

## Notice of Independent Review Decision

### **DATE OF REVIEW:**

04/04/2008 - CORRECTED SPELLING LAST NAME – 04/07/2008

### **IRO CASE #:**

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

MRI cervical and thoracic spine, epidural steroid injection (ESI) neck, trigger point injections (TPI), epidurography, and right hip x-ray (CPT codes 72141, 62310, 20552, 20553, 99144, 72275, and 77003).

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

Doctor of Osteopathy, Board certified Anesthesiologist, Specializing in Pain Management

### **REVIEW OUTCOME**

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

Provide a description of the review outcome that clearly states whether or not medical necessity exists for each of the health care services in dispute.

**The requested cervical MRI is medically necessary. The requested MRI of the thoracic spine, ESIs, TPIs, epidurography, and right hip x-ray (CPT codes 72141, 62310, 20552, 20553, 99144, 72275, and 77003) are not medically necessary.**

### **PATIENT CLINICAL HISTORY [SUMMARY]:**

The injured individual is a xx year old female with date of injury xx/xx. The injured individual had a C4/5 fusion in 2002 that was extended to C5/6 in 10/2006. She had an MRI before this surgery that showed a protrusion at C3/4 but it was small. She had an electromyogram (EMG) in 05/2007 that was normal but in 11/2007 she complained of right arm numbness for the first time and was noted to have sensory loss in the right C6 dermatome and reduced strength in the right biceps and triceps. None of these complaints or findings had been present before. The attending physician (AP) is requesting a cervical MRI.

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

The cervical MRI is the only part of the request that is warranted because the injured individual has progressive neurologic deficits consisting of reduced sensation in the right C6 dermatome and motor weakness in the right upper arm. These findings were never documented nor complained of before. The thoracic MRI and hip x-ray are not requested or are they necessary as there is no trauma noted to either of these areas. The cervical ESI is not necessary as the AP in 02/2008 stated he was holding off on this and the injection should not even be considered until the MRI is done. The epidurography and TPIs are not medically necessary as the diagnosis has not been established. TPIs are palliative treatment and are not medically necessary due to lack of definitive diagnosis at this point.

**A DESCRIPTION AND THE SOURCE OF THE SCREENING CRITERIA OR OTHER CLINICAL BASIS USED TO MAKE THE DECISION:****ODG- OFFICIAL DISABILITY GUIDELINES & TREATMENT GUIDELINES:**

Official Disability Guidelines 2007 for MRI: Not recommended except for indications list below. Patients who are alert, have never lost consciousness, are not under the influence of alcohol and/or drugs, have no distracting injuries, have no cervical tenderness, and have no neurologic findings, do not need imaging. Patients who do not fall into this category should have a three-view cervical radiographic series followed by computed tomography (CT). In determining whether or not the patient has ligamentous instability, magnetic resonance imaging (MRI) is the procedure of choice, but MRI should be reserved for patients who have clear-cut neurologic findings and those suspected of ligamentous instability. (Anderson, 2000) (ACR, 2002) See also ACR Appropriateness Criteria™. MRI imaging studies are valuable when physiologic evidence indicates tissue insult or nerve impairment or potentially serious conditions are suspected like tumor, infection, and fracture, or for clarification of anatomy prior to surgery. MRI is the test of choice for patients who have had prior back surgery. (Bigos, 1999) (Bey, 1998) (Volle, 2001) (Singh, 2001) (Colorado, 2001) For the evaluation of the patient with chronic neck pain, plain radiographs (3-view: anteroposterior, lateral, open mouth) should be the initial study performed. Patients with normal radiographs and neurologic signs or symptoms should undergo magnetic resonance imaging. If there is a contraindication to the magnetic resonance examination such as a cardiac pacemaker or severe claustrophobia, computed tomography myelography, preferably using spiral technology and multiplanar reconstruction is recommended. (Daffner, 2000) (Bono, 2007)

Indications for imaging -- MRI (magnetic resonance imaging):

- Chronic neck pain (= after 3 months conservative treatment), radiographs normal, neurologic signs or symptoms present
- Neck pain with radiculopathy if severe or progressive neurologic deficit
- Chronic neck pain, radiographs show spondylosis, neurologic signs or symptoms present
- Chronic neck pain, radiographs show old trauma, neurologic signs or symptoms present
- Chronic neck pain, radiographs show bone or disc margin destruction
- Suspected cervical spine trauma, neck pain, clinical findings suggest ligamentous injury, radiographs and/or CT "normal"
- Known cervical spine trauma: equivocal or positive plain films with neurological deficit

ODG for ESI: 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 for hip x-ray: Plain radiographs (X-Rays) of the pelvis should routinely be obtained in patients sustaining a severe injury. (Mullis, 2006) Although the diagnostic performance of the imaging techniques (plain radiography, arthrography, and bone scintigraphy) was not significantly different, plain radiography and bone scintigraphy are preferred for the assessment of a femoral component because of their efficacy and lower risk of patient morbidity. (Temmerman, 2005) X-rays are not as sensitive as CT in detection of subchondral fractures in osteonecrosis of the femoral head. (Stevens, 2003) (Stumpe, 2004)