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Notice of Independent Review Decision

DATE OF REVIEW: 8/7/09

IRO CASE #:

DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE

Cervical Epidural Steroid Injection C3-C4 and C4-C5

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

Certified by the American Board of Orthopaedic Surgery

REVIEW OUTCOME

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

- Upheld (Agree)
- Overturned (Disagree)
- Partially Overturned (Agree in part/Disagree in part)

Injury date	Claim #	Review Type	ICD-9 DSMV	HCPCS/ NDC	Upheld/ Overturned
		Prospective	7220	62310, 77003	Upheld

INFORMATION PROVIDED TO THE IRO FOR REVIEW

Correspondence throughout appeal process, including first and second level decision letters, reviews, letters and requests for reconsideration, and request for review by an independent review organization.

Physicians' note/evaluations dated 7/21/09, 7/2/09, 6/29/09, 2/27/09

X-ray reports dated 7/2/09

MRI dated 1/8/09

Physician submitted literature

Official Disability Guidelines provided-Neck & Upper Back-Epidural steroid injection

PATIENT CLINICAL HISTORY:

This xx-year-old male sustained an injury on xx/xx/xx, while pulling some pipes in an upward motion and felt an immediate pain to his right shoulder and neck area. The patient was provided with medications and underwent x-rays and referred for an MRI of the neck. MRI of the cervical spine dated 1/8/09 revealed 2 mm annular symmetric bulge of the disc at C5-6 with no neural foraminal narrowing and no central canal stenosis; 2 mm focal disc protrusion at C4-5 without compression upon the cord and no neural foraminal narrowing; mild left neural foraminal narrowing at C3-4 with a 2 mm central disc protrusion which extends to the cord, but no compression of the cord. C2-3, C6-7 and C7-T1 levels were unremarkable. The patient subsequently underwent a course of physical therapy. Consultation of 2/27/09 noted complaints of right shoulder pain and discomfort and neck pain. Medications include Arthrotec and Flexeril. Diagnoses are listed as cervical spine sprain and internal derangement of the right shoulder.

Examination of 6/29/09 reported that the patient sustained only a cervical paraspinal muscle strain. There is no evidence to suggest a diagnosis of a cervical radiculopathy with no evidence of any focal motor weakness, reflex loss or atrophy. The patient was determined to have reached maximum medical improvement with a 0% whole person impairment rating. An addendum note noted that the patient's MRI revealed annular bulges at C3-4, C4-5 and C5-6, and also noted that annular bulges are part of the natural aging process and were not caused by or aggravated by the work-related injury.

Consultation note dated 7/2/09 noted complaints of cervical pain and right shoulder pain. The patient reports numbness and tingling in the right upper extremity and cervical pain which radiates down between his shoulder blades. On physical examination the patient has decreased cervical range of motion. Axial compression reproduces the patient's neck pain. Spurling sign also reproduces neck pain radiating between the patient's shoulder blades. Upper extremity motor strength and sensation are symmetric and deep tendon reflexes are 2+ in the biceps, triceps and brachioradialis. Grip strength is appropriate bilaterally. Right shoulder range of motion is good in all directions. Impression is reported as protrusion C4-5, C3-4, bulge C5-6 and internal derangement of the right shoulder. X-rays of the cervical spine and right shoulder are reported as unremarkable.

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

In the Reviewer's opinion, upon review of the records presented and relevant evidence based guidelines, medical necessity for the proposed cervical epidural steroid injection is not supported. The Reviewer noted that the patient sustained a cervical strain injury in xx/xx and treatment to date included oral medications and a course of physical therapy. The patient underwent an evaluation on 6/29/09 which reported that the patient sustained only a cervical paraspinal muscle strain. It was noted that there is no evidence of cervical radiculopathy and the patient was placed at maximum medical improvement with a 0% whole person impairment. On physical examination the patient's upper extremity motor strength and sensation are symmetric and deep tendon reflexes are 2+ in the biceps, triceps and brachioradialis. MRI of the cervical spine revealed only annular bulges at C3-4, C4-5 and C5-6. There is no objective evidence of radiculopathy either on physical examination or imaging studies. Current evidence based guidelines require the presence

of an active radiculopathy prior to the performance of a cervical epidural steroid injection.

References:

ODG Neck and Upper Back Chapter

Epidural steroid injection (ESI)	<p>Recommended as an option for treatment of radicular pain (defined as pain in dermatomal distribution with corroborative findings of radiculopathy). See specific criteria for use below. In a recent Cochrane review, there was one study that reported improvement in pain and function at four weeks and also one year in individuals with chronic neck pain with radiation. (Peloso-Cochrane, 2006) (Peloso, 2005) Other reviews have reported moderate short-term and long-term evidence of success in managing cervical radiculopathy with interlaminar ESIs. (Stav, 1993) (Castagnera, 1994) Some have also reported moderate evidence of management of cervical nerve root pain using a transforaminal approach. (Bush, 1996) (Cyteval, 2004) A recent retrospective review of interlaminar cervical ESIs found that approximately two-thirds of patients with symptomatic cervical radiculopathy from disc herniation were able to avoid surgery for up to 1 year with treatment. Success rate was improved with earlier injection (< 100 days from diagnosis). (Lin, 2006) There have been recent case reports of cerebellar infarct and brainstem herniation as well as spinal cord infarction after cervical transforaminal injection. (Beckman, 2006) (Ludwig, 2005) Quadriparesis with a cervical ESI at C6-7 has also been noted (Bose, 2005) and the American Society of Anesthesiologists Closed Claims Project database revealed 9 deaths or cases of brain injury after cervical ESI (1970-1999). (Fitzgibbon, 2004) These reports were in contrast to a retrospective review of 1,036 injections that showed that there were no catastrophic complications with the procedure. (Ma, 2005) The American Academy of Neurology recently concluded that epidural steroid injections may lead to an improvement in radicular lumbosacral pain between 2 and 6 weeks following the injection, but they do not affect impairment of function or the need for surgery and do not provide long-term pain relief beyond 3 months, and there is insufficient evidence to make any recommendation for the use of epidural steroid injections to treat radicular cervical pain. (Armon, 2007) There is evidence for short-term symptomatic improvement of radicular symptoms with epidural or selective root injections with corticosteroids, but these treatments did not appear to decrease the rate of open surgery. (Haldeman, 2008) See the Low Back Chapter for more information and references.</p> <p>Criteria for the use of Epidural steroid injections, therapeutic:</p> <p><i>Note: The purpose of ESI is to reduce pain and inflammation, thereby facilitating progress in more active treatment programs, and avoiding surgery, but this treatment alone offers no significant long-term functional benefit.</i></p> <ol style="list-style-type: none">(1) Radiculopathy must be documented by physical examination <u>and</u> 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 only be offered if there is at least 50% pain relief for six to eight weeks, with a general recommendation of no more than 4 blocks per region per year.(8) Repeat injections should be based on continued objective documented pain and function response.(9) Current research does not support a “series-of-three” injections in either the
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	<p>diagnostic or therapeutic phase. We recommend no more than 2 ESI injections.</p> <p>(10) It is currently not recommended to perform epidural blocks on the same day of treatment as facet blocks or stellate ganglion blocks or sympathetic blocks or trigger point injections as this may lead to improper diagnosis or unnecessary treatment.</p> <p>(11) Cervical and lumbar epidural steroid injection should not be performed on the same day.</p> <p>Criteria for the use of Epidural steroid injections, diagnostic:</p> <p>To determine the level of radicular pain, in cases where diagnostic imaging is ambiguous, including the examples below:</p> <p>(1) To help to evaluate a pain generator when physical signs and symptoms differ from that found on imaging studies;</p> <p>(2) To help to determine pain generators when there is evidence of multi-level nerve root compression;</p> <p>(3) To help to determine pain generators when clinical findings are suggestive of radiculopathy (e.g. dermatomal distribution) but imaging studies are inconclusive;</p> <p>(4) To help to identify the origin of pain in patients who have had previous spinal surgery.</p>
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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)**