

# MEDR X

791 Highway 77 North, Suite 501C-316 Waxahachie, TX 75165  
Ph 972-825-7231 Fax 214-230-5816

## Notice of Independent Review Decision

**DATE OF REVIEW:** 11/22/2009

**IRO CASE #:**

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

The item in dispute is the prospective medical necessity 1 needle electromyography / nerve conduction velocity study of the bilateral upper extremities.

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

The reviewer is a Medical Doctor who is board certified in Physical Medicine and Rehabilitation. The reviewer has been practicing for greater than 10 years and performs this service in his office.

### **REVIEW OUTCOME**

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

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

The reviewer agrees with the previous adverse determination regarding the prospective medical necessity 1 needle electromyography / nerve conduction velocity study of the bilateral upper extremities.

### **INFORMATION PROVIDED TO THE IRO FOR REVIEW**

Records were received and reviewed from the following parties: MD

A copy of the ODG was not provided by the Carrier or URA for this review.

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

The patient is a male with the onset of pain in the shoulder while operating a machine at work

on xx/xx/xx. Treatment has not been effective in eliminating pain symptoms. He has been on restricted duty. An MRI of the right shoulder on 5/28/2009 was unremarkable. An MRI of the thoracic spine on 7/17/2009 showed disc bulge at Y9-10. A neurosurgical consult on 10/2/2009 with MD indicated question of thoracic disc disease or cervical disc disease. He recommended an EMG of the right upper extremity (not bilateral need EMG nor of Bilateral nerve conduction velocity studies). Surgical intervention was not recommended. Results of the one extremity EMG was to help determine the need for cervical MRI. He was to be sent to Pain Management for consideration of additional invasive injections.

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

The original doctor recommending this test appears to be MD on 10/2/2009, whose studies did not recommend bilateral needle EMG nor recommend NCV. Additionally the clinical findings and patient symptoms along with imaging studies did not support a clinical probability that cervical radiculopathy was a likely source of patient's complaints.

According to the ODG, a needle EMG is: Recommended (needle, not surface) as an option in selected cases. The American Association of Electrodiagnostic Medicine conducted a review on electrodiagnosis in relation to cervical radiculopathy and concluded that the test was moderately sensitive (50%-71%) and highly specific (65%-85%). EMG findings may not be predictive of surgical outcome in cervical surgery, and patients may still benefit from surgery even in the absence of EMG findings of nerve root impingement. This is in stark contrast to the lumbar spine where EMG findings have been shown to be highly correlative with symptoms.

*Positive diagnosis of radiculopathy:* Requires the identification of neurogenic abnormalities in two or more muscles that share the same nerve root innervation but differ in their peripheral nerve supply. *Timing:* Timing is important as nerve root compression will reflect as positive if active changes are occurring. Changes of denervation develop within the first to third week after compression (fibrillations and positive sharp waves develop first in the paraspinals at 7-10 days and in the limb muscles at 2-3 weeks), and reinnervation is found at about 3-6 months *Paraspinal fibrillation potentials:* May be seen in normal individuals and are nonspecific for etiology. The presence of these alone is insufficient to make a diagnosis of radiculopathy and they may be absent when there is a diagnosis of radiculopathy secondary to sampling error, timing, or because they were spared. They may support a diagnosis of radiculopathy when corresponding abnormalities are present in the limb muscles. *Indications when particularly helpful:* EMG may be helpful for patients with double crush phenomenon, in particular, when there is evidence of possible metabolic pathology such as neuropathy secondary to diabetes or thyroid disease, or evidence of peripheral compression such as carpal tunnel syndrome. *H-reflex:* Technically difficult to perform in the upper extremity but can be derived from the median nerve. The test is not specific for etiology and may be difficult to obtain in obese patients or those older than 60 years of age. Since the ODG criterion was not met, the proposed procedure is not medically necessary.

**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 KNOWLEDGBASE

- 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)**