

Case Number:	CM14-0207186		
Date Assigned:	01/14/2015	Date of Injury:	11/23/2009
Decision Date:	02/20/2015	UR Denial Date:	11/25/2014
Priority:	Standard	Application Received:	12/10/2014

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. 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/Service. He/she is familiar with governing laws and regulations, including the strength of evidence hierarchy that applies to Independent Medical Review determinations.

The Expert Reviewer has the following credentials:
 State(s) of Licensure: California
 Certification(s)/Specialty: Orthopedic Surgery

CLINICAL CASE SUMMARY

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

This is a 57 year old female with an 11/23/09 injury date. In a 1/16/15 AME note, the patient complains of persistent right hand/wrist pain with numbness and tingling in all five digits, significant night-time symptoms, and hypersensitivity over the hypothenar region. Objective findings included healed right wrist volar incisions with tenderness, pain at 40 degrees of wrist flexion, negative Phalen's and reverse Phalen's tests, allodynia over the entire palm to light touch and pinwheel, absent sensation to pinprick on the volar surfaces of all five digits, and markedly reduced grip and pinch strength. The latest right wrist MRI in 2013 was suggestive of increased median nerve signal at the level of the hook of hamate with evidence of a reconstituted transverse carpal ligament. The latest electrodiagnostic study in 2014 revealed prolonged median sensory latencies for a mild carpal tunnel syndrome. A 10/21/14 right wrist ultrasound revealed a bifid median nerve proximal to the wrist crease and a normal appearance of Guyon's canal structures. At the time of the ultrasound, the carpal tunnel was injected with lidocaine and cortisone which provided two weeks of partial relief of symptoms. As a result of these findings, the AME provider agrees with the primary surgeon's recommendations to proceed with a 3rd carpal tunnel release that would include neurolysis of the palmar cutaneous branch (PCB) of the median nerve, transfer of a hypothenar fat pad to the carpal tunnel to protect the nerve from further irritation, and a reverse muscle local flap. Diagnostic impression: right hand pain s/p carpal tunnel release (CTR) X 2 with "PCB hypersensitivity and persistent tingling." Treatment to date: right CTR x 2, right wrist cortisone injections with temporary relief, medications, physical therapy, bracing. A UR decision on 11/25/14 denied the request for right revision open carpal

tunnel release, hypothenar fat pad flap, and reverse muscle local flap because "the requested information was not received."

IMR ISSUES, DECISIONS AND RATIONALES

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

Right revision open carpal tunnel release, hypothenar fat pad flap, reverse muscle local flap: Overtured

Claims Administrator guideline: Decision based on MTUS ACOEM Chapter 11 Forearm, Wrist, and Hand Complaints Page(s): 270.

MAXIMUS guideline: Decision based on MTUS ACOEM Chapter 11 Forearm, Wrist, and Hand Complaints Page(s): 270-271. Decision based on Non-MTUS Citation Fusetti C, Garavaglia G, Mathoulin C, Gianfranco Petri J, Lucchina S. A reliable and simple solution for recalcitrant carpal tunnel syndrome: the hypothenar fat pad flap. *Am J Orthop.* 2009;38(4):181-186. Abzug JM, Jacoby SM, Osterman AL. Surgical options for recalcitrant carpal tunnel syndrome with perineural fibrosis. *Hand (NY).* 2012 Mar;7(1):23-29.

Decision rationale: CA MTUS criteria for carpal tunnel release include failure of non-operative treatment or severe symptoms such as continuous tingling and numbness; most patients should have had at least 1 glucocorticosteroid injection; and patients who do not have a glucocorticosteroid injection that results in at least partial benefit should have an electrodiagnostic study (EDS) consistent with CTS. The hypothenar fat pad flap interposes adipose tissue from the hypothenar eminence. In the article by Fusetti et al, 20 patients who underwent revision open carpal tunnel release with hypothenar fat pad flap had significant improvements in pain and 2 pt. discrimination. The authors concluded that the procedure prevents median nerve readherence, produces excellent results, and should be included among the tools any surgeon uses for carpal tunnel surgery. According to Abzug et al, numerous muscle flaps have been proposed for recalcitrant carpal tunnel syndrome to provide interposition around a scarred nerve as well as to bring neovascularization in the hope of restoring function to the damaged nerve. The majority of these muscle flaps have been taken from the intrinsic muscles of the hand including the palmaris brevis flap, the abductor digiti minimi flap, and the pronator quadratus flap. In this case, the patient has not done well after two previous carpal tunnel release surgeries. There is persistent pain, weakness, and numbness that correlate with exam findings of weak grip and pinch strength, and sensory dysfunction. These findings correlate well with recent MRI, ultrasound, and electrodiagnostic findings that reveal persistent median nerve dysfunction and a reconstituted transverse carpal ligament. The patient has had an appropriate regimen of previous conservative therapy as well as a recent carpal tunnel cortisone injection that provided 2 weeks of partial, temporary relief. Both the AME provider and the literature support the primary surgeon's recommendations for revision open carpal tunnel release with hypothenar fat pad transfer and possible reverse local muscle flap. Therefore, the request for right revision open carpal tunnel release, hypothenar fat pad flap, and reverse muscle local flap is medically necessary.