



Medical Review Institute of America, Inc.
America's External Review Network

DATE OF REVIEW: February 24, 2009

IRO Case #:

Description of the services in dispute

Items in dispute bilateral C4–C5 transforaminal ESI with fluoroscopy.

A description of the qualifications for each physician or other health care provider who reviewed the decision

The physician who provided this review is board certified by the American Board of Anesthesiology in General Anesthesiology and Pain Medicine. This reviewer is a member of the American Society of Anesthesiologists and the American Society of Regional Anesthesia and Pain Medicine. This reviewer has been in active practice since 2002.

Review Outcome

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

Upheld

Multilevel bilateral cervical tranforaminal injections are in general not indicated and impose unnecessary risks (vertebral arteries) on patients.

Information provided to the IRO for review

Records from the state:

Company request for IRO, 2/4/2009, 3 pgs

Request form for review by independent org, 4 pgs

Pre-auth review summary, 11/19/2008, 12/11/2008, 1/30/2009, 10 pgs

Records from Dr.:

Evaluation, 9/2/2008 and 11/5/2008, 7 pgs

EMG report, 10/22/2008, 2 pgs

Dr. report of EMG, request for ESI with fluoroscopy, 11/5/2008, 1 pg

Dr., request for coverage of ESI, 1/6/2009, 1 pg

Records from 2/4/2009:

Preauthorization Advisor Review Form, 9/25/2008 and 11/21/2008, 4 pgs

Surgical request, Ortho Group, 11/18/2008, 1 pg

Authorization denial Dr., 12/18/2008, 1 pg
Surgical reconsideration request, Ortho Group, 12/2/2008, 1 pg
Evaluation, Ortho Surg Group, 11/5/2008, 3 pages
Preauthorization Review Summary, 11/25/08, 2/3/2009, 6 pages
Dr., request for coverage of ESI, 1/6/2009, 1 pg
Records From Insurance 2/11/2009:
Description of Services, Services Corp, 1/4/2008, 6/13/2008, 7/3/2008, 8/5/2008, 9/4/2008,
10/4/2008, 12/4/2008 8 pgs
Preauthorization Review Summary, 2/27/2008, 3/13/2008, 4/24/2008, 5/23/2008, 5/28/2008,
6/2/2008, 6/24/2008, 9/22/2008, 28 pgs
History and physical, Dr., 5/5/2008, and 5/28/2008, 6 pgs
Evaluation Center Medical Evaluation, 6/12/2008, 6/17/2008, 10 pgs
Chiropractic request for authorization, 3/18/2008, 6/9/2008, 2 pg
Chiropractic statement of medical necessity, 3/25/2008, 6/2/2008, 6/13/2008 3 pg
TX Dept of Insurance WC form, notice of rehab services, 6/18/2008, 1 pg
Insurance, review request, 6/26/2008, 1 pg
MD, disability determination, 10/30/2008, 11 pgs
Ortho Group, evaluation, 9/23/2008, 3pgs
Functional capacity evaluation, Therapy, 6/17/2008, 14 pgs
Chiropractic Report, 2/15/2008, 1 pg
Chiropractic Progress, 2/11/2008 2/13/2008, 2/14/2008, 2/15/2008, 2/18/2008, 2/19/2008,
2/20/2008, 2/22/2008, 2/25/2008, 2/26/2008, 2/28/2008, 2/29/2008, 3/7/2008, 3/26/2008,
3/28/2008, 4/9/2008, 8/6/2008, 8/11/2008, 8/13/2008, 8/15/2008, 8/20/2008,
8/27/2008, 34 pgs
Chiropractic Supply Order, 3/24/2008, 1 pg
Dr., Physical Performance Evaluation, 4/6/2008, 26 pgs
Employer's First Report of Injury, xx/xx/xx, 1 pg
Surg Group Work Status Report, 9/23/2008, 1 pg
Surg Group, request for coverage, 1/19/2009 1 pg
Evaluation report, 6/17/2008, 3 pgs
Chiropractic weekly home exercise program 4/14-4/18/2008, 4/21-4/25/2008, 4/28-5/2/2008,
6 pgs
Imaging Center MRI Lumbar, 2/27/2008, 3/14/2008, 2 pgs
Dr. progress notes, 1/21/2008, 1/24/2008, 1/28/2008, 2/1/2008, 2/4/2008, 2/11/2008, 6 pgs
evaluation, 1/24/2008, 1/28/2008, 1/30/2008, 2/1/2008, 2/6/2008, 2/4/2008, 2/8/2008, 16
pgs
HICFA Form, Claims Center, 6/9/2008, 1 pg
TX Worker's Comp Status Report, 1/24/2008, 2/1/2008, 2/4/2008, 2/11/2008, 4/7/2008,
4/21/2008, 5/21/2008, 6/12/2008, 6/18/2008, 6/20/2008, 7/18/2008, 8/15/2008, 21 pgs
Patient clinical history [summary]
The claimant is a xx-year-old woman who sustained a cervical injury following a car accident on
xx/xx/xx. She has been extensively evaluated and received chiropractic treatments, physical

therapy, TENS unit and various pain medications and muscle relaxants. The pain is in her cervical and shoulder areas, with inconsistent pain in her upper extremities. The claimant has been examined by multiple providers, but the most thorough and meaningful evaluation and examination are documented in Dr. note dated 10/30/08. There was a consistent decrease in the cervical left-sided rotation and all other ranges of motions were within normal limits. Spurling's test was negative. The report of cervical spine MRI on 03/14/08 was unremarkable, with small central disc protrusion at C3-4 and very minimal bulges at C4-5 and C5-6. The report of EMG was normal. The listed diagnoses were cervicalgia, cervical radiculopathy and cervical disc degeneration. Dr. initially requested authorization for bilateral C3-4, C4-5 and C5-6 transforaminal cervical epidural steroid injections (ESI's) and later he reduced the request to bilateral C4-5 transforaminal ESI's. The requests have been declined because radiculopathy could not be substantiated.

Analysis and explanation of the decision include clinical basis, findings and conclusions used to support the decision.

The submitted records were extensively reviewed. Based on history of injury, clinical presentation, physical examination, imaging and electrodiagnostic studies, the diagnosis of cervical strain made by Dr. is most plausible. Apart from a mention of an inconsistent pain radiating to the left thumb and index finger, there has been no radicular symptoms. The radiation to the left thumb and index finger was inconsistent (not present at this time) and the involvement of left C6 nerve root is not confirmed by physical exam, imaging studies or EMG. This isolated symptom does not justify bilateral C4-5 TFESI. There is no evidence of cervical radiculopathy at C4-5.

Dr. is concerned about the violation of medical ethics, as multiple reviews denied his suggested treatments. He states that EMG lacks sensitivity and specificity for the diagnosis of radiculopathy. He states that the EMG has low diagnostic yield for this claimant's presentation and the ethical basis of ordering this painful test, which would not affect this patient's treatment is questioned.

Also, multilevel bilateral cervical tranforaminal injections are in general not indicated, impose unnecessary risks (vertebral arteries) on patients and may indicate a highly questionable practice. In the cervical spine, a single midline interlaminar ESI is much safer and usually covers both sides at multiple levels.

A description and the source of the screening criteria or other clinical basis used to make the decision:

Criteria for the use of Epidural steroid injections:

Note: The purpose of ESI is to reduce pain and inflammation, restoring range of motion and thereby facilitating progress in more active treatment programs, and avoiding surgery, but this treatment alone offers no significant long-term functional benefit.

- 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 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 diagnostic or therapeutic phase. We recommend no more than 2 ESI injections.

ODG –TWC, ODG Treatment, Integrated Treatment/Disability Duration Guidelines, Neck and Upper Back (Acute & Chronic), Epidural steroid injection (ESI)

Peloso PM, Gross AR, Haines TA, Trinh K, Goldsmith CH, Aker P. Medicinal and injection therapies for mechanical neck disorders: a cochrane systematic review. *J Rheumatol*. 2006 May;33(5): 957–67.

Stav A, Ovadia L, Sternberg A, Kaadan M, Weksler N. Cervical epidural steroid injection for cervicobrachialgia. *Acta Anaesthesiol Scand*. 1993 Aug;37(6): 562–6.

Castagnera L, Maurette P, Pointillart V, Vital JM, Erny P, Senegas J. Long-term results of cervical epidural steroid injection with and without morphine in chronic cervical radicular pain. *Pain*. 1994 Aug;58(2): 239–43.

Bush K, Hillier S. Outcome of cervical radiculopathy treated with periradicular/epidural corticosteroid injections: a prospective study with independent clinical review. *Eur Spine J*. 1996;5(5): 319–25.

Cyteval C, Thomas E, Decoux E, Sarrabere MP, Cottin A, Blotman F, Taourel P. Cervical radiculopathy: open study on percutaneous periradicular foraminal steroid infiltration performed under CT control in 30 patients. *AJNR Am J Neuroradiol*. 2004 Mar;25(3): 441–5.

Lin EL, Lieu V, Halevi L, Shamie AN, Wang JC. Cervical epidural steroid injections for symptomatic disc herniations. *J Spinal Disord Tech*. 2006 May;19(3): 183–6.

Beckman WA, Mendez RJ, Paine GF, Mazzilli MA. Cerebellar herniation after cervical transforaminal epidural injection. *Reg Anesth Pain Med*. 2006 May-Jun;31(3): 282–5.

Ludwig MA, Burns SP. Spinal cord infarction following cervical transforaminal epidural injection: a case report. *Spine*. 2005 May 15;30(10): E266-8.

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