



Specialty Independent Review Organization

Notice of Independent Review Decision

DATE OF REVIEW: 7/11/2011

IRO CASE #:

DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE

The item in dispute is the prospective medical necessity of a laminotomy with decompression nerve root and intraoperative neurophysiology testing (63030 & 95920).

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

The reviewer is a Medical Doctor who is board certified in Orthopedic Surgery. The reviewer has been practicing for greater than 10 years.

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)

The reviewer disagrees with the previous adverse determination regarding the laminectomy with decompression nerve root and intraoperative neurophysiology testing (63030 & 95920).

INFORMATION PROVIDED TO THE IRO FOR REVIEW

PATIENT CLINICAL HISTORY (SUMMARY):

The claimant was injured on xx/xx/xx while strapping a wheelchair to a van. Records reviewed included Attending Physician notes from 4/26/10, 4/19/11, 3/7/11 and prior. On 3/7/11, there were no leg symptoms. On 2/3/11, the Attending Physician differed from the radiologist's opinion of the MRI findings. Ongoing low back pain with radiation into the left leg has been documented, as has constipation and low back pain/sexual dysfunction. There was painful lumbar motion and motor weakness of 4/5 in the left quads and tibialis muscle groups. Sensation was decreased in the left L4 distribution and straight leg raise was positive. Reflexes were normal. Treatment included medication and therapy, along with a selective nerve root block. Prior records included an MRI dated 12/15/10 denoted multi-level lumbar stenosis, both centrally and at the foramen level at L3-4 and L4-5, with additional L5-S1 facet degeneration. Surgical nerve root decompression was felt applicable by the Attending Physician, for the "caudally migrated L3-4 disc." L4 nerve root decompression was felt applicable by the Attending Physician. The Attending Physician letter from 5/6/11 documented the failure of months of non-op. treatment. Records from 5/9/11 documented the temporizing effects post the nerve root block, the ongoing back and leg pain, and, occasional "bladder leaks." The diagnoses have included a disc herniation with caudal migration at L3-4.

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

The Official Disability Guidelines are supportive of the proposed procedure at this time. Clinical and radiographic findings of nerve root impingement on the left at L4 have been adequately documented. The subjective complaints and neurologic examination have actually progressed over a period of months. As per the guidelines, this is a 'red flag' that supports the Attending Physician's request. With the failure of multiple treatments for months, guidelines support the proposed decompression procedure, along with the associated requests for intra-operative monitoring (which is supported and "at the discretion of the surgeon to improve outcomes." The requested treatment is medically necessary.

ODG Lumbar Spine Indications for Surgery -- Discectomy/laminectomy -- Required symptoms/findings; imaging studies; & conservative treatments below:
I. Symptoms/Findings which confirm presence of radiculopathy. Objective findings on examination need to be present. Straight leg raising test, crossed straight leg raising and reflex exams should correlate with symptoms and imaging.

Findings require ONE of the following:

A. L3 nerve root compression, requiring ONE of the following:

1. Severe unilateral quadriceps weakness/mild atrophy
2. Mild-to-moderate unilateral quadriceps weakness
3. Unilateral hip/thigh/knee pain

B. L4 nerve root compression, requiring ONE of the following:

1. Severe unilateral quadriceps/anterior tibialis weakness/mild

atrophy

- 2 to-moderate unilateral quadriceps/anterior tibialis weakness
 - . Mild- 3. Unilateral hip/thigh/knee/medial pain
 - C. L5 nerve root compression, requiring ONE of the following:
 - 1. Severe unilateral foot/toe/dorsiflexor weakness/mild atrophy
 - 2. Mild-to-moderate foot/toe/dorsiflexor weakness
 - 3. Unilateral hip/lateral thigh/knee pain
 - D. S1 nerve root compression, requiring ONE of the following:
 - 1. Severe unilateral foot/toe/plantar flexor/hamstring weakness/atrophy
 - 2. Moderate unilateral foot/toe/plantar flexor/hamstring weakness
 - 3. Unilateral buttock/posterior thigh/calf pain
- (EMGs are optional to obtain unequivocal evidence of radiculopathy but not necessary if radiculopathy is already clinically obvious.)
- II. Imaging Studies, requiring ONE of the following, for concordance between radicular findings on radiologic evaluation and physical exam findings:
- A. Nerve root compression (L3, L4, L5, or S1)
 - B. Lateral disc rupture
 - C. Lateral recess stenosis
- Diagnostic imaging modalities, requiring ONE of the following:
- 1. MR imaging
 - 2. CT scanning
 - 3. Myelography
 - 4. CT myelography & X-Ray
- III. Conservative Treatments, requiring ALL of the following:
- A. Activity modification (not bed rest) after patient education (≥ 2 months)
 - B. Drug therapy, requiring at least ONE of the following:
 - 1. NSAID drug therapy
 - 2. Other analgesic therapy
 - 3. Muscle relaxants
 - 4. Epidural Steroid Injection (ESI)
 - C. Support provider referral, requiring at least ONE of the following (in order of priority):

1. Physical therapy (teach home exercise/stretching)
2. Manual therapy (chiropractor or massage therapist)
3. Psychological screening that could affect surgical outcome
4. Back school (Fisher, 2004)

For average hospital LOS after criteria are met, see Hospital length of stay (LOS).

Intraoperative neurophysiological monitoring (during surgery)

Recommended during spinal or intracranial surgeries when such procedures have a risk of significant complications that can be detected and prevented through use of neurophysiological monitoring. The following types of intraoperative monitoring may be necessary: somatosensory-evoked potentials; brainstem auditory-evoked potentials; EMG of cranial or spinal nerves; EEG; & electrocorticography (ECOG). Intraoperative EMG and nerve conduction velocity monitoring on peripheral nerves during surgery is not recommended.

Intraoperative monitoring is not recommended for intraoperative visual-evoked potentials and motor-evoked potentials. Use of intraoperative SSEP (somatosensory evoked potential) or DSEP (dermatomal sensory evoked potential) monitoring is recommended as an adjunct in those circumstances during instrumented lumbar spinal fusion procedures in which the surgeon desires immediate intraoperative information regarding the potential of a neurological injury. The occurrence of a postoperative neurological deficit is highly correlated with intraoperative changes in these monitoring modalities. An abnormal SSEP or DSEP during surgery, however, often does not correlate with a postoperative neurological injury because of a high false-positive rate. Use of intraoperative evoked EMG (electromyography) recordings is recommended in those circumstances in which the operating surgeon wishes to confirm the lack of a neurological injury during pedicle screw placement. A normal evoked EMG response is highly predictive of the lack of a neurological injury. An abnormal EMG response during the surgical procedure may or may not be associated with a clinically significant injury. (Resnick, 2005) Although high quality evidence supporting the use of monitoring in cervical, thoracic, and lumbar spinal surgeries is lacking, intraoperative neurophysiological monitoring during spine surgery is currently accepted as standard practice for many procedures and should be used at the discretion of the surgeon to improve outcomes of spinal surgery.

(Gonzalez, 2009)

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)