

<b>Case Number:</b>	CM14-0054101		
<b>Date Assigned:</b>	07/16/2014	<b>Date of Injury:</b>	12/31/2009
<b>Decision Date:</b>	08/19/2014	<b>UR Denial Date:</b>	04/17/2014
<b>Priority:</b>	Standard	<b>Application Received:</b>	04/23/2014

### 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 59-year-old male with a reported date of injury on 12/31/2009 who requested left pronator release, carpal tunnel release and synovectomy, as well as post-operative physical therapy 3x4 and preoperative testing (CBC, CMP, UA, EKG and chest x-ray). Documentation from 2/28/14 notes the patient complains of left shoulder, elbow and wrist pain. The patient reports no upper extremity numbness of the radial three digits. Previous surgeries have included a left carpal tunnel release on 3/21/12, left ulnar nerve transposition distal forearm on 10/7/10, left ulnar nerve decompression at the wrist on 7/15/10 and left lateral epicondylar release on 3/4/10. Sensory examination reveals no decreased sensation. Tinel's signs are negative at the median nerve at the wrist, median nerve in the forearm, ulnar nerve at the wrist and ulnar nerve at the elbow. There is no tenderness documented on physical examination of the bilateral upper extremities. Impression is that the patient has bilateral cubital tunnel syndrome, bilateral pronator syndrome, bilateral wrist synovitis, left cervical root tenderness, impingement of the left shoulder with rotator cuff damage and lateral epicondylitis. The plan was for electrodiagnostic studies and CT scan of the cervical spine. MRI of the left wrist notes small erosions possibly consistent with an inflammatory arthropathy but no evidence of synovitis, mild degenerative signal within the TFCC, but no high grade tear is identified, mild tendinosis of the ECU tendon and FCR, and trace tenosynovitis of the ECRL and ECRB. Further documentation from 3/25/14 notes similar findings as from 2/28/14 except a positive Tinel's sign at the left wrist and forearm median nerve. Treatments recommended included a pronator release, carpal tunnel release and synovectomy on the left side. Electrodiagnostic studies from 3/20/14 note 'slight degree of median sensory neuropathies at or distal to the wrist lines. There is normal EMG study of all muscles tested. Utilization review dated 4/17/14 did not certify the procedures of left pronator release, carpal tunnel release and synovectomy, as well as post-operative physical therapy 3x4

and preoperative testing(CBC, CMP, UA, EKG and chest x-ray) Reasoning given was that for pronator syndrome: there is limited evidence that the patient has failed conservative measures and that there is no electrodiagnostic study suggesting evidence of pronator syndrome. For carpal tunnel release, the patient only has slight carpal tunnel syndrome and there is limited documentation of conservative measures attempted. For synovectomy, there is neither an added benefit nor an increase in rate of morbidity associated with flexor tenosynovectomy at the time of carpal tunnel release.

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

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

#### **Left Pronator Release with Carpal Tunnel Release and Synovectomy: Upheld**

**Claims Administrator guideline:** Decision based on MTUS ACOEM. Decision based on Non-MTUS Citation Official Disability Guidelines.

**MAXIMUS guideline:** Decision based on MTUS ACOEM Chapter 11 Forearm, Wrist, and Hand Complaints Page(s): 272; page 19.. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG) Forearm, wrist and hand, Diagnostic arthroscopy Other Medical Treatment Guideline or Medical Evidence:Shum C1, Parisien M, Strauch RJ, Rosenwasser MP. 'The role of flexor tenosynovectomy in the operative treatment of carpal tunnel syndrome.' J Bone Joint Surg Am. 2002 Feb;84-A(2):221-5.

**Decision rationale:** The patient is a 59-year-old male with reported pain of the left wrist, elbow and shoulder. There is limited medical documentation that the patient has a clinically significant carpal tunnel syndrome other than a positive Tinel's sign at the wrist and forearm. He is documented to have 'no upper extremity numbness in the radial three fingers.' Electrodiagnostic studies only document 'slight 'median neuropathy at or distal to the wrist. EMG studies are normal. There is no documentation of any conservative measures attempted. From ACOEM page 271, patients with the mildest symptoms display the poorest post surgery 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. From Table 11-7, splinting is recommended as a first line conservative treatment for carpal tunnel syndrome. Injection of corticosteroids into the carpal tunnel for mild or moderate cases of carpal tunnel syndrome after trial of splinting and medication is recommended. Thus, without greater documentation to suggest that the patient has more than a slight carpal tunnel syndrome that has failed conservative measures, carpal tunnel release is not medically necessary. This is consistent with the findings of the utilization review. With respect to pronator syndrome, the patient is not well-documented to have signs and symptoms consistent with this diagnosis. He is not documented to have failed conservative measures as well. From ACOEM elbow complaints page 19, Pronator syndrome involves median nerve entrapment under or within the pronator teres muscle in the proximal forearm. It causes pain in the flexor forearm and paresthesias similar to carpal tunnel syndrome, which is the main consideration in the differential diagnosis. Pronator syndrome is believed to cause nocturnal awakening less frequently than carpal tunnel syndrome.

A confirmatory electrodiagnostic study is helpful, but somewhat difficult to obtain [Insufficient Evidence (I), Recommended]. There are no quality studies on which to rely for the treatment of pronator syndrome and there is no evidence of benefits of the following treatment options. However, these options are low cost, have few side effects, and are not invasive. Thus, while there is insufficient evidence, the following options are recommended: Wrist brace [Insufficient Evidence (I), Recommended]; Although not particularly successful for neuropathic pain, utilization of NSAIDs [Insufficient Evidence (I), Recommended]; and Activity modifications should be attempted if felt to be contributory [Insufficient Evidence (I), Recommended]. Thus, based on the medical documentation, a clear diagnosis of pronator syndrome cannot be supported. The examination does not document tenderness in the proximal forearm and sensory examination reveals no decreased sensation, except for a positive Tinel's sign at the median nerve of the forearm and wrist. Electrodiagnostic studies do not support the diagnosis as well (although, as noted, it may be difficult to obtain). Without clearer evidence of a pronator syndrome, conservative measures would be more important and recommended prior to surgical treatment. Thus, pronator release is not medically necessary, which is consistent with the utilization review. Finally, with respect to synovectomy, there is insufficient medical documentation to define the exact role for this procedure. Whether this is a procedure performed as an adjunct to a carpal tunnel release or to treat a primary wrist abnormality is not clear. As stated in the utilization review from Shum et al, as an adjunctive procedure, there is no evidence that a flexor tenosynovectomy may aid the patient with carpal tunnel syndrome. 'Our findings suggest that routine flexor tenosynovectomy offers no benefit compared with sectioning of the transverse carpal ligament alone for the treatment of idiopathic carpal tunnel syndrome.' If this is to treat a primary wrist abnormality, there is insufficient medical documentation of a detailed wrist exam to suggest an etiology. An MRI examination does not provide definitive evidence of a significant primary wrist abnormality that would be addressed with synovectomy. In addition, no conservative treatment including injection, splinting or medications is documented. From ACOEM p. 270 (although not specific to synovectomy but for general surgical considerations) referral for hand surgery consultation may be indicated for patients who have red flags of a serious nature, fail to respond to conservative management, including worksite modifications, have clear clinical and special study evidence of a lesion that has been shown to benefit, in both the short and long term, from surgical intervention. From the ODG, diagnostic arthroscopy could be considered to aid in the work-up of continued wrist pain but as stated Recommended as an option if negative results on imaging, but symptoms continue after 4-12 weeks of conservative treatment. This study assessed the role of diagnostic arthroscopy following a wrist injury in patients with normal standard radiographs, an unclear clinical diagnosis and persistent severe pain at 4 to 12 weeks. Thus, synovectomy in this patient should not be considered medically necessary. There is not a clear diagnosis, examination detail or reasoning for the procedure, as well as no documentation of conservative measures attempted. Therefore, the request is not medically necessary.

**Post-Op Physical Therapy 3x4:** Upheld

**Claims Administrator guideline:** Decision based on MTUS Postsurgical Treatment Guidelines.

**MAXIMUS guideline:** The Expert Reviewer did not cite any medical evidence for its decision.

**Decision rationale:** Since the primary procedure is not medically necessary, none of the associated services is medically necessary

**Pre-Op: Labs ( CBC, CMP, UA ) EKG, chest x-ray:** Upheld

**Claims Administrator guideline:** The Claims Administrator did not base their decision on the MTUS. Decision based on Non-MTUS Citation Official Disability Guidelines: Treatment in Workers' Comp, preoperative testing.

**MAXIMUS guideline:** The Expert Reviewer did not cite any medical evidence for its decision.

**Decision rationale:** As the procedures were not considered medically necessary, preoperative testing is not medically necessary.