

AccuReview
An Independent Review Organization
Phone (903) 749-4271
Fax (888) 492-8305

Notice of Independent Review Decision

DATE OF REVIEW: November 30, 2011

IRO CASE #:

DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE:

Radiofrequency Ablation Facet at L3-4 using Fluoroscopy.

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

This physician is Board Certified Orthopedic Surgeon with over 40 years experience.

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:

02-17-2011: COH on the Job Injury Reference Sheet

02-22 and 24-2011: Physical Therapy Evaluation at Medical Centers

03-04-2011: Orthopedic Consult with MD

03-04-2011: Manuel Muscle and Range of Motion

03-10-2011: MRI Lumbar spine at Memorial MRI and Diagnostic

04-03-2011: X-Ray Lumbar spine reviewed by MD

04-05-2011: Follow up visit with Orthopedic Surgeon, MD

04-13-2011: Pre-Authorization Determination Letter, IMO for an

05-05-2011: Operative Report by M.D.

05-16-2011: Explanation of off work letter from Orthopedic Surgeon, M.D

05-17-2011: Follow up visit with Orthopedic Surgeon, MD

05-24-2011: Pre-Authorization Determination Letter, IMO for Psychosocial Screen to be done on outpatient basis.

06-07-2011: Follow up visit with Orthopedic Surgeon, MD

06-15-2011: Psychosocial Screen by Orthopedic Surgeon, MD

06-15-2011: BHI 2 Enhanced Interpretive Report

06-21-2011: Report of Medical Evaluation at Evaluation Center

07-08-2011: Follow up visit with Orthopedic Surgeon, MD

07-18-2011: Pre-Authorization Determination Letter, IMO for MBB (medial Branch Block)

08-09-2011: Operative Report by MD

08-30-2011: Follow up visit with Orthopedic Surgeon, MD

10-04-2011: Follow up visit with Orthopedic Surgeon, MD

10-18-2011: UR by MD

11-09-2011: UR by MD

PATIENT CLINICAL HISTORY:

Claimant is a female employee of. Claimant reports back was injured on xx/xx/xx while raking asphalt. Claimant has been working for 10 years as an for this company and has not previously had a back problem.

03-04-2011: Orthopedic Consult with MD. Claimant presents with 9/10 lumbar pain radiating to her buttocks and leg. She gets numbness and tingling to the back of her thigh and some tingling to her feet. On exam, claimant had a positive straight leg raises bilaterally; with pain radiating to her posterior knee and calf regions and this also aggravates her back pain bilaterally. Lower extremity motor strength is intact but sensation is diminished on the soles and lateral aspects of both feet. Reflexes are 2+ and symmetric. Impression: Possible herniated nucleus pulposus with radiculopathy.

03-04-2011: Manuel Muscle and Range of Motion testing where performed. Claimant was tested using the JTECH Tracker ROM/System: The exam showed relative weakness greater than 15 percent. Grip strength was 29 percent of normal on the left side.

03-10-2011: MRI Lumbar spine at MRI and Diagnostic. Impression: Multilevel spondylosis of the lumbar spine, but no significant canal stenosis in the lumbar spine was seen. The neural foraminal bilaterally at L3-4 are mildly encroached secondary to osteophytes and annular disc bulging. The exiting L3 nerve root sheaths bilaterally are barely contacted, but not frankly compressed. Report by.

04-03-2011: X-Ray Lumbar spine reviewed by MD was unremarkable.

04-05-2011: Follow up visit with Orthopedic Surgeon, MD. Since last visit, claimant has been participating in physical therapy with temporary relief. Physical Examination is unchanged since last visit. Impression: Disc bulging at L3-4 with radiculitis and neurogenic claudication. Plan: Claimant has exhausted PT, and oral anti-inflammatories with only temporary relief. Recommend a lumbar ESI with post ESI PT.

04-13-2011: Pre-Authorization Determination Letter, IMO for an.

05-05-2011: Operative Report by M.D. ESI was performed and was tolerated well.

05-17-2011: Follow up visit with Orthopedic Surgeon, MD. Claimant stated that unfortunately the injection did not help. PE was unchanged. Plan: Since there does not appear to be significant nerve root compression and lack of improvement with the lumbar ESI, an additional injection would be warranted.

06-07-2011: Follow up visit with Orthopedic Surgeon, MD. Claimant states that since the second ESI performed on 05-05-2011, she had approximately 60-65%

relief and helped with symptoms in her upper extremity and low back. PE was unchanged. Plan: Medications will be renewed and proceed with psychosocial screening.

06-15-2011: Psychosocial Screen by Orthopedic Surgeon, MD. Claimant fell within the average range in all the major and relevant minor scales. Claimant actually tested slightly better than average for dysphoria and self-efficacy. Claimant was worse than average with regard to the intrinsic Job Dissatisfaction subscale and the Entitlement subscaled.

06-15-2011: BHI 2 Enhanced Interpretive Report. Scale Summary, Functional Complaints and Job Dissatisfaction Scale: Moderately High. Sever peak pain was reported, 8/10, which perceives as disabling and intolerable. This pain is not consistent with objective medical findings. Claimant does not have any psychosocial barriers to recovery

06-21-2011: Report of Medical Evaluation at Evaluation Center. After completion of a comprehensive evaluation, the examinee was found to have not reached maximum medical improvement. Dr. evaluated the claimant and felt that she would benefit from additional injections.

07-08-2011: Follow up visit with Orthopedic Surgeon, MD. Plan of Treatment: Claimant did not have any evidence of radiculopathy at this time but does have MRI abnormalities at L3-4 and physical exam findings consistent with facet syndrome. Dr. recommended a diagnostic lumbar medial branch block at L3-4 on the left.

07-18-2011: Pre-Authorization Determination Letter, IMO, for lumbar medial branch block at L3-4 using fluoroscopy.

08-09-2011: Operative Report by MD. Medial branch block at L3-4 using fluoroscopy was performed and claimant tolerated the procedure well.

08-30-2011: Follow up visit with Orthopedic Surgeon, MD. Claimant reported very good results following the injection: however, recently she has noticed more increased pain in her low back. PE: Claimant experiences a positive Kemp sign. Straight leg raises elicited back pain only. Plan: additional PT and additional medial branch block.

10-04-2011: Follow up visit with Orthopedic Surgeon, MD. Unchanged since last visit; no PT was since last visit.

10-18-2011: UR by MD. Rational for Denial: ODG would not support this specific request to be one of medical necessity. The reference indicates that the requested procedure is actually under study.

11-09-2011: UR by MD. Rational for Denial: Studies have not demonstrated improved function and the request are not medically supported. There was no arthropathy documented and claimant has neuroforaminal narrowing at L3-4 with neuroforaminal stenosis due to osteophytes contacting the L3 nerve root sheath bilaterally. Therefore, as there is no facet arthropathy objectified by imaging study, therefore the request is not medically supported.

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

The prior decisions are upheld. Per the ODG: Studies have not demonstrated improved function after having procedure. Claimant was not found to have arthropathy; records note neuroforaminal stenosis due to osteophytes contacting the L3 nerve root bilaterally, therefore the request for treatment is not medically supported.

PER ODG:

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. ([Hooten, 2005](#)) ([van Kleef, 1999](#)) ([Boswell, 2005](#)) ([Leclaire, 2001](#)) ([Van Kleef, 1999](#)) ([Gallagher, 1994](#)) ([van Wijk, 2005](#)) A recent small RCT found that the percutaneous radiofrequency neurotomy treatment group showed statistically significant improvement not only in back and leg pain but also back and hip movement as well as the sacro-iliac joint test. There was significant improvement in quality of life variables, global perception of improvement, and generalized pain. But RF neurotomy was not a total treatment, and it provided relief for only one component of the patients' pain. ([Nath, 2008](#)) *Observational Trials:* One observational trial found 60% of patients received 90% relief at 12 months and 87% had 60% pain relief. The authors used confirmatory blocks with 80% pain relief. ([Dreyfuss, 2000](#)) Clinical audits have reported pain relief in almost 70% of patients at 6 months. ([Gofeld, 2007](#))

Systematic reviews: When compiled into systematic reviews, the evidence has been found to be conflicting for a short-term effect ([Niemisto-Cochrane, 2003](#)) ([Niemisto-Cochrane, 2006](#)) and moderate to strong for a long-term effect when compared to a placebo. ([Geurts, 2001](#)) ([Boswell, 2005](#)) The latter systematic review failed to distinguish results between lumbar and cervical patients. A critical nonsystematic review by Slipman et al. reported "sparse evidence" to support use in the lumbar region ([Slipman, 2003](#)) and the ICSI did not feel the current scientific evidence allowed for a conclusion on the subject. ([ICSI, 2005](#)) Boswell et al have recently published a systematic review that included several new observational studies that came to the conclusion that the evidence for neurotomy was moderate (Level III) for long-term relief of cervical and lumbar facet joint pain. This conclusion was based on the standard techniques used in the United States. ([Boswell2, 2007](#)) Interventional strategies, such as prolotherapy, botulinum toxin injections, radiofrequency denervation, and intradiskal electrothermal therapy, are not supported by convincing, consistent evidence of benefit from randomized trials. ([Chou, 2008](#))

Technique: There are several techniques. ([Gofeld2, 2007](#)) The North American technique uses tangential insertion of a curve-tipped cannula parallel to the nerves. There is a long learning curve and results vary among operators. The European technique relies on radiologic appearance. Potential technical flaws include

inadequate exposure of the tip to the target nerve and generation of a lesion that is too small to ablate the nerve. There is also an Australian technique.

Factors associated with failed treatment: These include increased pain with hyperextension and axial rotation (facet loading), longer duration of pain and disability, significant opioid dependence, and history of back surgery.

Factors associated with success: Pain above the knee (upper leg or groin); paraspinal tenderness. ([Cohen2, 2007](#))

Duration of pain relief: One retrospective analysis has determined that the mean duration of relief is approximately 10-12 months (range 4-19 months). Subsequent procedures may not be as successful (possibly secondary to technical failure or progression of spinal degeneration). ([Schofferman, 2004](#)) In a more recent study 68.4% of patients reported good to excellent pain relief at 6 months and showed consistent results with the above findings. ([Gofeld, 2007](#))

Complications: Potential side effects include painful cutaneous dysesthesias, increased pain due to neuritis or neurogenic inflammation, and cutaneous hyperesthesia. Neuritis is the most frequent complication (5% incidence). ([Boswell, 2005](#)) ([Boswell2, 2007](#)) ([Cohen, 2007](#)) The clinician must be aware of the risk of developing a deafferentation centralized pain syndrome as a complication of this and other neuroablative procedures. This procedure is commonly used to provide a window of pain relief allowing for participation in active therapy. ([Washington, 2005](#)) ([Manchikanti, 2003](#)) See also [Facet joint diagnostic blocks](#) (injections); [Facet joint pain, signs & symptoms](#); [Facet joint medial branch blocks](#) (therapeutic injections); [Facet joint intra-articular injections](#) (therapeutic blocks). Also see [Neck Chapter](#) and [Pain Chapter](#).

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 $\geq 50\%$ 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.

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)