

# US Resolutions Inc.

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## NOTICE OF INDEPENDENT REVIEW DECISION

**DATE OF REVIEW:** August 10, 2011

**IRO CASE #:**

**DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE:**

Anterior cervical fusion at C4-C6 and bone growth stimulator cervical

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

M.D. Board Certified Orthopedic Surgeon

**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**

**PATIENT CLINICAL HISTORY SUMMARY**

This is a female with a date of injury of xx/xx/xx when she slipped and fell. Diagnosis was herniated nucleus pulposus C4-5, C5-6 and C6-7 and segmental spondylosis at C4-5, C5-6 and C6-7. The claimant has been treated with cervical epidural steroid injections without

sustained relief, medication and physical therapy. Dr. saw the claimant on 03/03/11. Dr. stated that the cervical flexion and extension views showed mild degeneration of the disc height in particular at C4-5, C5-6 and C6-7 with no spondylolisthesis. Dr. stated the claimant's angle change was greater than 11 degrees at C4-5 and C5-6 on flexion and extension. Dr. stated that the MRI showed herniated discs at C4-5 and C5-6 with left sided foraminal narrowing and mild encroachment across the thecal sac and no nerve root impingement. The electromyography from 03/23/11 was normal. On 04/15/11, Dr. stated that the MRI from 03/16/11 showed that C4-5, C5-6 and C6-7 had segmental spondylitic changes with annular bulge indenting the thecal sac. C5-6 and C6-7 had central and foraminal stenosis secondary to annular bulge and spondylitic changes more superior at C5-6.

Dr. stated there were Modic signs at C4-5 indicating instability and cervical spine consisting of flexion and extension x-rays showed mild to moderate spondylitic changes at C5-6 and C6-7 with mild changes at C4-5. Dr. felt there was 3 millimeters of anterior translation of C4 on C5 and irregular uncovertebral joints at C4-5, C5-6 and C6-7. A psychosocial exam was recommended. On 05/19/11, Dr. recommended C4-6 fusion. On 05/31/11, Dr. authored an addendum to the 03/16/11 cervical MRI. Dr. stated it showed slight bony narrowing of the lower portion of both neuroforamen at the C4-5 level foraminal diameter approximately 2.3 millimeter on the left and approximately 2.4 on the right at this level. There was moderately prominent left sided neuroforaminal narrowing at the C5-6 level with a foraminal diameter of approximately 1.2 millimeter at one level. There was slight right-sided neuroforaminal narrowing with diameter of the foramen measuring approximately 2.5 millimeter T5-6 level. Other findings described on the original report were the same. Dr. saw the claimant on 06/04/11. Examination was limited by pain, spasm, and guarding. There were no gross motor or sensory losses. There was mild to moderate paravertebral muscle spasm and upper trapezius spasm with trigger points in the upper trapezius. Dr. recommended a cervical and lumbar discogram.

#### **ANALYSIS AND EXPLANATION OF THE DECISION INCLUDING CLINICAL BASIS, FINDINGS AND CONCLUSIONS USED TO SUPPORT THE DECISION**

The diagnostic testing in this case would certainly suggest left sided compromise at C4-5 and C5-6. Indeed some left sided sensory complaints and left sided Spurling findings have been documented. An epidural steroid was temporarily helpful. However the utility of injections seem to diminish and the more recent injections reportedly do not last long at all. A recent MRI of 03/11 again, revealed narrowing, however EMG studies were negative. The most recent physical examination did not reveal motor or sensory loss. All in all this is a somewhat confusing presentation. The interpretation of her presentation may be somewhat complicated by records which suggest a history of bipolar disorder. Be that as it may, the most recent physical examinations do not reveal motor sensory or reflex loss. The electrodiagnostic of 03/11 do not reveal radiculopathy. If one turns to the Official Disability Guidelines it does not appear that there are recent sensory symptoms. There are no motor reflex or EMG changes. Absent any physical findings and absent any electrodiagnostic findings it would be difficult to correlate the narrowing seen on the imaging studies with anything in specific. Based on all of these factors the Official Disability Guidelines would not appear to be satisfied for medical necessity for the two level cervical surgery proposed. The reviewer finds no medical necessity for Anterior cervical fusion at C4-C6 and bone growth stimulator cervical.

Official Disability Guidelines Treatment in Worker's Comp, 16th edition, 2011 Updates, chapter neck and upper back and bone growth stimulator

Predictors of outcome of ACDF: Predictors of good outcome include non-smoking, a pre-operative lower pain level, soft disc disease, disease in one level, greater segmental kyphosis pre-operatively, radicular pain without additional neck or lumbar pain, short duration of symptoms, younger age, no use of analgesics, and normal ratings on biopsychosocial tests such as the Distress and Risk Assessment Method (DRAM). Predictors of poor outcomes include non-specific neck pain, psychological distress, psychosomatic problems and poor general health. (Peolsson, 2006) (Peolsson, 2003) Patients who smoke have compromised fusion outcomes. (Peolsson, 2008)

Bone growth stimulator under study for cervical spine

Official Disability Guidelines Treatment in Worker's Comp, 16th edition, 2011 Updates, chapter low back

There is conflicting evidence, so case by case recommendations are necessary (some RCTs with efficacy for high risk cases). Some limited evidence exists for improving the fusion rate of spinal fusion surgery in high risk cases (e.g., revision pseudoarthrosis, instability, smoker). (Mooney, 1990) (Marks, 2000) (Akai, 2002) (Simmons, 2004) There is no consistent medical evidence to support or refute use of these devices for improving patient outcomes; there may be a beneficial effect on fusion rates in patients at "high risk", but this has not been convincingly demonstrated. (Resnick, 2005) Also see Fusion for limited number of indications for spinal fusion surgery. See Knee & Leg Chapter for more information on use of Bone-growth stimulators for long bone fractures, where they are recommended for certain conditions

Criteria for use for invasive or non-invasive electrical bone growth stimulators

Either invasive or noninvasive methods of electrical bone growth stimulation may be considered medically necessary as an adjunct to spinal fusion surgery for patients with any of the following risk factors for failed fusion: (1) One or more previous failed spinal fusion(s); (2) Grade III or worse spondylolisthesis; (3) Fusion to be performed at more than one level; (4) Current smoking habit (Note: Other tobacco use such as chewing tobacco is not considered a risk factor); (5) Diabetes, Renal disease, Alcoholism; or (6) Significant osteoporosis which has been demonstrated on radiographs.

**A DESCRIPTION AND THE SOURCE OF THE SCREENING CRITERIA OR OTHER CLINICAL BASIS USED TO MAKE THE DECISION**

ACOEM-AMERICA 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)**