

SENT VIA EMAIL OR FAX ON  
Dec/29/2008

## P-IRO Inc.

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### NOTICE OF INDEPENDENT REVIEW DECISION

**DATE OF REVIEW:** Dec/28/2008

**IRO CASE #:**

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

inpatient lumbar laminectomy, discectomy L4/5, L5/S1, arthrodesis with cages, posterior instrumentation, implant of bone growth stimulator (BGS)at L5/S1 with 2 day LOS

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

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**

OD Guidelines

Lumbar MRI, 05/08/08

Office note, Dr. , 05/12/08

Office note, Dr. 05/14/08

EMG/NCS, Dr. 05/22/08

Office notes, Dr. 05/27/08, 10/14/08

Medical records review, Dr. , 06/11/08

Behavioral Health Assessment, 08/06/08

Peer review, Dr. , 10/27/08

Office note, Dr. , 11/05/08

CT, 11/07/08

Peer reviews, 11/26/08, 12/09/08

**PATIENT CLINICAL HISTORY SUMMARY**

The claimant is a xx year old warehouse worker with an initial lumbar injury on and a second

injury on xx/xx/xx lifting objects weighing approx 75 pounds. Records also indicate a history of intermittent episodes of back pain dating back to 2004. Following the xx/xx/xx injury a lumbar MRI was done on 05/08/08 showing multilevel disc desiccation without significant loss of intervertebral disc height and multilevel disc bulges with a more focal posterior protrusion at L5-S1, which contributed to neuroforaminal narrowing. There was no frank canal stenosis.

The claimant treated with Dr. , chiropractor, and was referred to Dr. for orthopedic evaluation. The claimant complained of low back pain and pain, numbness and tingling into the left lower extremity. He was noted to be 6'4" and 270 pounds. A 05/22/08 EMG/NCS showed nerve conduction study findings of bilateral tibial and lateral peroneal motor neuropathy consistent with right and left S1 radiculopathy and right L5 radiculopathy and EMG findings consistent with bilateral L5 radiculopathy.

On 05/27/08 Dr. evaluated the claimant for back and left leg pain. He indicated that the MRI films revealed L5-S1 non contained disc herniation and L4-5 contained disc herniation. He noted that x-rays performed in August 2007 revealed L5-S1 instability with a retrolisthesis of 1.5 cm in extension. Exam findings included positive spring test at L4-5 and L5-S1, positive sciatic notch tenderness bilaterally although worse on the left, positive Fortin finger test on the left, positive extensor lag, positive flip test bilaterally, positive Lasègue on the left at 45 degrees, contralateral positive straight leg raise on the right at 75 degrees with pain referred to the back and left lower extremity, positive Bragard's on the left, decreased ankle jerk on the left, absent posterior tibial tendon jerks bilaterally, paresthesias in the L5 and S1 nerve root distribution on the left and weakness of gastrocsoleus extensor hallicus longus on the left of -4/5 and weakness of gastrocsoleus on the right at -4/5. The impression was low back pain with herniated nucleus pulposis with left radiculopathy and clinical instability at L5-S1.

A medical record review of 06/11/08 by Dr. documented a psychiatric history of bipolar disorder. Medications included Effexor, Wellbutrin, Lithium, Provigil and hydrocodone. Dr. did not feel there were any new findings on the 05/08/08 MRI compared to the August 2007 MRI. He did not find evidence of a significant lateralizing disc herniation that might be causing nerve root compression. He indicated that the MRI findings were consistent with typical degenerative spondylosis.

A Behavioral Health assessment pre surgical screening was done on 08/06/08 with a diagnosis of pain disorder, bipolar disorder and adjustment disorder with mixed anxiety and depressed mood. The evaluation results indicated that affective symptoms surrounding his current situation remained an issue which affected all areas of functioning and quality of life. At least four sessions of psychotherapy to address symptoms of depression, anxiety, fear avoidance, pain experience and pain perception were recommended prior to surgery.

Dr. saw the claimant on 10/14/08 with back pain and bilateral leg pain worse on the left than on the right. The claimant had stopped smoking. Dr. noted that X-rays of the lumbar spine to include flexion/extension views revealed gross instability at L5-S1 with a retrolisthesis of 1.3 cm in extension which corrected in forward flexion with extension angle measuring 24 degrees, which corrected to 4 degrees in forward flexion for a total change of 20 degrees both indicating clinical instability. X-rays of L4-5 showed extension angle of 15 degrees forward flexion angle 11 degrees for a total change of 4 degrees. Exam findings were essentially unchanged. The diagnosis was HNP L4-5 and L-5S1 with instability and radiculopathy. Dr. recommended decompression and arthrodesis L4-5 and reduction of L5-S1 subluxation and bone growth stimulator.

A peer review of 10/27/08 by Dr. indicated no new injury on xx/xx/xx other than lumbar strain. He felt that conservative treatment for chronic low back pain was reasonable but not related to the reported injury.

Evaluation on 11/05/08 by Dr. documented low back pain at the L5 segment with no radiation. He performed a repeat EMG/NCS that was normal. On exam the claimant had intact sensation L1 through S1 and 5/5 strength bilaterally. Straight leg raise was normal bilaterally. Reflexes were 2+ bilaterally and there was no atrophy.

CT/myelogram on 11/07/08 showed a developmentally small canal at L2-3 and L3-4 and L4-5. At L5-S1 there was a small protrusion with no significant central stenosis or foraminal stenosis. The S1 nerve root sleeves filled symmetrically. There was mild degenerative facet disease. The myelogram showed no extradural filling defects and no nerve root cutoff. The surgery was denied on peer reviews of 11/26/08 and 12/09/08.

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

The requested L4-5 and L5-S1 discectomy, arthrodesis, instrumentation, and bone growth stimulator with two day length of stay is not medically necessary based on review of this medical record.

While this claimant has ongoing back pain and radicular leg complaints, there is an MRI documenting degenerative disc disease at multiple levels, as well as a CT myelogram documenting degenerative changes, but neither one of these tests document significant disc herniation or nerve root abnormality.

There is an EMG which seems to document either tibial/peroneal neuropathy or radiculopathy, although it is a little difficult to determine on review of this report. While his treating physicians have documented L5-S1 structural instability, there is no documentation of an L4-5 structural instability.

There has also been a psychologic evaluation/behavioral health assessment screen which would seem to indicate the need for treatment of depression, anxiety, fear avoidance, pain experience, and pain perception, and does not seem to indicate that this claimant would be a good candidate for surgery.

ODG guidelines document the use of spinal fusion in patients who have proven structural instability, all pain generators have been identified, and a psychosocial screen with confounding issues has been addressed. In this case, it is not clear why an L4-5 fusion is being requested since there is no evidence of instability at that level, and it is also not clear why this claimant has multilevel possible EMG changes without clear evidence of nerve root cutoff or nerve root abnormality on his testing, plus it is not clear that he has had the confounding issues addressed, which were identified on the psychosocial screen.

Therefore, based on review of this medical record, the requested surgical intervention is not medically necessary.

Official Disability Guidelines Treatment in Worker's Comp 2008 Updates, Low Back:

Bone growth stimulator:

Under study. 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. (Kucharzyk, 1999) (Rogozinski, 1996) (Hodges, 2003)

Fusion (spinal)

#### Patient Selection Criteria for Lumbar Spinal Fusion

For chronic low back problems, fusion should not be considered within the first 6 months of symptoms, except for fracture, dislocation or progressive neurologic loss. Indications for spinal fusion may include: (1) Neural Arch Defect - Spondylolytic spondylolisthesis, congenital neural arch hypoplasia. (2) Segmental Instability (objectively demonstrable) - Excessive motion, as in degenerative spondylolisthesis, surgically induced segmental instability and mechanical intervertebral collapse of the motion segment and advanced degenerative changes after surgical discectomy. [For excessive motion criteria, see AMA Guides, 5th Edition, page 384 (relative angular motion greater than 20 degrees). (Andersson, 2000) (Luers, 2007)] (3) Primary Mechanical Back Pain (i.e., pain aggravated by physical activity)/Functional Spinal Unit Failure/Instability, including one or two level segmental failure with progressive degenerative changes, loss of height, disc loading capability. In cases of workers' compensation, patient outcomes related to fusion may have other confounding variables that may affect overall success of the procedure, which should be considered. There is a lack of support for fusion for mechanical low back pain for subjects with failure to participate effectively in active rehab pre-op, total disability over 6 months, active psych diagnosis, and narcotic dependence. [For spinal instability criteria, see AMA Guides, 5th Edition, page 379 (lumbar inter-segmental movement of more than 4.5 mm). (Andersson, 2000)] (4) Revision Surgery for failed previous operation(s) if significant functional gains are anticipated. Revision surgery for purposes of pain relief must be approached with extreme caution due to the less than 50% success rate reported in medical literature. (5) Infection, Tumor, or Deformity of the lumbosacral spine that cause intractable pain, neurological deficit and/or functional disability. (6) After failure of two discectomies on the same disc, fusion may be an option at the time of the third discectomy, which should also meet the ODG criteria. (See ODG Indications for Surgery -- Discectomy.

Pre-Operative Surgical Indications Recommended: Pre-operative clinical surgical indications for spinal fusion should include all of the following: (1) All pain generators are identified and treated; & (2) All physical medicine and manual therapy interventions are completed; & (3) X-rays demonstrating spinal instability and/or myelogram, CT-myelogram, or discography (see discography criteria) & MRI demonstrating disc pathology; & (4) Spine pathology limited to two levels; & (5) Psychosocial screen with confounding issues addressed. (6) For any potential fusion surgery, it is recommended that the injured worker refrain from smoking for at least six weeks prior to surgery and during the period of fusion healing. (Colorado, 2001) (BlueCross BlueShield, 2002)

Milliman Care Guidelines® Inpatient and Surgical Care 12th Edition

#### **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 KNOWLEDGBASE

[ ] 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 ERVIEWED NATIONALLY ACCEPTED MEDICAL LITERATURE (PROVIDE A DESCRIPTION)

OTHER EVIDENCE BASED, SCIENTIFICALLY VALID, OUTCOME FOCUSED GUIDELINES (PROVIDE A DESCRIPTION)