

<b>Case Number:</b>	CM14-0177474		
<b>Date Assigned:</b>	10/30/2014	<b>Date of Injury:</b>	11/01/2011
<b>Decision Date:</b>	12/08/2014	<b>UR Denial Date:</b>	10/13/2014
<b>Priority:</b>	Standard	<b>Application Received:</b>	10/27/2014

### HOW THE IMR FINAL DETERMINATION WAS MADE

MAXIMUS Federal Services sent the complete case file to an expert reviewer. He/she has no affiliation with the employer, employee, providers or the claims administrator. The expert reviewer is Board Certified in Plastic and Reconstructive Surgery and is licensed to practice in Maryland, Virginia, and North Carolina. He/she has been in active clinical practice for more than five years and is currently working at least 24 hours a week in active practice. The expert reviewer was selected based on his/her clinical experience, education, background, and expertise in the same or similar specialties that evaluate and/or treat the medical condition and disputed items/services. He/she is familiar with governing laws and regulations, including the strength of evidence hierarchy that applies to Independent Medical Review determinations.

### CLINICAL CASE SUMMARY

The expert reviewer developed the following clinical case summary based on a review of the case file, including all medical records:

The patient is a 32 year old female with a reported date of injury on 11/1/11 who requested right carpal tunnel release, ulnar nerve decompression of the right elbow and lateral epicondyle repair of the right elbow. Orthopedic reevaluation report dated 10/28/14 notes the patient complains of constant pain to the right hand and wrist, radiating to the fingers. The pain increases with activity. She has numbness and tingling to the fingers. Examination notes tenderness to palpation at the right lateral epicondyle. Elbow flexion test is positive. There is tenderness over the flexion/extension crease of the right wrist/hand. Katz hand diagram reveals classis patterns of carpal tunnel syndrome. There is diminished light touch in the right median and ulnar nerve distributions. The patient is diagnosed with right carpal tunnel syndrome, right cubital tunnel syndrome and right lateral epicondylitis. In response to the utilization review denial, the requesting surgeon notes the patient has focal findings because she has specific tenderness along the right lateral epicondyle of her elbow. She has diminished light touch in the right median and ulnar nerve distribution; she has a positive Phalen's test and positive median nerve compression test, and a positive elbow flexion test on the right side. In addition, her electrodiagnostic studies show entrapment of the median nerve at the right wrist and entrapment of the ulnar nerve at the right elbow. The nerve study was performed on 8/20/14. Thus, the requesting surgeon is requesting ultrasound of the right elbow and wrist, as well as MRI scan of the right elbow to further evaluate. Documentation from the utilization review noted the patient complained of right wrist, arm and forearm pain that affected her function. This affected the patient's sleep. There was tenderness to palpation over the right lateral epicondyle. Elbow flexion test was positive. There was diminished sensation to light touch in the right median and ulnar nerve distributions. The utilization review stated, 'The nerve conduction study of the right upper extremity on 5/20/14 documented abnormalities.' The patient had undergone physical therapy 3 x per week

and provided relief in pain. The patient had acupuncture and provided some relief. The patient received cortisone injection of the right elbow on 7/11/14 which provided no relief of pain. The patient received plasma injection on the right elbow on 8/25/14 which provided no relief. Utilization review dated 10/13/14 did not certify the procedures. The electrodiagnostic studies performed showed abnormalities but were not specified. There are no positive focal examinations or diagnostic imaging findings that would necessitate surgical intervention per guidelines.

### **IMR ISSUES, DECISIONS AND RATIONALES**

The Final Determination was based on decisions for the disputed items/services set forth below:

#### **carpal tunnel release of the right wrist,: Upheld**

**Claims Administrator guideline:** Decision based on MTUS ACOEM Chapter 11 Forearm, Wrist, and Hand Complaints. Decision based on Non-MTUS Citation ODG Carpal Tunnel Syndrome (updated 02/20/14) Carpal tunnel release surgery (CTR)ODG Indications for Surgery -- Carpal Tunnel Release

**MAXIMUS guideline:** Decision based on MTUS ACOEM Chapter 11 Forearm, Wrist, and Hand Complaints Page(s): 270 and 272-273.

**Decision rationale:** The patient is a 32 year old female with signs and symptoms of possible right carpal tunnel syndrome. The patient is not documented to have thenar atrophy, a sign that might suggest a severe condition. Electrodiagnostic studies are only stated to show carpal tunnel syndrome, but the degree of severity is not provided. The actual report of the electrodiagnostic study is not provided as well in the medical records provided for this review. The patient is reported to have had physical therapy, but wrist bracing was not specifically stated. From ACOEM, page 270, Surgical decompression of the median nerve usually relieves CTS symptoms. High-quality scientific evidence shows success in the majority of patients with an electrodiagnostically confirmed diagnosis of CTS. Patients with the mildest symptoms display the poorest postsurgery results; patients with moderate or severe CTS have better outcomes from surgery than splinting. CTS must be proved by positive findings on clinical examination and the diagnosis should be supported by nerve-conduction tests before surgery is undertaken. Mild CTS with normal electrodiagnostic studies (EDS) exists, but moderate or severe CTS with normal EDS is very rare. Positive EDS in asymptomatic individuals is not CTS. Studies have not shown portable nerve conduction devices to be effective diagnostic tools. Surgery will not relieve any symptoms from cervical radiculopathy (double crush syndrome). The stated finding of an abnormal electrodiagnostic study is not sufficient. Greater specificity is necessary to classify the severity of the condition. From page 272, Table 11-7, recommendations are made with respect to mild and moderate carpal tunnel syndrome. Injection of corticosteroids into carpal tunnel in mild or moderate cases of CTS after a trial of splinting and medication is recommended. The patient has not been considered for steroid injection(only of the right elbow). Splinting has not been specifically documented. Finally, early surgical intervention for severe CTS confirmed by NCV may be indicated. The patient is not documented to have severe carpal tunnel syndrome and thus early surgical intervention is not indicated. In summary, the patient is documented to have signs and symptoms of right carpal tunnel syndrome. However, specific evidence from

electrodiagnostic studies has not been provided. Conservative management of splinting and/or steroid injections has not been documented or discussed. There is no evidence of a severe condition. Therefore, right carpal tunnel release should not be considered medically necessary for this patient. However, this judgment is based on the medical records provided for this review, which was limited, and thus if further detailed documentation is provided this could be reconsidered.

**ulnar nerve decompression of the right elbow,:** Upheld

**Claims Administrator guideline:** The Claims Administrator did not base their decision on the MTUS. Decision based on Non-MTUS Citation ACOEM Guidelines Elbow Disorders; Ulnar Nerve Entrapment ODG Elbow (updated 05/15/14): Surgery for cubital tunnel syndrome (ulnar nerve entrapment)ODG Indications for Surgery -- Surgery for cubital tunnel syndrome: Initial conservative treatment

**MAXIMUS guideline:** Decision based on MTUS ACOEM Chapter 10 Elbow Disorders (Revised 2007) Page(s): 36-38.

**Decision rationale:** The patient is a 32 year old female with signs and symptoms of a possible left cubital tunnel syndrome. Electrodiagnostic studies are only stated to show findings consistent with cubital tunnel syndrome; greater specifics were not provided with respect to the severity. In addition, the actual report was not provided in the records for this review. Conservative management has included steroid injection, physical therapy, acupuncture and plasma injection. From ACOEM, Elbow complaints, with respect to ulnar nerve entrapment, Evidence is lacking that any of these surgeries has advantages over conservative treatment. The simple ulnar nerve release does have some evidence of benefits over more complicated surgical procedures such as transposition. Surgery for ulnar nerve entrapment requires establishing a firm diagnosis on the basis of clear clinical evidence and positive electrical studies that correlate with clinical findings. A decision to operate requires significant loss of function, as reflected in significant activity limitations due to the nerve entrapment and that the patient has failed conservative care, including full compliance in therapy, use of elbow pads, removing opportunities to rest the elbow on the ulnar groove, workstation changes (if applicable), and avoiding nerve irritation at night by preventing prolonged elbow flexion while sleeping. Before proceeding with surgery, patients must be apprised of all possible complications, including wound infections, anesthetic complications, nerve damage, and the high possibility that surgery will not relieve symptoms. Absent findings of severe neuropathy such as muscle wasting, at least 3-6 months of conservative care should precede a decision to operate. Based on these guidelines the patient is not adequately documented to have failed conservative management and the stated abnormal electrodiagnostic studies is insufficiently detailed. The patient has not been documented to have used elbow pads, changed her activity to remove opportunities to rest the elbow on the ulnar groove or to prevented prolonged elbow flexion while sleeping. The patient is not noted to have severe neuropathy such as muscle wasting. Thus, ulnar nerve release at the elbow should not be considered medically necessary at this point for this patient. However, this judgment is based on the medical records provided for this review, which was limited, and thus if further detailed documentation is provided this could be reconsidered.

## **lateral epicondyle repair of the right elbow: Upheld**

**Claims Administrator guideline:** The Claims Administrator did not base their decision on the MTUS. Decision based on Non-MTUS Citation ACOEM Guidelines Elbow Disorders; Surgical Considerations for Lateral Epicondylagia ODG Elbow (updated 05/15/14): Criteria for Lateral Epicondylar Release for Chronic Lateral Epicondylagia

**MAXIMUS guideline:** Decision based on MTUS ACOEM Chapter 10 Elbow Disorders (Revised 2007) Page(s): 35-36.

**Decision rationale:** The patient is a 32 year old female with a complaint of right elbow pain that is documented to have affected her function. She has undergone physical therapy, acupuncture, steroid injection and plasma injection. Based on the documentation provided, the exact time course of conservative treatment cannot be determined. **SURGICAL CONSIDERATIONS FOR LATERAL EPICONDYLALGIA** There is currently a debate regarding whether lateral epicondylagia is an inflammatory condition or an enthesopathy and what treatments are most appropriate. Conservative care should be maintained for a minimum of 3-6 months. Although some individuals will improve with surgery for lateral epicondylagia, at this time there are no published RCTs that indicate that surgery improves the condition over non-surgical options. There are clinical trials to compare different surgical techniques, but this type of study cannot show the benefit of surgical intervention over medical treatment or untreated controls, particularly when numerous studies have documented the tendency for the condition to spontaneously improve over time. Five articles were reviewed on surgery for lateral epicondylagia, four studies<sup>113,114,115,116</sup> and one meta-analysis.<sup>117</sup> One of the studies was of high quality, one of intermediate quality, and two of low quality. The studies evaluated the following techniques: 1) botulinum toxin injections versus open surgery; 2) percutaneous versus open surgery; 3) lengthening of the distal tendon of the extensor carpi radialis brevis (ECRB) surgery versus decompression of the posterior interosseous nerve (PIN) surgery; and 4) open surgery with drilling versus open surgery with no drilling. The first study evaluated 40 patients with an average duration of symptoms of 10.5 months--half were treated with the open (Hohmann) surgical technique and half with botulinum toxin injections.<sup>113</sup> The authors found that "treating chronic tennis elbow with botulinum toxin equal those of operative release." The second study evaluated 47 elbows (45 patients who had undergone conservative treatment for 12 months); 24 were treated with a formal open release (Nirschl) surgical technique and 23 with a percutaneous surgical technique.<sup>114</sup> The results showed that "those patients undergoing a percutaneous release returned to work on average three weeks earlier and improved significantly more quickly than those undergoing an open procedure. The percutaneous procedure is a quicker and simpler procedure to undertake and produces significantly better results." Another study evaluated 28 elbows (26 patients with average duration of symptoms of 23 months); half were treated with decompression of the posterior interosseous nerve (PIN) surgery and half with lengthening of the distal tendon of the extensor carpi radialis brevis (ECRB) surgery.<sup>115</sup> The authors found that the "overall outcome after a mean follow-up of 31 months after the primary operation was successful in 60% of the cases." They concluded that the "present results seem to indicate that PIN neurolysis and lengthening of the tendon of the ECRB muscle are of similar value in the surgical treatment of resistant tennis elbow. Neither of these methods, however, can be considered a very effective treatment in chronic tennis elbow." The last study evaluated 23

elbows (duration of patients symptoms not indicated) and treated them with open (Nirschl) release surgery with drilling or without drilling.<sup>116</sup> The author concluded that "drilling confers no benefit and actually causes more pain, stiffness, and wound bleeding than not drilling." Quality studies are available on surgery for patients with chronic symptoms of lateral epicondylalgia, although they used different surgical techniques and did not include an observation group. Benefits of less invasive procedures are suggested. This option is high cost, invasive, and has moderate side effects. Thus, surgery for lateral epicondylalgia should only be a consideration for those patients who fail to improve after a minimum of 6 months of care that includes at least 3-4 different types of conservative treatment. However, there are unusual circumstances in which, after 3 months of failed conservative treatment, surgery may be considered [Insufficient Evidence (I), Recommended]. The guidelines recommend a minimum of 6 months of care that includes at least 3-4 different types of conservative management. The patient does not have evidence of a severe condition that could warrant intervention sooner than this. The time course of conservative management cannot be accurately determined based on the medical records provided for this review. Thus, lateral epicondyle repair should not be considered medically necessary for this patient. However, this judgment is based on the medical records provided for this review, which was limited, and thus if further detailed documentation is provided this could be reconsidered. Therefore, the request is not medically necessary.