 cc of injectate), as increased volume may anesthetize other potential areas of pain generation and confound the ability of the block to accurately diagnose facet pathology. Specifically, the concern is that the lateral and intermediate branches will be blocked; nerves that innervate the paraspinal muscles and fascia, ligaments, sacroiliac joints and skin. (Cohen, 2007) Intraarticular blocks also have limitations due to the fact that they can be technically challenging, and if the joint capsule ruptures, injectate may diffuse to the epidural space, intervertebral foramen, ligamentum flavum and paraspinal musculature. (Cohen, 2007) (Washington, 2005) (Manchikanti, 2003) (Drevfuss, 2003) (BlueCross BlueShield, 2004) (Pneumaticos, 2006) (Boswell, 2007) (Boswell2, 2007) A recent meta-analysis concluded that there is insufficient evidence to evaluate validity or utility of diagnostic selective nerve root block, intra-articular facet joint block, medial branch block, or sacroiliac joint block as diagnostic procedures for low back pain with or without radiculopathy. (Chou2, 2009) This study suggests that proceeding to radiofrequency denervation without a diagnostic block is the most cost-effective treatment paradigm, but does not result in the best pain outcomes. (Cohen, 2010)

Facet joint medial branch blocks (therapeutic injections)

Not recommended except as a diagnostic tool. Minimal evidence for treatment.

See also Facet joint intra-articular injections (therapeutic blocks).

Pain Physician 2005: In 2005, *Pain Physician* published an article that stated that there was moderate evidence for the use of lumbar medial branch blocks for the treatment of chronic lumbar spinal pain. (Boswell, 2005) This was supported by one study. (Manchikanti, 2001) Patients either received a local anesthetic or a local anesthetic with methyl prednisolone. All blocks included Sarapin. Sixty percent of the patients overall underwent seven or more procedures over the 2.5-year study period (8.4 ± 0.31 over 13 to 32 months). There were more procedures recorded for the group that received corticosteroids that those that did not (301 vs. 210, respectively). ["Moderate evidence" is a definition of the quality of evidence to support a treatment outcome according to *Pain Physician*.] The average relief per procedure was 11.9 ± 3.7 weeks.

Pain Physician 2007: This review included an additional randomized controlled trial. (Manchikanti2, 2007) Controlled blocks with local anesthetic were used for the diagnosis (80% reduction of pain required). Four study groups were assigned with 15 patients in each group: (1) bupivacaine only; (2) bupivacaine plus Sarapin; (3) bupivacaine plus steroid; and (4) bupivacaine, steroid and Sarapin. There was no placebo group. Doses of 1-2ml were utilized. The average number of treatments was 3.7 and there was no significant difference in number of procedures noted between the steroid and non-steroid group. Long-term improvement was only thought to be possible with repeat interventions. All groups were significantly improved from baseline (a final Numeric Rating Scale score in a range from 3.5 to 3.9 for each group). Significant improvement occurred in the Oswestry score from baseline in all groups, but there was also no significant difference between the groups. There was no significant difference in opioid intake or employment status. There was no explanation posited of why there was no difference in results between the steroid and non-steroid groups. This study was considered positive for both short- and long-term relief, although, as noted, repeated injections were required for a long-term effect. Based on the inclusion of this study the overall conclusion was changed to suggest that the evidence for therapeutic medial branch blocks was moderate for both short- and long-term pain relief. (Boswell2, 2007)

Psychiatric comorbidity is associated with substantially diminished pain relief after a medial branch block injection performed with steroid at one-month follow-up. These findings illustrate the importance of assessing comorbid psychopathology as part of a spine care evaluation. (Wasan, 2009) The use of the blocks for diagnostic purposes is discussed in Facet joint diagnostic blocks (injections). The AHRQ comparative effectiveness study on injection therapies for LBP concluded that facet joint corticosteroid injections are not effective for presumed facet joint pain. (Chou, 2015)

A DESCRIPTION AND THE SOURCE OF THE SCREENING CRITERIA OR OTHER CLINICAL BASIS USED TO MAKE THE DECISION:		
	MED:	ACOEM- AMERICAN COLLEGE OF OCCUPATIONAL & ENVIRONMENTAL ICINE 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
	D PARA	TEXAS GUIDELINES FOR CHIROPRACTIC QUALITY ASSURANCE & PRACTICE AMETERS
		TEXAS TACADA GUIDELINES
		TMF SCREENING CRITERIA MANUAL
	DESC	PEER REVIEWED NATIONALLY ACCEPTED MEDICAL LITERATURE (PROVIDE ACRIPTION)
		OTHER EVIDENCE BASED, SCIENTIFICALLY VALID, OUTCOME

FOCUSED GUIDELINES (PROVIDE A DESCRIPTION)