

Notice of Independent Review Decision

DATE OF REVIEW: October 30, 2013

IRO CASE #:

DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE

Lumbar Facet MBT Injection 64994, 64495, 77003, 99144

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

This case was reviewed by a physician who holds a board certification in Anesthesiology with sub-specialty in Pain Medicine. The reviewer is licensed and currently practicing in the state of Texas.

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)

INFORMATION PROVIDED TO THE IRO FOR REVIEW

Type of Document Received	Date(s) of Record
Employers First Report of Injury or Illness	3/22/2013
Office Note	3/25/ 2013, 26, 27, 28, 4/1/2013, 2, 4, 9, 11, 16, 19, 22, 26, 5/3/2013, 13, 24, 6/7/2013, 14, 21, 7/5/2013, 15, 8/1/2013, 14, 21, 26, 9/12/2013, 19, 23
Texas Workers' Compensation Work Status Report	3/26/2013, 4/2/2013, 9, 11, 20, 26, 5/15/2013, 31, 6/14/2013, 29, 7/15/2013, 8/14/2013, 9/12/2013
NMES TENS Supply Order	3/28/2013
Statement of Medical Necessity	3/28/2013, 4/5/2013, 5/1/2013
X-ray of the Lumbar Spine Report	4/8/2013, 30
MRI of the Lumbar Spine	4/8/2013



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Office Note	4/29/2013, 5/24/2013, 7/1/2013, 15, 8/5/2013, 28, 9/5/2013
Letter of Medical Necessity	4/29/2013
NMES/TENS Supply Order	4/29/2013
Patient Inquiry Data	4/29/2013
Description of Services	4/30/2013, 5/1/2013
Request for Authorization of Reasonable and Necessary DME	3/28/2013, 4/30/2013, 5/1/2013, 30, 6/28/2013, 7/29/2013, 8/29/2013, 9/23/2013
Statement of Medical Necessity	5/1/2013
Electro-Diagnostic Study Report	5/24/2013
Functional Capacity Evaluation Report	8/10/2013
Office Note	9/23/2013
Health Summary	10/16/2013

EMPLOYEE CLINICAL HISTORY [SUMMARY]:

The patient is a female who sustained an injury on xx/xx/xx. The patient twisted to her right, twisted again and felt pain in her lower back on the right side specifically. The patient sought chiropractic care for her symptoms. X-ray of the lumbar spine revealed mild disc derangement at L3-4 and L5-S1, bony endplate proliferation at L4-5, diffuse mild to moderate facet hypertrophy below L3, densities, postural changes, posttraumatic biomechanical alteration, muscle spasm and articular dysfunction. MRI of the lumbar spine revealed herniation at L5-S1, mild disk derangement and bulging at L3-4, hypertrophy at L4-5, facet joint effusion, hypolordosis and atrophy of lower lumbar L5 paraspinal musculature and fatty filum terminals. The patient was started on physical therapy and pain medications. In April 2013, recommended EMG for right L4-5 and L5-S1 radiculopathy and subsequent ESI to also be considered. EMG was performed on 05/24/2013 and revealed evidence which suggests a right L5 radiculopathy. She had transforaminal epidural injections in July of 2013 administered. On exam of lumbar spine showed mild malpositions with continued moderate pain and muscle spasms. is now requesting lumbar facet MBT injections, which were denied by the carrier. An appeal for the requested service(s) was filed on 9/5/2013 which was again denied on 9/13/2013 with the reviewer stating "while lumbar medial branch blocks may be considered, the lumbar levels of the requested procedure were not specified in the medical reports."

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

The patient sustained an injury on xx/xx/xx complaining of low back pain and right leg pain. MRI on 04/08/2013 showed effusion in facet joints L2-3, L3-4, L4-5, and L5-S1 compatible with active inflammation. Considering the time course, this was an acute injury to the facet joints of a rather extensive nature, involving bilateral joints at 4 levels. MRI

also reported a disc herniation at L5-S1 to the far right possibly pressing on the right S1 nerve root. EMG/NCV on 05/24/2013 showed right L5 radiculopathy.

1. ODG criteria say “limited to patients with low back pain that is non-radicular and at no more than two levels bilaterally.” It is true facet pain does not cause radicular pain, but in this case there is a separate problem – the herniated disc at L5-S1 that pressed on a nerve root. The radicular pain came from the disc and should not negate the presentation of the facet pain.

There is no scientific evidence that indicates facet pain cannot involve more than two levels. As the MRI reported, the patient suffered a four level injury.

2. *Interventional Pain Management* by Steven D. Waldman, second edition p.452-453 says “The patient’s primary symptom is low back pain, either unilateral or bilateral, with tenderness over the facet joints.” The patient on examination on 09/05/2013 exhibited tenderness over right facets L3-4, L4-5, and L5-S1. On 09/23/2013 there is bilateral facet pain. On 07/15/2013 there was paraspinal tenderness.
3. The same reference says “some patients describe sudden onset of pain, usually in association with twisting, bending or rotatory movements.” The patient had a twisting injury when she lifted six gallons of water.
4. I do not agree IV sedation negates the result of medial branch blocks. A successful block can offer pain relief for days, outlasting the IV sedation, which is usually over in a few hours.

In summary, I believe the patient’s injury involves the L5-S1 disc and the facet joints as discussed. She did not respond to conservative treatment and epidural injections. She is still hurting at a VAS of 8-9/10. A trial of medial branch injections is justified under IV sedation.

ODG criteria for 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. 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



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neurotomy procedure itself. (Cohen, 2007) (Bogduk, 2000) (Cohen2, 2007) (Mancchukonda, 2007) (Dreyfuss, 2000) (Manchikanti2, 2003) (Datta, 2009)

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)

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) (Dreyfuss, 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) See also Facet joint pain, signs & symptoms; Facet joint radiofrequency neurotomy; Facet joint medial branch blocks (therapeutic injections); & Facet joint intra-articular injections (therapeutic blocks). Also see Neck Chapter and Pain Chapter.

Criteria for the use of diagnostic blocks for facet “mediated” pain:
Clinical presentation should be consistent with facet joint pain, signs & symptoms.

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.



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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)]

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

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 2½ year study period (8.4 ± 0.31 over 13 to 32 months). There were more procedures recorded for the group that received corticosteroids than 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).

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)**

Interventional Pain Management by Steven D. Waldman, second edition p.452-453