CLAIMS EVAL

Utilization Review and Peer Review Services

DATE OF REVIEW: 2-6-09

IRO CASE #:

DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE

Rhizotomy T11-T12

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

American Boards of Physical Medicine and Rehabilitation and Pain Management

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)

Provide a description of the review outcome that clearly states whether or not medical necessity exists for each of the health care services in dispute.

INFORMATION PROVIDED TO THE IRO FOR REVIEW

- 7-12-07 CT scan of the head and spine.
- 7-31-07 MRI of the lumbar spine.
- MD., office visits from 11-21-07 through 8-27-08 (7 visits).
- 1-11-08 x-rays of the thoracic spine and CT myelogram.
- 5-7-08 x-rays of the thoracic spine and lumbar spine.
- 7-18-08 bilateral T11-T12 costovertebral joint injection.
- 8-15-08 bilateral T11-T12 costovertebral joint injections.
- 11-11-08 MD., performed an Independent Medical Evaluation.
- 11-24-08 an MRI of the lumbar spine.
- 12-12-08 MD., office visit.
- 1-8-09 DO., Utilization Review.
- 1-16-09 MD., Utilization Review.

PATIENT CLINICAL HISTORY [SUMMARY]:

Xx/xx/xx CT scan of the head and spine shows an incidental arachnoid cyst in the right middle cranial fossa. No acute intracranial processes. Mild burst compression fracture of the T12 vertebrae. Distraction of the T11 and T12 spinous processes, representing ligamentous injury.

7-31-07 MRI of the lumbar spine shows subacute compression fracture T12 with 20-30% loss of anterior vertebral body height. The study of the lumbar spine shows normal discs and adequate volume and caliber of the spinal canal and neural foramina.

On 11-21-07, the claimant was evaluated by, MD. It is noted the claimant is a xx-year-old gentleman who reports injury on xx/xx/xx when he had a large amount of weight that fell on him. Since then, he has been having pain in his shoulder, upper back, as well as the mid back area. He complains of pain radiating into the left lower abdominal groin area. He reports that he was taken to the emergency room, diagnosed as having multiple compression fractures from T11, T12 and L1 the worst one at T12 for which Dr. did a vertebroplasty 1 1/2 months after the initial date of injury. It helped some with his

pain but there are still periods whether at work or at home, certain activities will significantly aggravate pain especially on the left side of his thoracolumbar area that radiates into his groin area on the left side with some tingling in his distal leg as well. He is back to work. He does intermittently use a brace for his back. He reports he takes Flexeril and Darvocet or Vicodin when he has a lot of pain; the Vicodin he only takes for severe pain, usually he takes the Darvocet and Flexeril that is written by Dr., his treating physician. The Vicodin has been written through Dr.. On exam, evaluation of his mid back demonstrates exquisite tenderness at the T12 vertebral body, exquisite tenderness in the loft thoracolumbar region. Flexion and extension increases pain in the left thoracolumbar area reproductive of his usual pain. There is no evidence, of any sensory deficit or motor deficits in his flexor, knee extensor, ankles dorsiflexor, or plantar flexors. Reflexes are 2+ and symmetric in the patellar and Achilles tendons. Fabere's testing is negative bilaterally. Right shoulder evaluation demonstrates significant pain with abduction, internal rotation, and external rotation of the shoulder with reproductive pain in the anterior and superior part of his right shoulder. He has exquisite pain on resisted abduction and significant subacromial bursa tenderness with weakness in predominantly shoulder abduction and internal rotation. The evaluator recommended further workup to include CT myelogram of the thoracic spine. The evaluator also recommended a trial of Lyrica 50 mg. The evaluator also recommended an orthopedic evaluation for the right shoulder pain.

A follow-up visit with Dr. on 12-26-07 notes the claimant has continued left-sided radicular pain in the T11-T12 distribution radiating into his left groin. The evaluator recommended a thoracic myelogram study to include the upper lumbar spine. The evaluator suspected a possible nerve root compression on that side since the pain in that area was not relieved with the kyphoplasty procedure. The evaluator also discussed trial of Lyrica. The claimant was given a prescription for 50 mg twice a day starting initially at night to see if that helps with his pain. The evaluator also discussed his right shoulder pain, which he still has pain with especially with any kind of abduction with the right shoulder. This a result of him returning to light duty work and having pain in that area, so we have discussed getting an MRI study of his right shoulder as well. Based on the results of these studies we will make further recommendations for him to either see an orthopedic specialist for his shoulder as well as a possible nerve block in the lumbar region on that left side.

On 1-11-08 x-rays of the thoracic spine shows previous T12 kyphoplasty for anterior compression fracture. A CT myelogram shows previous anterior column fracture of T12 with kyphoplasty. Gentle scoliosis of the thoracic spine. No other fractures identified. There is no central canal or neural foremen stenosis. No significant disc pathology is seen.

On 1-15-08, a follow up visit with Dr. notes the claimant has moderate pain on lumbar and thoracic flexion, exquisite pain on lumbar and thoracic extension in the upper lumbar lower thoracic spine. On exam, the claimant is neurologically intact status post T11-T12 compression fracture with continued low back pain possible posterior element related strain pain in the facet joints. The claimant reports that the Lyrica 50 mg at night

is significantly helping him so will have him increase to using it twice a day. If that helps, he can increase it to 75 mg twice a day and we will give him the prescription for the 75 mg tablets. The claimant was advised to complete his physical therapy since the Lyrica is helping him significantly and I will go and write a prescription for continuance of his physical therapy in the neutral spine bias fashion. The claimant is also been referred to Dr. for an evaluation of his shoulder on the right side. If he is not improved, we may want to evaluate his pain generator with medial branch or facet blocks in the thoracolumbar area.

On 2-25-08, Dr. reported in terms of the left thoracolumbar pain, the evaluator recommended a diagnostic/therapeutic left T11-T12 and L1-L2 facet blocks to see if that helps treating and evaluate his pain response from that. If he does get greater than 80% relief, then we will note that this pain is probably related to the thoracolumbar facets on that left side. The claimant is continued with his light-duty work status for now. If he does get significant .long-term improvement from the thoracic facet blocks and based on the follow-up evaluation, then we will determine MMI status based on the patient's ability to go back to full-duty work if that is possible.

On 5-7-08, x-rays of the thoracic spine shows remote compression deformity within the lower thoracic spine presumably the T12 vertebral body. Dextrosconvex rotatory scoliosis mid thoracic spine. X-rays of the lumbar spine shows remote anterior wedge compression deformity of the T12 vertebral body status post vertebroplasty or kyphoplasty. Kyphotic angulation at T12 worsens with patient flexion. Minimal posterior subluxation of L5 on S1.

An office visit with Dr. on 7-2-08 notes the claimant had his facet joint blocks by Dr. on June 19, 2008. He reports that initially there was no significant relief that he could note from the pain. There is a mild improvement, but on exam today, he still has significant exquisite pain on deep flexion of his thoracolumbar area as well as extension to about 10 degrees of his thoracolumbar area especially with extension and rotation on each side. The evaluator reported he did not think the facet is his pain generator, and the next step may be to consider the possibility of costovertebral related pain. Therefore, the evaluator recommends T11-T12 costovertebral joint injection on both sides. The claimant was also tried on Voltaren gel.

On 7-18-08, the claimant underwent bilateral T11-T12 costovertebral joint injection.

Follow up with Dr. dated 7-30-08 notes the claimant had bilateral T11-T12 costovertebral joint injections done. He has derived more benefit short term and now 2 weeks out from the injection than he did with the facet block. The evaluator suspected that the problem for him has been the costovertebral joints. The claimant also reported that with this he has actually tried to get off the Vicodin and has been fairly successful. The evaluator recommended a second injection at the same levels costovertebral at T11-T12 to see if that would help further.

On 8-15-08, the claimant underwent bilateral T11-T12 costovertebral joint injections.

Follow up visit with Dr. dated 8-27-08 notes the claimant had bilateral T11-T12 costovertebral injections on August 15, 2008. This was a second set. The claimant reports with each injection though he has had significant relief. He is still maintaining some level of relief, but with increased activity, the pain does get aggravated. The evaluator discussed the possibility of a medial branch rhizotomy. In the meantime, he requires no medications, but the evaluator did discuss the possibility of using Lidoderm patches. The claimant will be seen as needed.

On 11-11-08, MD., performed an Independent Medical Evaluation. It was his opinion that the claimant has persistent tightness and chronic thoracolumbar pain as a sequelae of the T12 compression fracture. The claimant will require ongoing maintenance care for his persistent, chronic back pain. This would need to be in the form of office visits every 3 months with maintenance medications. The claimant should be performing an active home exercise program incorporating stretching and thoracolumbar stabilization exercises. The evaluator notes the claimant has already reached MMI, but he will require ongoing maintenance care. The evaluator noted the claimant's current medical treatment including the injections would be considered medically reasonable. Continuation of Naprelan would be reasonable. The evaluator was not quite clear how Lyrica would be effective in this setting. The evaluator recommended reducing the Vicodin use to no more than one to two a day for breakthrough pain. The evaluator did not see the indication for the use of Butalbital. The use of Flexeril would not be warranted in a chronic setting. The evaluator noted the claimant had facet injections with some efficacy. The evaluator recommended reserving facet injections to when he has a flare-up and would limit them to no more than two to three a year as part of his maintenance care. The evaluator noted the claimant was working at light duty and it would be difficult for his to return to his regular duty, which requires heavy lifting.

On 11-24-08, an MRI of the lumbar spine shows the lumbar vertebral bodies and intervertebral discs maintain normal height in signal. There is no central or foraminal stenosis. There is anterior wedging at T12. There is no retropulsion. There is hypointense signal within the mid and anterior vertebral body on all pulse sequences, which may be the result of prior intervention. The lower thoracic cord and conus appear unremarkable.

On 12-12-08, the claimant was evaluated by, MD. The claimant is a very pleasant xx-year-old male who presents to the office today for evaluation of rhizotomy at T11-T12. The claimant reports date of injury xx/xx/xx while employed by xxxx. They were unloading a truck. He states there was a 2000-pound object that fell on top of him. Initially, he was having significant neck, left-sided shoulder, hip, leg, and knee pain in addition to his back pain. He was taken to the emergency room where he was evaluated. X-rays were taken. He reports fractures to T11, T12 and L1. He was kept overnight, released the next day after being braced. He was later seen by Dr. who performed a T12 kyphoplasty in September 2007. He continues to have localized back pain with occasional pain radiating into his legs with prolonged walking. He has been evaluated by Dr. who has ordered T11-T12 costovertebral joint injections. He states that

both of these have provided him with significant benefit. The first injection he reports a preinjection pain level of 10/10, it was immediately reduced to 7/10, and then upon returning home continued to reduce to 3/10. This relief remained for about 2 weeks. He then became a little bit more aggressive with his activities. He has young children and this seem to flare his pain. He once again underwent a second injection with reproduction of his pain relief, this lasting a little bit longer 2-1/2 to 3 weeks, again as he increased his activity, his pain level increased as well. He states that during the time after his injection, lie was able to stop all medications and he was actually able to sleep well for the first time since his injury. He states that he no longer is having symptoms into his leg but the injections have resolved those. He does take Vicodin when his pain is at its worst in addition to Flexeril and Lyrica. His pain is relieved with lying down. He denies weakness. He reports no bowel or bladder dysfunction. He continues to work light duty. On exam, he does have some difficulty in standing from a seated position. He has point tenderness over the thoracolumbar area. Lumbar flexion is to almost 90 degrees. Extension is full and this reproduces his pain. Otherwise, he demonstrates 5/5 motor strength throughout the lower extremities. His reflexes are normal and symmetric. Seated straight leg raising is negative. He does appear to have tight hamstrings. The evaluator reported e claimant was a good candidate for a rhizotomy.

On 1-8-09, , DO., provided an adverse determination for the requested T11-T12 rhizotomy. The evaluator noted that neither ODG nor the literature supports the use of rhizotomy or facet injection in the thoracic spine.

On 1-16-09, MD., provided an adverse determination for the requested rhizotomy at T11-T12. The evaluator reported ODG guidelines render a non-recommendation for thoracic rhizotomy, due to the paucity of favorable studies and relative lack of mobility of the facets in region.

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

BASED ON THE MEDICAL RECORDS PROVIDED, THERE IS NO INDICATION THAT THIS CLAIMANT HAS FACET MEDIATED PAIN. THE CLAIMANT HAD UNDERGONE MEDIAL BRANCH BLOCKS, WITH POOR RESPONSE. ACCORDING TO CURRENT TREATMENT GUIDELINES, FACET RHIZOTOMY IS NOT RECOMMENDED AND CONSIDERED EXPERIMENTAL. ADDITIONALLY, IN ORDER TO PERFORM THIS PROCEDURE, TREATMENT REQUIRES A DIAGNOSIS OF FACET JOINT PAIN USING A MEDIAL BRANCH BLOCK. THEREFORE, BASED ON THE DOCUMENTATION PROVIDED, THE CLAIMANT DID NOT HAVE A POSITIVE MEDIAL BRANCH BLOCK DIAGNOSTIC INJECTION. THEREFORE, PERFORMING A THERAPEUTIC T11-T12 RHIZOTOMY IS NOT EVIDENT.

ODG-TWC, last update 12-31-08 Occupational Disorders of the Low back and Thoracic spine Back – Rhizotomy:

Facet Rhizotomy: Not recommended. No studies. Considered experimental. Under study. Conflicting evidence is available as to the efficacy of this procedure and approval of treatment should be made on a case-by-case basis (only 3 RCTs with one suggesting pain benefit without functional gains, potential benefit if used to reduce narcotics). Studies have not demonstrated improved function. Also called Facet rhizotomy, Radiofrequency medial branch neurotomy, or Radiofrequency ablation (RFA), this is a type of injection procedure in which a heat lesion is created on specific nerves to interrupt pain signals to the brain, with a medial branch neurotomy affecting the nerves carrying pain from the facet joints.
Current research: Multiple placebo-controlled trials have been completed on this topic, but these studies all had potential clinical methodologic flaws including the use of non-controlled diagnostic blocks and potential discrepancies in technique of lesioning from that which is currently recommended

Criteria for use of facet joint radiofrequency neurotomy:
(1) Treatment requires a diagnosis of facet joint pain using a medial branch block as described above. See Facet joint diagnostic blocks (injections).
(2) While repeat neurotomies may be required, they should not occur at an interval of less than 6 months from the first procedure. A neurotomy should not be repeated unless duration of relief from the first procedure is documented for at least 12 weeks at ≥ 50% relief. The current literature does not support that the procedure is successful without sustained pain relief (generally of at least 6 months duration). No more than 3 procedures should be performed in a year's period.
(3) Approval of repeat neurotomies depends on variables such as evidence of adequate diagnostic blocks, documented improvement in VAS score, and documented improvement in function.
(4) No more than two joint levels are to be performed at one time.
(5) If different regions require neural blockade, these should be performed at intervals of no sooner than one week, and preferably 2 weeks for most blocks.
(6) There should be evidence of a formal plan of additional evidence-based conservative care in addition to facet joint therapy.

Facet joint injections thoracic spine: Not recommended. There is limited research on therapeutic blocks or neurotomies in this region, and the latter procedure (neurotomies) are not recommended. Recent publications on the topic of therapeutic facet injections have not addressed the use of this modality for the thoracic region. (Boswell, 2005) (Boswell2, 2005) Pain due to facet joint arthrosis is less common in the thoracic area as there is overall less movement due to the attachment to the rib cage. Injection of the joints in this region also presents technical challenge. A current non-randomized study reports a prevalence of facet joint pain of 42% in patients with chronic thoracic spine pain. This value must be put into perspective with the overall frequency of chronic pain in the cervical, thoracic and lumbar region. In this non-randomized study, 500 patients had 724 blocks. Approximately 10% of the blocks were in the thoracic region, with 35.2% in the cervical region and 54.8% in the lumbar. (Manchikanti, 2004)

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)