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Notice of Independent Review Decision

Date: April 2, 2013

**IRO CASE #:**

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

Cervical epidural steroid injection (ESI) at C3-C4

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

American Board of Physical Medicine & Rehabilitation/ Pain Medicine

**REVIEW OUTCOME:**

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

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 xx-year-old male who sustained injuries to his neck and low back on xxxxxxxx. The patient was working around heavy equipment. One of the

heavy equipment pieces was coming towards the patient. He moved to keep the equipment from hitting from him and slipped and fell.

**2008 – 2011:** The records start with computerized tomography (CT) scan of the lumbar spine dated xxxxxxxx. The study showed mild bilateral facet degenerative changes at L5-S1, mild central 2-3 mm L5-S1 disc bulge. There were mild bilateral facet hypertrophic changes at L4-L5 and evidence of mild definite bony canal stenosis at L4-L5. There was minimal central 2-mm L4-L5 disc bulge. There were mild bilateral facet degenerative and hypertrophic changes at L3-L4 level. There were mild bony canal stenosis and mild diffuse 2-3 mm L3-L4 disc bulge.

On xxxxxx, x-rays of the cervical spine with lateral flexion and extension views were performed for history of cervical spine surgery and neck pain. The study showed anterior fusion plates and screws extending from C4 to C6 as well as from C7 to T1. There were bony fusion changes extending from C4 to C7. The posterior fusion hardware was present from C4 to C7. There was minimal anterior movement of C3 on C4 with flexion on order of 1 mm. There was similar posterior movement seen at this level with extension. There were small anterior osteophytes noted at this level. The C2-C3 and C3-C4 disc space heights were well maintained. There was evidence of infusion catheter along the posterior aspect of the spinal canal with tips at the C2-C3 level. These appeared to be placed from an inferior approach.

On xxxxxxx, CT scan of the cervical spine with and without IV contrast showed anterior fusion from C4 through T1 and evidence of posterior spinal rods and pedicle screws and a stimulator in place. There was minimal posterior osteophyte related diffusion at C5-C6 and C6-C7.

On xxxxxxx, M.D., performed harvesting of autograft bone through a separate skin and facial incision, application of Mayfield three-point tongs for intraoperative head and neck positioning, removal of segmental spinal instrumentation at C4, C5, C6 and C7 (Medtronic lateral mass screw and rod system), exploration of spinal fusion at C4-C5, C5-C6, C6-C7 and C7-T1; pseudoarthrosis repairs at C7-T1; re-instrumentation of the spine with lateral mass screws to the C7 lateral masses and pedicle screws to the T1 thoracic pedicles and posterior spinal fusion of cervicothoracic junction using autograft bone augmented with a bone morphogenetic protein.

On xxxxxx, MRI of the cervical spine showed obliteration of the C4-C5, C5-C6 and C6-C7 disc spaces suggesting fusion at these levels; at C3-C4, disc protrusion measuring approximately 2-3 mm flattening the thecal sac; at C4-C5, posterior osteophyte formation; at C5-C6, thecal sac appearing capacious aside for osteophyte formation involving the posterior C5 vertebral body; at C6-C7, posterior osteophyte formation involving the C6 vertebral body and slight flattening of the thecal sac, the thecal sac measured approximately 12 to 13 mm. At C7-T1, there was disc space narrowing and endplate osteophyte formation.

On xxxxxx, the patient underwent videonystagmography that showed no evidence of significant central and peripheral vestibular dysfunction. The evaluator recommended no intervention based on these findings. He recommended repeating the tests that were incomplete.

On xxxxxx, , M.D., evaluated the patient for lower back and neck pain. He noted that following the injury the patient went to the emergency room (ER). He complained of pain in lower back and neck with the intensity of 7/10. The pain was described as sharp, shooting and stabbing. The pain radiated to the area and was associated with tingling and numbness. The pain was also associated with muscle spasms and was aggravated by sitting for a long time. Patient's sleep was affected because of pain. Sensory examination showed 50% on the right and 60% on the left on upper arms and forearms, decreased motor strength in biceps and triceps, wrists at 3/5 on the right and 4/5 on the left in biceps, triceps and wrists. Examination of the lower extremities showed 50% sensory and 60% on anterior leg, dorsal foot and plantar. Motor examination showed 3/5 on the right and 4/5 on the left on knee, ankle and toes. Straight leg raising (SLR) test was negative bilaterally. Dr. reviewed the diagnostics and diagnosed cervical disc herniation, cervical radiculitis, lumbar disc herniation/syndrome and radiculalgia, radiculopathy and lumbar radiculitis. He prescribed Lortab, Soma, Elavil, Valium, Zanaflex and naproxen and recommended active and passive therapy three times a week for six weeks.

**2012:** xxxxxx, the patient was evaluated at xxxxx by Dr. for neck/back pain running down the arms and back pain running down into the legs. He noted that the patient had neck injection eight months ago. Dr. prescribed Norco, Zanaflex, Ambien, naproxen and Elavil. He requested for an updated MRI.

On xxxxxx, Dr. noted positive spasm, a positive SLR and decreased ROM. He noted that the patient had surgeries on his neck in 2003, 2005, 2006 and 2009. He recommended continuing Norco, Zanaflex, Elavil and naproxen.

On xxxxx, Dr. xxxx that the patient had an ESI which lasted only for one week. The patient reported that his sleep was not good. Dr. Khan refilled Norco, Zanaflex, Elavil and Ambien and recommended electromyography (EMG).

On xxxxxx, the patient underwent EMG/nerve conduction velocity (NCV) of the lower extremities. The evaluator noted that the patient's onset of symptoms was in 2008. The patient suffered a low back injury and underwent active and passive treatment modalities and two lumbar injections three weeks ago. A prior EMG/NCV was performed on xxxx, by, Sr., M.D., which revealed peroneal nerve neuropathy bilaterally and an evidence of chronic L5 radiculopathy in the right leg. Neurological/orthopedic examination showed decreased sensation over the right L5 and S1 dermatomes. EMG/NCV study revealed evidence of an acute L5 and S1 radiculopathy on the left. There was evidence of chronic L5 radiculopathy on the right and peripheral neuropathy involving the right peroneal motor nerve.

On xxxxx, Dr. evaluated the patient for lower back and neck complaints. He refilled Norco, Zanaflex, Elavil, Ambien and naproxen. He requested for left L5 and S1 selective nerve root injection.

On xxxxxx, Dr. noted lower back and neck complaints. He refilled Norco, Zanaflex, Ambien and naproxen and discontinued Elavil. He recommended obtaining plain films of the cervical spine with flexion and extension views, CT myelogram and bilateral upper extremity EMG/NCV study.

On xxxxx, the patient complained of lower back and neck pain. Dr. noted that the patient had injections to the cervical spine. The discogram was not approved. He noted that the previous injection had lasted three weeks leaving 50% improvement. He opined that the patient needed repeat injection and there were multiple trigger points in the cervical region. The patient had numbness in his hands and feet and decreased sensation in bilateral hands and feet. Dr. xxxx refilled Norco, Zanaflex, Ambien and Mobic and opined that the patient needed Neurontin.

On xxxxxx, the patient complained of neck and lower back radiating down the arms and legs. Dr. refilled Norco, Zanaflex, Ambien and Mobic.

On xxxxx, Dr. noted spasm, positive SLR and decreased ROM. He refilled Norco, Zanaflex, Valium and naproxen and provided a letter of medical necessity for lower back injection.

On xxxxxxx, Dr. noted that the patient was awaiting evaluation by, M.D., an orthopedic spine surgeon. He refilled Norco, Zanaflex, Elavil and Valium and opined that the patient needed lumbosacral and cervical MRI as well as plain films of the cervical and lumbar spine.

On xxxxxx, MRI of the cervical spine showed minimal leftward disc bulge measuring 2 mm at C2-C3 creating mild stenosis of the entrance zone of the left neural exit foramina. There was minimal disc space narrowing with a posterior disc bulge measuring 2 mm at C3-C4 without spinal stenosis. There was evidence of previous anterior discectomy with fusion with unremarkable appearance of the spinal canal and neural exit foramina at C4-C5. There were postsurgical artifacts markedly limiting evaluation of the spinal canal at C5-C6. There was maintenance of the normal segmental alignment of C5 and C6. There were postsurgical changes with artifacts creating mild limitations at C5-C6. There were artifacts limiting evaluation of the central spinal canal and neural exit foramina at C7-T1. However, there was a 2 mm disc bulge.

On xxxxxx, MRI of the lumbar spine showed mild disc space narrowing with a 2-mm disc bulge at L2-L3. There was mild disc space narrowing with broad-based posterior disc bulge measuring 3 to 4 mm creating minimal bilateral foraminal stenosis at L4-L5. There was posterior disc protrusion or herniation measuring approximately 6 mm at L4-L5 creating mild central spinal canal and right lateral recess stenosis. There was posterior central disc protrusion with minimal left

lateralization measuring 3 to 4 mm at L5-S1. There was mild facet arthropathy at L3-L4 to L5-S1.

On xxxxxxx, the patient was evaluated at xxxxx for neck and lower back complaints. He was prescribed Norco, Zanaflex, Elavil and Ambien and was provided a letter of medical necessity for ESI.

**2013:** On xxxxxxx, Dr. provided a letter of medical necessity for lumbar ESI. He noted that the patient had electrodiagnostic evaluation on June 18, 2008, that showed evidence of acute L5-S1 radiculopathy on the left and chronic L5 radiculopathy on the right. There was evidence of a peripheral neuropathy involving the right peroneal motor nerve. Dr. xxxx recommended bilateral lumbar ESI and post-procedure PT three times per week for three to four weeks and a chronic pain management program (CPMP).

On xxxxxxx, the patient was evaluated at xxxx for lower back and neck complaints. The evaluator noted that the patient was using heat and transcutaneous electrical nerve stimulation (TENS) unit. He was status post cervical ESI six months ago. The patient received refill of Norco, Zanaflex, Elavil and Ambien.

Per utilization review dated xxxxxx, a request for lumbar ESI was denied with the following rationale. *“The request for bilateral L5-S1 transforaminal epidural steroid injection is not certified. The guidelines indicate lumbar epidural steroid injections should be performed when true evidence of nerve root impingement is noted on diagnostic imaging and correlates with physical examination findings. Additionally, conservative treatment failure should be documented. The claimant does have evidence of lower extremity radiculopathy including muscular weakness; however, there is no specific documentation indicating the exact etiology, as there is bilateral symmetrical deficit noted on examination. No true evidence of nerve root impingement is noted on the MRI of the lumbar spine from xxxxxx, and documentation of recent conservative treatment failure including oral medications including muscle relaxants, non-steroidal anti-inflammatory medications or recent physical therapy has not been provided in the records reviewed. The records have not documented whether the claimant has had prior epidural steroid injections. Without recent documentation of conservative treatment failure and true evidence of nerve root impingement noted on MRI, the request is not supported”*

On xxxxxxxx, the patient was evaluated at xxxx for neck and lower back complaints. He received refills for Norco, Zanaflex and Elavil.

Per utilization review dated xxxxxxxx, the request for cervical ESI was denied with the following rationale. *“The Official Disability Guidelines Neck and Upper Back outline the criteria for epidural steroid injection which is recommended when radiculopathy is objectively documented on a physical examination and corroborated by imaging studies or electrodiagnostic testing. In this case, there*

*are no dermatomal radicular symptoms to the upper extremities. The claimant's upper extremity neurological examination is normal. The claimant's MRI as outlined above reveals no evidence of neural compression at C3-C4 or any level. On reviewing this case, the criteria are not satisfied as there is not an apparent radiculopathy and as such the requested ESI at C3-C4 cannot be considered medically necessary."*

On xxxxxxx, the appeal for cervical ESI was denied. Dr. reviewed the following treatment history: According to the medical records, the patient sustained an industrial injury on xxxxxxx. He was status post C7-T1 fusion on xxxxxx. He underwent placement of a cervical spinal cord stimulator with subsequent removal on xxxxxx. The patient attended 80 hours of CPMP in 2010. The patient was most recently evaluated by his treating provider on xxxxxxx, at which time he complained of average pain 4/10. Pertinent examination findings demonstrated 2+ reflexes in the upper extremities, intact sensation and 5/5 strength. The request for cervical ESI was denied with the following rationale: "1) *There do not appear to be clinical findings on physical examination consistent with an objective focal neurologic deficit in a dermatomal or myotomal pattern that would cause concern for neural compromise or radiculopathy stemming from the cervical spine. In the absence of radiculopathy, the patient would not be considered an appropriate candidate for this type of interventional pain management procedure. (2) Furthermore, the most recent imaging study of July 16, 2010, did not establish a neural compressive lesion. The references specifically indicate that radiculopathy must be documented by physical examination and corroborated by imaging studies and/or electrodiagnostic testing. This does not appear to be the case for this patient. Additionally, the imaging study would be considered outdated at this juncture. 3. The patient has already participated in a chronic pain management program in 2010. Generally, this type of program is reserved for patients who have already failed all other modes of treatment. As such, additional conservative care/ interventional procedures would not be indicated. 4. Peer to peer discussion took place with Dr. on February 14, 2013, and the case was discussed. Dr. reviewed the records and noted primary axial neck pain right more than left. No radicular referral was noted. No neurological deficits were noted. No evidence of radiculopathy was documented. (ODG TWC 2013 Neck and Upper Back ESI Criteria for the use of Epidural steroid injections, therapeutic); Radiculopathy must be documented by physical examination and corroborated by imaging studios and/or electrodiagnostic testing."*

On xxxxxxxx, the patient was evaluated at xxxx for neck and lower back complaints. The pain was described as aching, throbbing, shooting, stabbing, gnawing, sharp, tender, burning, penetrating, nagging, numb and miserable. They were occasional and continuous and were present in the evening and at nighttime. It was noted that pain gel was denied and cervical ESI was also denied. Examination was positive for decreased range of motion (ROM) and a positive SLR. The sensation in the upper extremities was 100% bilaterally. It was 80% on the right and 90% on the left in the lower extremities. The muscle strength was 5/5 bilaterally in the upper extremities while it was 4/5 bilaterally in

the lower extremities. The reflexes were 2+ bilaterally in the upper extremities while they were 1+ in the lower extremities. The patient received refills of Norco and Zanaflex.

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

According to the ODG, the criteria for an epidural steroid injection is listed:

- 1) Radiculopathy must be documented by physical examination and corroborated by imaging studies and/or electrodiagnostic testing.
- 2) Initially unresponsive to conservative treatment (exercises, physical methods, NSAIDs and muscle relaxants).
- 3) Injections should be performed using fluoroscopy (live x-ray) for guidance.
- 4) If used for diagnostic purposes, a maximum of two injections should be performed. A second block is not recommended if there is inadequate response to the first block. Diagnostic blocks should be at an interval of at least one to two weeks between injections.
- 5) No more than two nerve root levels should be injected using transforaminal blocks.
- 6) No more than one interlaminar level should be injected at one session.
- 7) In the therapeutic phase, repeat blocks should be based on continued objective documented pain and functional improvement, including at least 50% pain relief with associated reduction of medication use for six to eight weeks, with a general recommendation of no more than 4 blocks per region per year.

A physical exam documenting a cervical radiculopathy is absent. The neurological examination was normal as documented, 3/4/2013. The cervical MRI, 10/22/12, revealed minimal changes at the C23 and C34 level of 2mm. Thus, the ODG criteria are not met and the request for a cervical epidural steroid injection is denied.

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

- ODG- OFFICIAL DISABILITY GUIDELINES & TREATMENT GUIDELINES**