

## Notice of Independent Review Decision - WC

## **IRO REVIEWER REPORT – WC**

DATE OF REVIEW: JULY 16, 2018

IRO CASE #: XXXX

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

EMG/NCV of LUE

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

Board Certified in Orthopedic Surgery

#### REVIEW OUTCOME

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

Upheld (Agree)

 $\boxtimes$ Overturned (Disagree)

Partially Overturned (Agree in part/Disagree in part)

## 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:

• EMG/NCV of LUE – Overturned.

#### PATIENT CLINCIAL HISTORY [Summary]:

XX, MD saw the claimant on XX for left elbow pain. The claimant was right hand dominant. The claimant reported that XX picked up a handle of a XX weighing about XX XX and the XX gave way and the elbow sustained forceful hyperextension type jerk. There was acute onset of pain and the claimant had popping and locking of the elbow and had had onset of numbness and tingling over the ulnar aspect of the left forearm not

the hand, 4<sup>th</sup> and 5<sup>th</sup> digits, that was painful. PSH positive for right elbow in XX, left ankle surgery. The claimant is XX and weighed XX with BMI off 38.89 kg. Upper extremity exam revealed left lateral elbow tenderness, painful and limited supination; flexion to 120, extension with 10 degree lag, painful and restricted. There was a right elbow chronic defect with decreased motion and surgical scar. Left elbow x-ray was negative. XX: Other injury of muscle, fascia and tendon of other parts of biceps, left arm, neuritis of left ulnar nerve. MRI of the left elbow was ordered and referral to ortho. Surgeon for distal biceps tendon tear. RTW light duty.

XX, MD saw the claimant on XX for left elbow pain that is 8 at rest but gets up to 10 in the ulnar and posterior side of the arm. There was pain, loss of motion and strength and tingling in the last 2 fingers. Exam of the left upper extremity identified 100 degrees of flexion, 10 of extension, 80 of supination and pronation, 60 of wrist flexion and extension. There was a negative Tinel at the elbow, mild effusion, negative Biceps hook test, negative crepitus. There was good strength with wrist flexion/extension and finger extension, good grip. There was moderate epicondyle tenderness and mild lateral epicondyle tenderness to palpation. There was mild olecranon tenderness to palpation and moderate radial cap. Tenderness to palpation. X-rays of the left elbow showed arthritic changes in the elbow; high grade arthritis changes in the elbow with loss of joint space, reactive spurring and some chronic triceps tendinitis with spurring at that location and just the edge of the ulnohumeral articulation had some significant spurring and sclerosis. XX reported there were also some loose bodies and had some little small cysts in the capitellum. There were degenerative changes proximally in the radioulnar articulation. XX reported there were significant degenerative changes in the elbow. On soft tissue imaging, XX could see the biceps and it looked a little balled up in this soft tissue that was concerning. MRI on coronal imaging showed high grade degenerative changes in the radio capitellar joint, loose bodies in the elbow though no tearing associated with the medial or lateral epicondyle. On coronal imaging, it looked like the bicep tendon was going down and attaching all the way. There was a mild amount of signal but no indication of a bicep tear on that image. XX reported that the better view was the sagittal and on this, there was cord of the biceps tendon coming across and it appeared to go all the way and attach without any deficiencies and was kind of an elongated cord more than was normally seen. XX reported XX did not have the MRI report, but the bicep tendon was not torn or retracted and there was no surgical urgency. XX felt that the symptoms go along more with a flare up than from the arthritis that was clearly present on the x-rays and the MRI. XX: Left shoulder pain, a flare up of arthritis in the left elbow, an elongated biceps tendon but no biceps tendon rupture. Steroid injection of the left elbow performed. The claimant would continue light duty for 2 weeks.

XX, MD performed electrodiagnostic evaluation of the left arm on XX. The claimant sustained injury to the left elbow on XX and since that time had associated numbness, tingling, pain and weakness throughout the left forearm and hand. Exam revealed limited ROM with pain inhibition at the left elbow; 5/5 strength, no atrophy sensation intact, reflexes were normal. EMG/NC revealed left median sensory response was absent; left median motor response showed marked prolongation of distal latency with preserved amplitude. F waves were within normal limits. Needle exam showed large motor unit potentials with decreased recruitment but absence of spontaneous activity of the left APB. Impression was abnormal study, with electrical evidence of moderate to severe median neuropathy at the left wrist. No electrical evidence of acute or ongoing denervation. This was consistent with acute and chronic moderate left carpal tunnel syndrome.

XX saw the claimant on XX who reported that pain and swelling was slightly better in the left elbow, still had limited ROM with pain in the elbow, on modified duty. Claimant was pending EMG/NC. The claimant lived XX from XX and no local facilities for PT. MRI report was discussed with the claimant and revealed no fracture or tears per the radiology. The EMG/NC showed no fixed nerve lesion. Exam revealed tenderness in medial elbow, passive ROM to 90 to 95, extension lag of 10 degrees; negative Tinel at the elbow and negative Tinel at the wrist. Phalen negative at the wrist. Dx: Unspecified sprain of the left elbow. XX opined that there were no definite lesions to explain clinical findings and there was significant reduction of ROM of the left elbow. Would await further ortho. eval. Would try to locate a PT facility but travel and distance were problematic.

XX saw the claimant on XX who was diagnosed with elbow arthritis and carpal tunnel syndrome in the left upper extremity. The claimant said the elbow felt the same and locked every now and then. The claimant was hoping to repeat the injection. The claimant was working as a supervisor light duty. The EMG was read as being active and chronic moderate to severe median neuropathy. The claimant reported having no symptoms in the elbow or hand prior to this event. The claimant said XX felt like XX could live with the symptoms in the elbow the claimant had some mechanical symptoms. The claimant said the main thing that frustrated XX was the numbness and tingling in the fingers that felt pretty permanent. The claimant described it in the small fingers today and said XX did not feel like XX grip was good. Exam revealed limited ROM of the elbow, positive Tinel at the ulnar nerve and weakness in grip and decreased sensation. The median nerve did not show any evidence of deficits today. XX: Left elbow arthritis with exacerbation; left wrist carpal tunnel syndrome; some cubital tunnel type symptoms but normal ulnar nerve on EMG. XX ordered the EMG repeated because the symptoms were not consistent with what was seen on the EMG and would get it performed at a different location to make sure that it was not technique dependent. XX recommended that this be done about XX after. XX wanted to see if the carpal tunnel had progress or there were symptoms of cubital tunnel. A left elbow XX injection performed for a diagnosis of arthritis.

Pre-cert XX denied EMG/NCV of the LUE.

On XX, XX sent a letter regarding the disputed EMG/NC. XX reported that the findings on the EMG/NC did not correlate with what was seen on physical exam. A repeat EMG done at a different facility was recommended. This was not ordered for worsening but rather for the possibility of an inaccurate diagnosis that was not correlating with the exam findings.

On XX, XX submitted another letter regarding the non-approval of EMG/NC. XX reported that the EMG testing came back positive for carpal tunnel symptoms, but nothing was positive across the ulnar nerve. XX reported this did not correlate with what was seen on exam which was documented as weakness in grip, decreased sensation in the ulnar nerve distribution and a positive Tinel at the elbow which all correlated more with cubital tunnel rather than carpal tunnel syndrome. XX reported that the claimant had attempted conservative management for a significant period of time and remained symptomatic in the distribution of the ulnar nerve and may benefit from ulnar nerve transposition and release, but XX wanted EMG evidence to support this diagnosis. A second EMG at a different facility was ordered to ensure that there were no findings at

the cubital tunnel, which was what was clinically suspected. XX reported that this request was made via peer to peer and it was denied because it did not meet ODG requirements for a second study. XX reported that this was an exception when it was an incorrect diagnosis made that did not fall under the ODG Guidelines and therefore, repeat testing was justified.

Pre-cert on XX denied a repeat EMG/NC. The report noted that detailed evidence of a recent comprehensive conservative treatment protocol trial and failure had not been submitted. During peer to peer, the provider reiterated that the results of the prior electrical studies appeared to not correlate with clinical findings.

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

The XX XX reported that on XX picked up a handle of a XX weighing about XX and the line gave way and the elbow sustained a forceful hyperextension type jerk. The claimant reported having the acute onset of pain and the claimant had popping and locking of the elbow and had had onset of numbness and tingling over the ulnar aspect of the left forearm not the hand, 4<sup>th</sup> and 5<sup>th</sup> digits, that was painful. The claimant had an EMG/NC of the left upper extremity performed on XX, or approximately XX after the work incident. That EMG/NC identified electrical evidence of moderate to severe median neuropathy at the left wrist, no electrical evidence of acute or ongoing denervation and the findings were consistent with acute and chronic moderate left carpal tunnel syndrome.

The treating orthopedic surgeon reviewed a left elbow MRI and an EMG/NC and noted that the findings of limited ROM of the elbow, positive Tinel at the ulnar nerve and weakness in grip and decreased sensation and no median nerve deficits were not consistent with what was seen on the EMG and the provider recommended that the EMG/NC be repeated, and have it performed at a different location to make sure that it was not technique dependent.

The following from ACOEM identifies that "to make a diagnosis of cubital tunnel syndrome requires inching technique to define the abnormality to the cubital tunnel (rather than in the condylar groove, or "funny bone")." Electromyographic (EMG) and nerve conduction studies establish nerve function. EMG testing should be done with the elbow flexed between 70° and 90° to improve accuracy. Electrodiagnostic testing is often negative (Eversmann; Mackinnon).

Electrodiagnostic studies are very useful, especially for more advanced CTS requiring surgery. In early phases dynamic ischemia results from transient positional decreased blood perfusion to the ulnar nerve, but does not slow the fastest-conducting nerve fibers; so nerve conduction studies are usually normal. More prolonged ischemia leads to demyelination resulting in slowing of nerve conduction measurements. Long-standing or severe compression leads to axonal loss and nerve conduction studies reveal decreases in amplitude, reflecting overall loss of functioning nerve fibers. Corresponding abnormal activity on electromyography is also seen as the spectrum of compression worsens. (Christopher, 2016)

Review of the EMG/NC of the left upper extremity performed on XX does not identify positioning of the left elbow during performance of the diagnostic. Review of the report and raw data does not document that the inching technique was performed. Peer reviewed literature Therefore, based on the clinical exam findings not correlating with the left upper extremity EMG/NC findings on XX and with the claimant having continued symptoms and exam findings of ulnar neuropathy since that initial EMG/NC, medical necessity is established for a repeat EMG/NCV of the left upper extremity.

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

- MEDICAL JUDGMENT, CLINICAL EXPERIENCE AND EXPERTISE IN ACCORDANCE WITH ACCEPTED MEDICAL STANDARDS
- ODG OFFICIAL DISABILITY GUIDELINES & TREATMENT GUIDELINES MEDICAL DISABILITY GUIDELINES
- ACOEM-AMERICAN COLLEGE OF OCCUPATIONAL AND ENVIRONMENTAL MEDICINE