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Notice of Independent Review Decision

**June 26, 2014**

**IRO CASE #:**

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

Caudal L5-S1 ESI

**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:**

**PATIENT CLINICAL HISTORY [SUMMARY]:**

The patient is a male who alleges an injury on xx/xx/xx. The patient tripped on a box where he did some twisting and falling on an outstretched hand and fell onto his left side. He alleges pain in his neck and low back.

**2010:** On May 26, 2010, evaluated the patient for neck and back pain. The patient complained of constant 8/10 pain. He was requesting refills for hydrocodone, Celebrex, Skelaxin and Paxil. The patient reported that the medications helped relieving his neck pain, back pain and depression symptoms. On examination, he had decreased range of motion (ROM) of the cervical spine. There was positive cervical paraspinal muscle tenderness to palpation bilaterally and during ROM of the cervical spine. There was decreased ROM of the lumbar spine. There was positive lumbar paraspinal muscle tenderness to palpation bilaterally and during ROM of the lumbar spine. There was +2/4 deep tendon

reflexes (DTR) equal and symmetrical in the bilateral upper and lower extremities. There was positive neurosensory deficit with a decreased sensation in the left lower extremity from left hip to the left foot. diagnosed neck pain, back pain and depression. recommended continuing opiate reduction by decreasing hydrocodone. The patient was prescribed hydrocodone 10/325 mg, Celebrex 200 mg, Skelaxin 800 mg and Paxil 40 mg. A urine drug screen was performed.

On June 23, 2010, the patient remained unchanged from the previous visit. He was requesting orthopedic surgeon evaluation for possible back surgery. continued his opiate reduction by decreasing hydrocodone from 100 tablets per month to 95 tablets per month. He was recommended to continue current medication management. A urine drug screen was performed. The patient was referred to an orthopedic surgeon per his request.

On July 13, 2010, evaluated the patient for complaints of low back pain with bilateral radicular symptoms. The patient also complained of neck pain. stated that the patient had two prior laminectomy and discectomies done in 1999 and 2000. The patient rated his low back pain at 8/10, leg pain at 7/10, mid back pain at 4/10, neck pain at 5/10 and arm pain at 4/10. He reported that the pain awakened him from sleep. His history was remarkable for gout, anxiety, depression and sexual difficulty and shoulder surgery. The patient was utilizing hydrocodone, Skelaxin, paroxetine and lorazepam. On examination, he had a slight limp on the right. There was some difficulty with heel to toe. He had decreased ROM in the cervical spine and slightly positive Spurling's sign to the left. The strength was 4+/5 on the left side versus right side. diagnosed low back pain due to disc narrowing at the L5-S1 and L4-L5 levels with osteophytes into the canal and possibly pressing upon the dura and neck pain due to unknown etiology at that time. The patient was recommended cervical and lumbar magnetic resonance imaging (MRI). He was prescribed Celebrex and Zanaflex.

An electromyography and nerve conduction studies (EMG/NCS) of the lower extremities was also recommended. X-rays of the cervical spine was unremarkable. The lumbar x-rays showed disc space narrowing at the L4-L5 and L5-S1 level. There were bony osteophytes protruding into the dura from the L4 vertebral body posteriorly.

On July 27, 2010, MRI of the lumbar spine showed a large broad-based disc bulge at L4-L5 with right paracentral disc protrusion effacing the right anterior aspect of the thecal sac. The disc material occupied the inferior aspect of both intervertebral foramen more pronounced on the left than right. At L3-L4, there was relative central canal stenosis secondary to large circumferential disc bulge and hypertrophy of the ligamentum flavum. At L3-L4, there was broad-based disc bulge more pronounced on the right than left effacing the anterior thecal sac. There was disc dehydration of the L2-L3, L3-L4 and L4-L5 intervertebral discs.

On August 10, 2010, Ms. again recommended EMG/NCV of the lower extremity along with the upper extremity.

On December 10, 2010, evaluated the patient for severe pain down the back into his legs. The patient was very frustrated from the pain and weakness. He had 4/5 strength in the right lower extremity with decreased sensation in the L4 and L5 dermatomes. noted that overall the patient's condition had worsened with neurologic deficits, decreased sensation and worsening of pain. recommended surgery to stabilize the L4-L5 segment and decompress the segments and address foraminal stenosis. X-rays performed of the lumbar spine showed slight retrolisthesis at L4-L5.

On December 29, 2010, performed a psychological presurgical evaluation on the patient. On the Beck Depression Inventory II (BDI II), the patient scored 36 placing him in the severe depression and on Beck Anxiety Inventory (BAI) he scored 50 placing him in the severe anxiety. diagnosed chronic pain disorder associated with both psychological features and general medical conditions. cleared him for the recommended surgery. The expected clinical response was good. The prognosis for participating/benefiting from the program was good.

**2011:** On January 7, 2011, evaluated the patient for ongoing issues. The patient rated his pain at 8/10 in intensity. He was requesting medication refills. further made reduction in his opioid medications to 65 tablets per month and recommended continuing his medications. A urine drug screen was performed. The patient was recommended to follow-up as directed.

On March 1, 2011, noted that the patient was denied surgery as there was apparently inconsistency and discrepancy. The patient still continued with pain in his back radiating down the legs. His pain was centered over L4-L5 segment. recommended decompression and fusion of the L4-L5 segment.

On September 20, 2011, evaluated the patient for ongoing complaints of lumbar spine pain. The patient rated the pain at 8/10 and pointed towards his lower back. The pain was radiating in the left thigh and right thigh. He was status post transforaminal test on August 29, 2011. He was utilizing Xanax and Celebrex. On examination, lumbar ROM was lateral flexion 35 degrees, extension 35 degrees, flexion 80 degrees and rotation was full and pain free. There was numbness in the bilateral L4 and L5 distribution. diagnosed annular tear of the lumbar disc and thoracic/lumbosacral neuritis or radiculitis. opined that the patient had failed PT and conservative treatment and met the criteria for surgery. recommended discussing surgical options.

On October 6, 2011, noted that the patient had undergone epidural steroid injection (ESI) that did not help his pain. The patient stated that the pain continued with worsening of his legs. On examination, the patient had 3/4 DTRs on the left side and 1/4 on the right side. He had positive SLR bilaterally, but right worse than left. There was significant tenderness in the lumbar spine at L4-L5. recommended decompression of the L4-L5 segment.

On October 25, 2011, EMG/NCS of the bilateral lower extremities revealed decreased amplitude of the bilateral peroneal motor nerves, which was most likely

due to disuse atrophy, commonly seen in older patients. Active radiculopathy was not identified.

**2012:** On February 7, 2012, noted that the patient continued with persistent low back pain into his legs. X-rays of the lumbar spine showed disc space narrowing significantly seen at the L4-L5 and some at L5-S1. There were some osteophytes projecting posteriorly at the L4-L5. The pedicles were well visualized and he had a normal appearing sacroiliac joint. There was facet arthrosis at L4-L5. recommended decompressive laminectomy at L4-L5.

On March 13, 2012, noted that the patient was scheduled for surgery for 360-degree fusion with decompression at L4-L5.

On March 19, 2012, performed corpectomy at L4-L5, anterior lumbar interbody fusion at L4-L5 using allograft bone with bone marrow aspiration x3, implantation of spinal USA polyetheretherketone (PEEK) interbody cage at L4-L5 and somatosensory evoked potential and electromyogram monitoring nerve root at L2 through S2 bilaterally. Further, performed pedicle screw instrumentation at L4-L5 using spine 360-degree open pedicle screws, bilateral decompressive laminectomy at L4-L5, dural graft using metallic shield, bone marrow aspiration x3 and somatosensory evoked potential and electromyogram monitoring nerve roots from L2-S2 bilaterally.

On April 3, 2012, noted that the patient had quite a bit of pain in his legs bilaterally. The Lyrica that was started helped him, but he still had quite a bit of pain. His examination showed 5/5 strength and positive SLR bilaterally. X-rays of the lumbar spine showed good position of the pedicle screws at the L5 level and the anterior interbody implant was in good position. No subsidence or loosening was seen. prescribed Medrol Dosepak and Celebrex. The dose of Lyrica was increased. recommended considering computerized tomography (CT) myelogram if the symptoms did not improve with medications.

On May 2, 2012, noted the patient was much better and had quite a bit of pain in his legs. He noted that the medications helped, but still had some leg pain. X-rays of the lumbar spine showed implants to be in good position except for on the left side of the L5 it appeared the pedicle screws might be just outside the screw. Anterior implants were in good position. started physical therapy (PT) and refilled the medications.

On June 14, 2012, the patient continued with some pain and prescribed Norco, Celebrex and Zanaflex. recommended starting PT.

On August 11, 2012, the patient was status post 360-degree fusion with decompression at L4-L5. He was attending postoperative PT. The patient was utilizing Lyrica, tizanidine, Arthrotec and Norco. On examination, noted that the patient was sitting comfortably and he was able to stand erect. His gait was balanced. The paravertebral muscles were tender bilaterally. SLR was normal.

diagnosed lumbar spinal stenosis and spondylolisthesis. The patient was recommended x-rays of the lumbar spine and chronic pain management referral.

**2013:** saw the patient on February 5, 2013, and February 6, 2013, for ongoing complaints. refilled medications and recommended CT myelogram.

On March 7, 2013, post-myelogram CT scan showed transitional vertebral anatomy. There were postsurgical changes including anterior and posterior fusion with discectomy at L4-L5. No solid fusion at that time. No hardware complications were evident. There was moderate L3-L4 central stenosis and mild L2-L3 central stenosis and right lateral recess narrowing. There was mild neural foraminal narrowing at multiple levels.

On June 17, 2013, performed removal of pedicle screws instrumentation at L4-L5, exploration of fusion of L4-L5, revision posterior spinal fusion at L4-L5 using allograft bone with bone marrow aspiration x3.

On June 28, 2013, noted that the patient was doing well and he felt that surgery had definitely helped him. The patient had already noticed significant difference and reduction in his pain. recommended starting PT in two weeks.

On September 5, 2013, noted that the patient was still having quite a bit of pain in his lower back. He was utilizing Lyrica, tizanidine, Arthrotec, Norco and Zanaflex. Examination revealed decreased sensation in the L4 dermatome with normal strength. noted that the patient still had no any postoperative PT and complained of pain down the right leg with numbness. The patient also stated that his leg was giving out on him. recommended MRI of the lumbar spine. Norco was prescribed.

On September 24, 2013, MRI of the lumbar spine showed transitional and probably non-mobile S1-S2 disc space. There was a previous anterior fusion at the L5-S1 level. Decompressive laminectomies had been accomplished at this level. There was facet hypertrophy seen. There was no high grade central or foraminal stenosis at this level. There was a partial laminectomy defect on the right L4-L5. There was generalized annular disc bulging without focal disc protrusion. There was facet hypertrophy. The combination of findings reflected at least mild-to-moderate central spinal stenosis without light grade foraminal stenosis. There was also laminectomy defect on the right L3-L4. There was no focal disc protrusion at this level. There was no central or foraminal stenosis. The upper lumbar levels and conus were grossly normal. The S1-S2 disc space was unremarkable.

On November 15, 2013, reviewed the MRI scans. recommended lumbar ESI and PT.

On December 11, 2013, the patient underwent functional capacity evaluation (FCE). The report is incomplete.

**2014:** From February 10, 2014, through February 14, 2014, the patient attended work hardening program (WHP).

On March 4, 2014, evaluated the patient for flare up of back pain. The patient had pain radiating down his legs. The patient was utilizing Lyrica, tizanidine, Arthrotec, Norco, Zanaflex and Celebrex. The patient reported that he was improved from PT and wanted to try something different for his worsening symptoms. felt that the significant stenosis per MRI was contributing to his symptoms. prescribed Celebrex and recommended ESI.

On March 28, 2014, noted ESI was denied. The patient complained that the pain was radiating down both legs along with paresthesias in the bottom of his foot. He had positive SLR reproducing more back and buttock pain in both sides. The strength was 5/5. scheduled the patient for an EMG of the bilateral lower extremities.

On April 11, 2014, EMG of the bilateral lower extremities showed electrodiagnostic evidence of chronic bilateral L5 lumbar radiculopathy of moderate severity.

Per utilization review dated May 12, 2014, the request for caudal L5-S1 ESI was denied with the rationale: *"The guidelines indicate epidural steroid injections would be supported if there is documentation of radiculopathy on physical examination in correlation with imaging studies and/or electrodiagnostic testing. The patient should be unresponsive to lower levels of care. The records reflect electrodiagnostic studies showed a chronic L5 radiculopathy bilaterally. There was no documentation of nerve root impingement on the most recent MRI provided for review. The most recent physical examination documented a positive straight leg raise test with reproduced more back than buttock pain. The records do not reflect the claimant had radiation of pain. Motor strength was 5/5 and there is no documentation of sensory loss in a dermatomal pattern that would correlate with the requested procedure. The request for a caudal epidural steroid injection at L5-S1 is not certified."*

Per a reconsideration review dated June 12, 2014, the request for caudal L5-S1 epidural steroid injection was denied with the following rationale: *"Submitted documentation and review of the claim indicates that this patient was injured on xx/xx/xx, underwent 360 degree lumbar spine fusion on March 19, 2012, and had the hardware removed at L4-L5 with revision posterior spinal fusion at the same level on June 17, 2013. On March 28, 2014, the patient complains of low back pain with some radicular component down both legs and paresthesias in the bottom of the foot. Straight leg raise is positive reproducing more back and buttock pain in both sides. Strength is 5/5. Electro diagnostic studies on April 11, 2014 revealed evidence of chronic moderate bilateral L5 lumbar radiculopathy. MRI on September 24, 2013 notes transitional vertebral anatomy and reveals previous anterior fusion at "L5-S1" with history of decompressive laminectomies and facet hypertrophy, partial laminectomy defect with general disc bulging and facet hypertrophy at "L4-L5" that causes at least mild to moderate trefoil central*

*spinal stenosis, and laminotomy defect at right "L3-L4". Treatment to date has included medication, activity modification, and at least two visits of orientation to a work hardening program. ODG states that the purpose of ESI is to reduce pain and inflammation, thereby facilitating progress in more active treatment programs, reduction of medication use and avoiding surgery, but this treatment alone offers no significant long-term functional benefit. Radiculopathy must be documented with correlated objective findings on examination, imaging studies and/or electro diagnostic testing. The use of epidural steroid injection (ESI) in patients with lumbar spinal stenosis is common, but there is little evidence in the literature to demonstrate its long-term benefit. Despite equivalent baseline status ESIs are associated with significantly less improvement at four years among all patients with spinal stenosis. This systematic review found the data was limited to suggest that ESI is effective in lumbar spinal stenosis. According to the APS/ACP guidelines, ESIs are not for nonspecific low back pain or spinal stenosis. In this case, the claimant presents with nonspecific radicular low back pain and paresthesias in the bottom of the "foot." Straight leg raise is positive, but there are no specific neurologic deficits in the lower extremities. Post-operative MRI reveals mild to moderate trefoil central spinal stenosis at L4-L5 but no specific evidence of nerve root compression. Based upon the clinical findings, documentation, and evidence based medical guidelines, medical necessity of the proposed epidural steroid injection is not supported."*

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

The preauthorization reviewers determined that the requested caudal ESI was not medically reasonable or necessary, based on ODG criteria. This determination appears to be accurate, as the most recent MRI did not reveal any evidence of nerve root compression, and there is no recent documentation of objective clinical exam findings consistent with radiculopathy, per ODG.

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

**ODG- OFFICIAL DISABILITY GUIDELINES & TREATMENT GUIDELINES**