



Medical Review Institute of America, Inc.  
America's External Review Network

DATE OF REVIEW: July 11, 2008  
Amended 08/07/08

IRO Case #:

**Description of the services in dispute:**

ACDF at C5-6

**A description of the qualifications for each physician or other health care provider who reviewed the decision**

The physician who provided this review is a fellow of the American Board of Orthopaedic Surgery. This reviewer is a fellow of the North American Spine Society and the American Academy of Orthopaedic Surgeons. This reviewer has been in active practice since 1990.

**Review Outcome**

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

Upheld.

The proposed ACDF at C5-6 is not medically necessary. It is unclear based upon the historical record that C5-6 is the patient's pain generator. Serial examinations by other providers failed to diagnose any other condition further to find anything greater than a myofascial strain and there is no previous evidence of radiculopathy. The patient has negative electrodiagnostic studies. The sudden development of radicular symptoms in the left upper extremity between the dates of 04/24/08 and 05/13/08 is concerning. Based on this information it is the requested surgery is not medically necessary at this time.

**Information provided to the IRO for review**

RECORDS FROM THE STATE:

1. Confirmation of Receipt of a Request for Review by an IRO, 8 pages

RECORDS RECEIVED FROM THE INSURANCE COMPANY:

1. Denial by physician advisor from, 3 pages
2. Call record, 1 page
3. Letter from dated 5/30/08, 7 pages
4. Peer review report, 11 pages
5. Surgery Reservation Sheet, 5/20/08, 1 page
6. Quick View Print Screens, 1 page
7. Orthopedic Report, 5/13/08, 2 pages
8. Instructional Course Lectures Spine, 15 pages

RECORDS RECEIVED FROM THE PROVIDER:

1. Functional Capacity Evaluation dated 12/03/07, 23 pages
2. EMG/NCV Study of the upper and lower extremities dated 12/20/07, 4 pages
3. Designated Doctor Evaluation dated 01/23/08, 5 pages
4. Medical Records, Dr., 3 pages
5. MRI of the cervical spine dated 03/05/08, 1 page
6. Radiographic Report Left shoulder dated 03/11/08, 1 page
7. Radiographic Report Cervical spine dated 03/11/08, 1 page
8. Radiographic Report lumbar spine dated 03/11/08, 1 page
9. Medical Records, Dr., 6 pages
10. Designated Doctor Evaluation, dated 04/07/08, 4 pages
11. Procedure Report LESI dated 04/18/08, 2 pages
12. DWC Form 69, 2 pages

**Patient clinical history [summary]**

The patient is a xx year old male who is reported to have sustained injuries to his neck and his low back on xx/xx/xx. On this date the patient was sitting in a tractor that was parked when a coworker driving the forklift struck the tractor. This resulted in his body being jerked back and forth.

The first available clinical record is dated 12/03/07. This is a functional capacity evaluation which reports the patient is under the care of , D.C. The patient has received passive therapy and active rehabilitation. The functional capacity evaluation indicates that the patient is capable of sedentary to light medium physical activity. The patient was subsequently referred for Electrodiagnostic studies on 12/20/07. At this time the patient underwent studies of both the upper and lower extremities. There is no evidence of a cervical radiculopathy. There is Electrodiagnostic evidence reported to be consistent a mild lumbar radiculopathy primarily affecting the left L5 nerve root.

A medical evaluation was performed on 01/23/08 by Dr.. Dr. notes the patient's mechanism of injury. He indicates that the patient was initially seen by Dr. , a company doctor who provided the patient oral medications. He is reported to have undergone physical therapy 3 weeks for 11

sessions. He is still getting therapy 3 x a week. He reports neck pain mainly felt in the left side of the neck which is described as sharp, worse with neck movement. This pain radiates to the left shoulder and back, buttocks and down to the feet. He further reports foot numbness with sitting. On physical examination the head and neck are reported to be normal. Cranial testing motor strength sensation and reflexes are normal on both the upper and lower extremities. There is mild restriction of flexion extension of the cervical and lumbar spine. Straight leg raise is negative bilaterally. There is spasm of the paraspinal muscles. The patient is reported to have reduced range of motion in the left shoulder with a positive supraspinatus test on the left. The left elbow has decreased range of motion. There is no limp during examination. The patient's gait velocity was normal. Gait pattern was normal. He is able to heel/toe walk. There is reported to be an MRI of the lumbar spine performed on 11/14/07 which is reported as unremarkable. The patient was subsequently diagnosed with a cervical strain, lumbar radiculopathy, left shoulder strain and paresthesia. Dr. reports that the patient is not at clinical maximum medical improvement.

The patient was referred to Dr. on 02/18/08. The patient presents with a chief complaint of low back pain rated as 8/10. He describes his pain as sharp and constant. He also states that he has left shoulder pain graded as 5/10 and he further has left sided neck pain described as sharp and aggravated by neck movement graded as 6/10. He reports episodic numbness to the buttocks and the bottom of the left foot and midfoot region after standing. On physical examination the patient is 6' tall and weighs 166lbs. Examination of the cervical spine reveals mainly decreased left lateral bending rotational maneuvers and extension. He is noted to have a mild left sided cervical paraspinal muscle tenderness. Spurling's test is negative. The patient was noted to have left sided cervical facet joint pain at C3-4 to C5-6. Examination of the shoulder reveals restricted internal and external rotation, secondary to pain. Flexion was achieved in 160 degrees and extension was achieved at 30. Motor strength in the upper extremities decreased on the left secondary to shoulder pain. Reflexes are 2+ /4 bilaterally. Examination of the lumbar spine reveals mild paraspinal tenderness. Straight leg raise was negative bilaterally and in the sitting and supine position at 90 degrees. Range of motion was mildly decreased in all planes. Motor strength is equal and symmetric. Reflexes are graded as 2+/4. The patient is diagnosed with left shoulder impingement syndrome, left sided cervical pain, probably secondary to facet joints and some lumbar myofascial pain syndrome. The patient was recommended to undergo MRI of the lumbar and cervical spines and referred for functional capacity test.

MRI of the cervical spine was performed on 03/05/08. This study shows mild disc height narrowing at C3-4 through C5-6. There is no posterior protrusion at C2-3 or C3-4. The cord and the neural foramina are intact. At C4-5 there is a 1.0mm posterior disc protrusion with no involvement of the cord or encroachment on the neural foramina. At C5-6 there is a focal 3.0mm disc herniation to the left of midline. The cord is abutted and shows 10% thinning along the left anterior margin. The neural foramina are adequately maintained. At C6-7 there is a 1.0 to 2.0mm posterior protrusion. There is no involvement of the cord or encroachment on the neural foramina. C7-T1 is unremarkable. The patient was subsequently referred to Dr. The record indicates the patient underwent radiographic imaging of the left shoulder, cervical spine and lumbar spine which were all

reported to be unremarkable. At the time of evaluation the patient reports that he sustained injuries to his cervical and lumbar spines and left shoulder. On examination the patient has 2+ symmetrical reflexes in the biceps, triceps, brachioradialis and Achilles. He has decreased lumbar flexion. Lower extremity motor strength is symmetrical. He has diminished sensation along the left L5. Straight leg raise elicits back pain. Upper extremity and motor strength and sensation are also symmetrical. He has increased pain with axial compression of the cervical spine. He has slightly diminished cervical extension as well as flexion. Spurling's sign reproduces axial neck pain. Dr. reports the patient has a disc bulge at L4-5 and L5-S1, a left L5 radiculopathy, a cervical strain with possible disc herniation, and a left shoulder strain.

On 04/07/08 the patient was seen by Dr. for follow-up designated doctor evaluation. At this time the patient reports ongoing low back pain and pain in the left buttock. He reports his neck is not to be hurting very much except when the weather changes it will be stiff and hurting. The patient's physical examination indicates that there is mild restriction of flexion and extension of the cervical spine. There is restricted motion of the left shoulder and left elbow as well as the low back. The patient is reported to be functioning at a medium heavy physical demand level. Dr. recommends that the patient be referred to a work hardening program and he notes that epidural steroid injections may be beneficial.

The patient underwent a lumbar epidural steroid injection on 04/18/08. When seen in follow-up by Dr. on 04/24/08. The epidural is reported to have helped significantly and his pain has decreased. He has been having some leg numbness since the injection but no headaches. He returns with results of a cervical MRI. Dr. reports there is a disc herniation at C5-6 with protrusions at C4-5 and C6-7. On examination the patient is reported to have painful and decreased cervical range of motion. He has increased pain with axial compression. Upper extremity motor strength and sensation are symmetrical. His reflexes are symmetrical. His Spurling's sign is positive for axial pain. Lumbar spine is tender to palpation. He has painful decreased lumbar range of motion, and lower extremity motor strength and sensation are symmetrical. Dr. recommends that the patient undergo post injection rehab for his lumbar spine. He is provided oral medications and he'd like the patient to have a functional capacity evaluation. The patient was seen in follow-up on 05/15/08. At this time the patient's neck pain is reported to be 7/10 and radiates into his left hand causing numbness. The patient has had a cervical MRI which is reported to show a disc herniation. He reviewed the films today. He believes that the primary problem is a disc herniation at C5-6. On examination the patient demonstrates a positive Spurling's sign reproducing left arm pain. He is now reported to have weakness in his wrist extensors and the wrist on the left. He also has some numbness along the left index finger primarily but less so on the thumb and in the middle. His biceps reflexes are 2+ and symmetrical but his brachioradialis reflexes are too weak to elicit bilaterally. His lumbar examination is not significantly changed. Dr. opines that the pathology is clear cut and that the patient would require discectomy and interbody fusion at C5-6. He subsequently submitted for surgery.

On 05/23/08 the request for surgery was reviewed by Dr., a neurosurgeon. Dr. does not certify the

request. He notes that the patient has not undergone any preoperative psychological evaluation to determine the appropriateness for surgical intervention. He further suggests that the patient should undergo a second surgical opinion given the differences in physical examination over the initial consult and subsequent follow-up reports. He notes that the patient's complaints and physical examinations have changed dramatically. As such he recommends an independent second surgical opinion. The determination was appealed and on 05/30/08 the request was reviewed by Dr., an orthopedic spine surgeon. Dr. does not certify the request. He reports that the imaging study does not support the need for fusion and he notes there are no flexion or extension films that demonstrate instability or spondylolisthesis. He indicates that there is no psychological evaluation as recommended by the previous neurosurgical reviewer.

**Analysis and explanation of the decision include clinical basis, findings and conclusions used to support the decision.**

The proposed ACDF at C5-6 is not medically necessary. The submitted clinical records indicate that the patient initially received chiropractic treatment. Records suggest that the patient's primary focus at that time was low back pain. It is noted that the patient is reported to have neck and left shoulder involvement. The patient was later referred for electrodiagnostic studies on 12/20/07. These were performed approximately 6 weeks post date of injury. This study reports evidence of a possible L5 radiculopathy however the upper extremities studies are entirely normal. There is no evidence of cervical radiculopathy at any level with no abnormalities on nerve conduction studies. The patient was seen by a designated doctor. This examination in regards to the neck is remarkable for reduced cervical range of motion. There is no evidence of upper extremity weakness. No sensory deficits. There is evidence of some left sided muscle spasm and tenderness. This physical exam would be consistent with the patient's electrodiagnostic studies. It is noted that the patient subsequently was referred for pain management under Dr. He notes the electrodiagnostic findings and indicates that the patient has decreased cervical range of motion and left lateral bending, rotational maneuvers and extension. He has mild left sided cervical paraspinal tenderness and Spurling's test is negative. He does suggest that the patient had some left sided cervical facet joint pain at C3-4 and C5-6. MRI of the cervical spine was performed on 03/05/08 and this study shows small disc protrusions at C4-5 and C6-7. At C5-6 there is a small 3.0mm posterior disc herniation to the left of midline with some abutment of the cord but the neural foramina are adequately maintained. The patient was subsequently referred to Dr. on 03/11/08. It's noted at this examination the patient has 2+ symmetrical reflexes in the biceps, triceps, brachioradialis and Achilles. Lower extremity motor strength is intact. There is some diminished sensation on the left L5. In regards to the cervical spine there is increased pain with axial compression and there is slightly diminished cervical extension as well as flexion and Spurling's sign produces axial pain. Dr. initial impression was a cervical strain, possible disc herniation. The patient was again seen by Dr. on 04/07/08. The cervical examination remains unchanged from previous evaluation. The focus appears to be the patient's low back. On 04/18/08 the patient underwent lumbar epidural steroid injection and appears to have had significant improvement. On 04/24/08 the patient's physical examination is unchanged. Dr. recommends that the patient have

post injection rehab. He has provided medications and indicates that should his symptoms return that epidural steroid injections to the cervical or lumbar spine would be considered. He recommends that the patient follow-up in 2 months. The patient was seen in follow-up on 05/13/08 and had continued complaints. It is reported that the effects of his injection have worn off. He notes that they have been focusing on the patient's lumbar spine because that is where most of his complaints were coming from. He reports that the patient had decreased cervical range of motion. He has developed an absent brachioradialis reflex on the left and weakened triceps on the left. His biceps reflexes are 2+ and symmetrical. He has a positive Spurling's sign on the left as well as weakness in extension and grip on the left but his sensation is intact. Dr. recommends consideration of operative intervention at C5-6. The patient was seen in follow-up on 05/15/08 and suddenly is known to report to have significant neck pain, left handed numbness. He has some numbness along the left index finger but also on the thumb and middle. Given this sudden change in physical examination I would concur with the previous reviewers that independent medical examination would be required prior to considering an ACDF at C5-6. Additionally the record does not contain any cervical flexion or extension views to document instability. It is unclear based upon the historical record that C5-6 is the patient's pain generator. Serial examinations by other providers failed to diagnose any other condition further to find anything greater than a myofascial strain and there is no previous evidence of radiculopathy. The patient has negative electrodiagnostic studies. The sudden development of radicular symptoms in the left upper extremity between the dates of 04/24/08 and 05/13/08 is concerning. Based on all this information, the requested surgery is not medically necessary at this time.

**A description and the source of the screening criteria or other clinical basis used to make the decision:**

1. The Official Disability Guidelines, 11th edition, The Work Loss Data Institute.
2. The American College of Occupational and Environmental Medicine Guidelines; Chapter 8.
3. S. Terry Canale, MD, Campbell's Operative Orthopedics, 10th edition University of Tennessee-Campbell Clinic, Memphis TN, Le Bonheur Children's Medical Center, Memphis, TN ISBN 0323012485.

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