

Maturus Software Technologies Corporation
DBA Matutech, Inc
881 Rock Street
New Braunfels, TX 78130
Phone: 800-929-9078
Fax: 800-570-9544

Notice of Independent Review Decision

March 11, 2014

IRO CASE #:

DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE:

Laminectomy/discectomy bilaterally at L5-S1

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

Certified, American Board of Orthopaedic Surgery

REVIEW OUTCOME:

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

X Upheld (Agree)

Medical documentation **does not support** the medical necessity of the health care services in dispute.

INFORMATION PROVIDED TO THE IRO FOR REVIEW:

- Diagnostic (08/29/13)
- Office visits (09/11/13 – 01/15/14)
- Review (11/23/13)
- Utilization reviews (01/09/14, 01/30/14)

- Utilization reviews (01/09/14, 01/30/14)

ODG criteria have been utilized for the denials.

PATIENT CLINICAL HISTORY [SUMMARY]:

The patient is a male who was involved in a motor vehicle accident on xx/xx/xx. He was driving a truck in which he hit an oncoming bus that crossed in the front of him and hit the front end of the bus.

On August 29, 2013, the patient underwent magnetic resonance imaging (MRI) of the lumbar spine at Imaging for clinical history of lower back pain with bilateral lower extremity numbness. The study showed posterior L5-S1 disc space narrowing, disc dehydration at L5-S1, slightly heterogeneous marrow signal due to fatty replacement, tip of the thecal sac terminating at the S1-S2 level, fatty filum having a maximum diameter of 1 mm and mild disc dehydration at T12-L1. At T12-L1, there was minimal anterior endplate spurring with circumferential annular bulge measuring 1 mm or less. At L2-L3, there was 1 mm posterolateral annular bulge. At L3-L4, there was circumferential annular bulge measuring up to 1.5 mm within the bilateral posterolateral aspect with associated mild-to-moderate bilateral neural foraminal narrowing, the central canal was narrowed measuring 6.5 mm in AP diameter with mild bilateral facet hypertrophy. At L4-L5, circumferential annular bulge measuring up to 1.5 mm within the posterolateral aspect with canal stenosis and mild bilateral facet hypertrophy. There was mild-to-moderate bilateral lateral recess and subarticular narrowing. At L5-S1, there was circumferential disc bulge with 3 mm posterior disc protrusion with posterior central annular tear. The posterior disc protrusion appeared to be in contact with the bilateral traversing S1 nerve roots. There was mild-to-moderate bilateral facet osteoarthritis and hypertrophy. There was moderate bilateral lateral recess and subarticular narrowing. The broad-based disc bulge appeared to be in contact with the bilateral anterior inferior exiting L5 nerve roots. The central canal at this level measured at least 10 mm in AP diameter.

On September 11, 2013, evaluated the patient for bilateral low back and leg pain. The patient had completed 12 sessions of PT with no improvement in his symptoms. He was also utilizing hydrocodone, naproxen and Flexeril with no significant improvement. Examination revealed mild antalgic gait bilaterally. Examination of the lumbar spine revealed tenderness in the lower lumbar from approximately L4 to S1 equally on left and right side, decreased forward flexion, extension, lateral flexion and lateral rotation and positive straight leg raising (SLR) bilaterally inducing posterolateral pain into the legs. Sensory examination showed decreased sensation along the left great than right lateral lower extremity and posterior lower extremity. reviewed MRI and diagnosed lumbar radiculopathy, bilateral, in the L5-S1 distribution, lumbar herniated nucleus pulposus (HNP), multiple levels, at L3-L4, L4-L5 and L5-S1, lumbar stenosis, mild, at L3-L4, multilevel neural foraminal stenosis and lumbar spondylosis/facet arthropathy. He prescribed Medrol Dosepak, Lortab, gabapentin and discussed different treatment options including pain medications, oral steroids, anti-neuropathic medications to improve his symptoms with scheduling of bilateral epidural steroid injection (ESI) at L4-L5 and L5-S1 to improve discogenic radicular symptoms.

On October 16, 2013, noted the patient was status post bilateral L4-L5 and L5-S1 transforaminal ESI on October 3, 2013 with approximately 40% pain relief for three days. His pain was located mostly along the bilateral lower back area with radiation down the posterior legs to the ankle and feet. His pain was described as burning, numbness, dull and stiffness with discomfort. Examination revealed mildly antalgic gait. Examination of the lumbar spine revealed tenderness at approximately L4 to S1 bilaterally, decreased range of motion (ROM), SLR

inducing posterolateral leg pain bilaterally. There was decreased sensation along the left greater than right lateral lower extremity and posterior lower leg. refilled Lortab. The patient opted for evaluation with one of the spine surgeon before proceeding with injections.

On November 18, 2013, noted 80% back pain and 20% bilateral leg pain. The leg pain was intermittent in the bilateral buttock radiating to the posterior thighs, right more severe than the left. The patient had attended therapy, which had provided temporary relief. Examination revealed tenderness in the bilateral paraspinous regions. He had 40 degrees of forward flexion and 5 to 10 degrees of back extension where he had pain with back extension only. There was stretching sensation in the low back with SLR on the right but negative on the left. Sensation to light touch had decreased on the right lateral thigh and shin. There was positive FABERE bilaterally and 4+/5 weakness in bilateral gastroc soleus. diagnosed HNP L5-S1 and lumbar radiculopathy. He recommended microdiscectomy at L5-S1.

On November 23, 2013, performed a designated doctor evaluation (DDE) and opined that the patient had not reached maximum medical improvement (MMI) as the patient had significant pain and poor ROM and was unable to sit and drive bus secondary to pain. Surgeon had offered surgery and the patient was to see him again to finalize plans for surgery.

On December 16, 2013, noted ongoing back and leg pain rated as 7/10 with 100% back pain. Examination findings were unchanged. diagnosed lumbar radiculopathy, bilateral lower extremities and disc displacement L5-S1. recommended surgery.

Per the utilization review dated January 9, 2014, the request for lumbar laminectomy/discectomy bilateral L5-S1 was denied based on the following rationale: *"The request for Lumbar Laminectomy/Discectomy Bilaterally at L5-S1 is not recommended as medically necessary based on the clinical documentation provided for review and current evidence based guidelines. The patient has been followed for ongoing complaints of low back pain radiating intermittently to the lower extremities. Per reports, the patient's primary complaints are of low back pain. Conservative treatment has included prior physical therapy and one epidural steroid injection with minimal benefit. The patient's imaging did demonstrate disc bulging in combination with degenerative disc disease contributing to contact of the existing L5 and traversing S1 nerve roots. On physical exam, the patient demonstrated some sensory loss that was intermittent and very mild weakness at the bilateral gastrocs. Overall, given the minimal findings for symptomatic lumbar radiculopathy and that the patient's primary complaints of low back, it is unclear how the proposed procedures would provide any substantial relief. Without further evidence regarding severe and refractory lumbar radiculopathy at L5-S1, this reviewer would not recommend certification for the request."*

On January 15, 2014, requested reconsideration for previous submitted request for LAMI/Disc L5-S1.

On January 22, 2014, evaluated the patient for follow-up of back pain and leg numbness. There was constant bilateral paraspinous pain, left more than the right. diagnosed HNP L5-S1, lumbar radiculopathy, lumbar strain/sprain and SI joint sprain/strain. appealed for microdiscectomy/laminectomy at L5-S1 bilaterally.

Per the reconsideration review dated January 30, 2014, the appeal for lumbar laminectomy/discectomy at bilateral L5-S1 was denied based on the following rationale: *“The patient is a male who sustained an injury on xx/xx/xx, due to a motor vehicle accident. The patient is diagnosed with lumbar radiculopathy. An appeal request is made for out-patient lumbar laminectomy/discectomy at the bilateral L5-S1. The previous request was denied because of the minimal findings for symptomatic lumbar radiculopathy and it is unclear how the proposed procedures would provide any substantial relief. Lumbar MRI dated August 29, 2013 revealed disc space narrowing with disc dehydration at L5-S1. There is circumferential disc bulge with 3.5 mm posterior central disc protrusion at L5-S1 with associated posterior central annular tear and disc bulge/protrusion which is in slight contact with the bilateral traversing S1 nerve root. There is moderate bilateral L5-S1 lateral recess and sub-articular narrowing with suggestion of impingement of the bilateral exiting L5 nerve roots. Prior treatments include physical therapy with temporary relief and one epidural steroid injection performed on October 3, 2013, with minimal benefit. The updated medicals include a medical report dated December 16, 2013, which states that the patient has back and leg pain. On physical examination of the lumbar spine, there is tenderness to palpation in the bilateral paraspinous regions. He has 40 degrees of forward flexion and 5-10 degrees of back extension with pain. There is positive Straight Leg Raising test bilaterally. Sensation is intact and symmetric in the lower extremities. There is positive Fabere testing bilaterally. There is mild 4+/5 weakness in the bilateral gastroc-soleus. The recent physical examination findings did not show evidence of functional deficits, and severe and refractory lumbar radiculopathy at L5-S1. In agreement with the previous determination, the medical necessity of the request has not been established.”*

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

The ODG criteria for lumbar laminectomy and discectomy are as follows:

ODG 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. Mild-to-moderate unilateral quadriceps/anterior tibialis weakness
 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).

The ODG criteria for the documentation of clinical radiculopathy are as follows:

[Andersson GBJ, Cocchiarella L, American Medical Association. Guides to the Evaluation of Permanent Impairment, Fifth Edition. Hardcover - Dec 15, 2000.](#)

Radiculopathy (page 382-383)

“is defined as significant alteration in the function of a nerve root or nerve roots and is usually caused by pressure on one or several nerve roots. The diagnosis requires a dermatomal distribution of pain, numbness, and/or paresthesias in a dermatomal distribution. A root tension sign is usually positive. The diagnosis of herniated disk must be substantiated by an appropriate finding on an imaging study. The presence of findings on an imaging study in and of itself does not make the diagnosis of radiculopathy. There must also be clinical evidence as described above.”

Electrodiagnostic evidence of acute nerve root pathology (page 382-383)

“includes the presence of multiple positive sharp waves or fibrillation potentials in muscles innervated by one nerve root. However, the quality of the person performing and interpreting the study is critical. Electromyography should be performed only by a licensed physician qualified by reason of education, training, and experience in these procedures. Electromyography does not detect all compressive radiculopathies and cannot determine the cause of the nerve root pathology. On the other hand, electromyography can detect noncompressive radiculopathies, which are not identified by imaging studies.”

Radiculopathy, page 382-383:

Weekly Impairment Evaluation Tip-Radiculopathy

The preferred methodology in the AMA Guides 5th ed. for rating impairment of the spine is the Diagnosis- Related Estimate (DRE). Table 15-3, Criteria for Rating Impairment Due to Lumbar Spine Injury, Table 15-4, Criteria for Rating Impairment Due to Thoracic Spine Injury, and Table 15-6, Criteria for Rating Impairment Due to Cervical Disorders, outline the five applicable categories and impairment ranges based upon historical, physical examination, and other clinical findings. Box 15-1, Definitions of Clinical Findings Used to Place an Individual in a DRE Category, on pages 382-383 contains essential definitions of clinical findings to help assess the proper placement of an examinee in a DRE

category. In our experience, after reviewing thousands of reports over the past years, the diagnosis of Radiculopathy presents one of the more challenging concepts when determining the correct DRE placement. The Guides define Radiculopathy as a "significant alteration in the function of a nerve root or nerve roots and is usually caused by pressure on one or several nerve roots". The most important clinical components required to support the diagnosis of a compressive Radiculopathy include:

- Pain, numbness, and/or paresthesias in a [specific] dermatomal distribution
- An imaging study documenting correlating concordant nerve root pathology
- Associated clinical findings such as loss of relevant reflexes, muscle weakness and/or atrophy of appropriate muscle groups, loss of sensation in the corresponding dermatome(s)

Electrodiagnostic studies are helpful in supporting the diagnosis of a compressive radiculopathy but are not required, and do not substitute for imaging studies.

Impairment Tip Archives at www.impairment.com/tips

Sincerely, Christopher Brigham, MD, FACOEM, FAADEP, CIME

It is not apparent from the documentation provided that there are consistent, objective clinical findings consistent with bilateral S1 radiculopathy, and there is insufficient objective MRI evidence of nerve root compression. The bases for the preauthorization denials on two previous occasions appear to be consistent with the ODG criteria. The fact that the claimant did not respond substantially to the ESIs casts doubt that one or more nerve roots are the major source of symptoms; even more so appreciating that the majority of the claimant's symptoms are axial rather than radicular. Thus, the noncertifications of the requested surgery appear to have been appropriately determined.

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

- x DWC- DIVISION OF WORKERS COMPENSATION POLICIES OR GUIDELINES**
- x ODG- OFFICIAL DISABILITY GUIDELINES & TREATMENT GUIDELINES**