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DATE OF REVIEW: FEBRUARY 25, 2008

IRO CASE #:

DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE

Cervical discogram (62291)

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

- Board Certified in Orthopaedic Surgery
- Fellow, American Academy of Orthopaedic Surgeons
- Licensed to Practice Medicine in State of Texas

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 discogram.

ODG guidelines have been utilized for the denials.

INFORMATION PROVIDED TO THE IRO FOR REVIEW

- Office notes (10/02/07 – 12/12/07)
- Diagnostics (10/29/07)
- Utilization reviews (01/08/08 – 01/25/08)

M.D.

- Office notes (11/12/07 – 12/12/07)
- Diagnostics (10/29/07)

PATIENT CLINICAL HISTORY [SUMMARY]:

The patient is a xx-year-old female who was injured on xx/xx/xx. She developed neck pain when she was hit by a dolly on her chin.

In October 2007, M.D., evaluated the patient for bilateral hand numbness and cervical and left shoulder pain. She was unable to take any medications due to non-tolerance and headaches. She had undergone left shoulder arthroscopic debridement and subacromial decompression with acromioplasty and coracoacromial ligament release on November 11, 2003. Dr. assessed cervical radiculopathy and possible mechanical internal derangement of the left temporomandibular joint. He prescribed Lyrica. Electromyography/nerve conduction velocity (EMG/NCV) study revealed: (1) Right and left carpal tunnel syndrome (CTS). (2) Right median and left ulnar neuropathy. (3) Right and left cubital tunnel syndrome. (4) Right and left C5-C6, C7-C8, and T1 radiculopathy. Her history was significant for bilateral carpal tunnel surgery in 2001. Magnetic resonance imaging (MRI) of the cervical spine revealed slight increase in desiccation and disc bulging at C4-C5 and C5-C6 as compared with the 2006 examination.

M.D., noted the following: *The neck pain had been constant without any change after the injury. Physical therapy (PT) did not help her. She had two prior epidural injections each giving 50% relief of the neck pain for two hours with no change in the arm symptoms.* History was significant for left rotator cuff repair, ganglion cyst removal, and subdural hematoma. Medications were Requip, Limbitrol, clonazepam, and Lyrica. X-rays of the cervical spine were normal. Dr. assessed cervical radiculopathy, bilateral CTS, bilateral ulnar nerve entrapment syndrome, and axonal neuropathy and recommended neck stabilization program and cervical discogram to evaluate discogenic origin of the pain. He also recommended bilateral carpal tunnel release (CTR) as well as ulnar nerve transposition.

In December, Dr. noted radicular complaints in both arms, left greater than right. On examination, there was guarded range of motion (ROM) of the cervical spine exacerbated by ROM in all directions or positions. There was tenderness over both rhomboids and trapezius muscles. Decreased sensation was noted in the right C5-C6 dermatome. There was decreased strength in the third webspace on the right through the intrinsic muscles. There was hyperreflexia bilaterally of both upper and lower extremities. There was a positive Hoffman's on the right and a positive wrist and elbow Tinel's signs bilaterally. Dr. assessed cervical disc derangement, cervical radiculopathy, cervicgia, bilateral CTS, and bilateral ulnar nerve entrapment syndrome. He recommended cervical discogram prior to suggesting any surgical correction.

The cervical discogram was nonauthorized with the following rationale: *The patient is noted to have sustained an injury in xx/xxxx. The patient is noted to have undergone several discogenic/imaging studies including plain films, cervical MRI, and electromyography (EMG) of the bilateral upper extremities. However, no reports of these studies were submitted for review. The patient is noted to have undergone conservative treatment including PT and cervical epidural steroid injections (ESIs) without significant improvement. The most recent physical examination revealed guarded ROM of the cervical spine with exacerbation of symptoms with movement in all directions. Motor and sensory changes are noted as well as hyperreflexia and positive Hoffman's. There is no*

documentation of a psychosocial assessment. Given the current clinical data, the proposed cervical discogram is not recommended as medically necessary.

An appeal for the reconsideration of the discogram was nonauthorized with the following rationale: *Cervical discography is not medically necessary. There is conflicting evidence on the utility of the results and further research is needed to better delineate its role in evaluating neck pain. There is also concerning evidence that the procedure can produce symptoms in control groups more than a year later.*

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

The role of discography (or provocative discography) remains controversial in the treatment of discogenic pain¹. Multiple studies have failed to demonstrate a correlation between discography data and clinical implications^{2,3,4,5,6}. Furthermore, discography is not recommended in the diagnostic evaluation of patients with suspected cervical myelopathy or radiculopathy¹. An appropriate history and physical examination augmented with plain radiographs, MRI, and/or EMG and nerve conduction studies are the standard of care in evaluating patients with Ms. medical complaints¹. Based on the medical records available for my review, Ms. has had these studies (radiographs, MRI, EMG/NCV) already performed, and in some cases, performed multiple times. It is my opinion, based on current, peer reviewed orthopaedic and spine surgery literature that a cervical discogram is not indicated in Ms. at this time.

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

1. *Orthopaedic Knowledge Update, 9th Edition*. American Academy of Orthopaedic Surgeons (2008): 541-549 and 557-558.
2. Buirski G, Silberstein M: The symptomatic lumbar disc in patients with low-back pain: Magnetic resonance imaging appearances in both symptomatic and control population. *Spine* 1993;18:1808-1811
3. Carragee EJ, Barcohana B, Alamin T, van den Haak E: Prospective controlled study of the development of lower back pain in previously asymptomatic subjects undergoing experimental discography. *Spine* 2004; 29:1112-1117
4. Carragee EJ, Lincoln T, Parmar VS, et al: A gold standard evaluation of the "discogenic pain" diagnosis as determined by provocative discography. *Spine* 2006; 31:2115-2123.
5. Carragee EJ, Chen Y, Tanner CM, Truong T, Lau E, Brito JL: Provocative discography in patients after limited lumbar discectomy: A controlled, randomized study of pain response in symptomatic and asymptomatic subjects. *Spine* 2000; 25:3065-3071.
6. Carragee EJ, Alamin TF, Carragee JM: Low-pressure positive discography in subjects asymptomatic of significant low back pain illness. *Spine* 2006; 31:505-509.

Answers to questions above are based on ODG guidelines and the experience of a Board Certified Orthopaedic Surgeon, trained in an AGME approved orthopaedic surgery residency. Additionally, Dr. participates in continuing medical education and maintenance of certification parameters outlined by the American Board of Orthopaedic Surgery and the American Academy of Orthopaedic Surgeons. Reference to MMI and determination of impairment, disability, or apportionment is based on the American Medical Association's *Guides to the Evaluation of Permanent Impairment*. Reference to standard of care in the orthopaedic surgery community is based on literature cited in the *Orthopaedic Knowledge Update*, 9th Edition (AAOS, 2008) in addition to any specifically cited journal articles.

- ⊗ **MEDICAL JUDGEMENT, CLINICAL EXPERIENCE AND EXPERTISE IN ACCORDANCE WITH ACCEPTED MEDICAL STANDARDS**
- ⊗ **ODG- OFFICIAL DISABILITY GUIDELINES & TREATMENT GUIDELINES**
- ⊗ **PEER REVIEWED NATIONALLY ACCEPTED MEDICAL LITERATURE (PROVIDE A DESCRIPTION)**
- ⊗ **OTHER EVIDENCE BASED, SCIENTIFICALLY VALID, OUTCOME FOCUSED GUIDELINES (PROVIDE A DESCRIPTION)**