Case Number:	CM14-0142984		
Date Assigned:	09/10/2014	**Date of Injury:**	01/08/1999
Decision Date:	10/10/2014	**UR Denial Date:**	08/08/2014
Priority:	Standard	**Application Received:**	09/03/2014

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 Physical Medicine and Rehabilitation, has a subspecialty in Interventional Spine and is licensed to practice in California. 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:

This patient is a 51 year old female with an injury date of 1/08/99. No PR2 was submitted with the treatment request. The 4/14/14 office/outpatient visit notes state this patient presents with a diagnosis of reflex sympathetic dystrophy, of upper limb. The 8/9/13 supplementary report/review of records states this patient was being treated for complex regional pain syndrome (CRPS), thoracic outlet syndrome, and right shoulder internal derangement" and she continues with "associated problems of hearing loss, tinnitus, vertigo, and major depression." The 6/27/13 report indicates that this patient has "intermittent right upper extremity tremor, frozen right shoulder, severe tenderness over the right brachial plexus with soft tissue swelling. On 12/01/11, an ultrasound evaluation of the bilateral brachial plexus region was performed. Impressions: 1) Right anterior scalene edema, thickening and fibrosis (appears to entrap the brachial plexus) and 2) Normal left brachial plexus region. The utilization review being challenged is dated 8/08/14. The request is for 1 brachial plexus doppler arterialvenous studies. The requesting provider has provided various progress reports from 5/28/13 to 7/24/14.

IMR ISSUES, DECISIONS AND RATIONALES

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

1 brachial plexus doppler arterialvenous studies: Upheld

Claims Administrator guideline: The Claims Administrator did not base their decision on the MTUS. Decision based on Non-MTUS Citation Official Disability Guidelines,Arterial Ultrasound TOS Testing, and Shoulder (Acute & Chronic)

MAXIMUS guideline: The Expert Reviewer did not base their decision on the MTUS. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG) Shoulder (Acute and Chronic), Arterial Ultrasound TOS Testing (online):

Decision rationale: This patient presents with thoracic outlet syndrome/frozen shoulder and reflex sympathetic dystrophy of the upper limb. The treater requests 1 brachial plexus doppler arterialvenous studies. While MTUS guidelines do not address the use of such studies for thoracic outlet syndrome, ODG-TWC Guidelines for the section re: arterial ultrasound TOS testing (online) "Not recommended. Clinical tests for vascular thoracic outlet syndrome (vTOS) generally incorporate shoulder horizontal flexion/extension (HF/HE), abduction (ABD) and external rotation (ER). The effect of these clinical tests on blood flow characteristics and the most effective arm positions for detecting arterial compromise are, however, unknown. Arterial evaluation using Doppler ultrasound has been suggested. The heterogeneous response of asymptomatic individuals with no past history of TOS symptoms raises uncertainty of the validity of positive test responses from extreme arm positions. Clinical decisions based on false positive outcomes have serious implications for mistreatment such as inappropriate surgical intervention; therefore it is imperative that clinical decision is not based on these test outcomes alone. Further research is required to determine the cause of heterogeneous responses in asymptomatics and discover means to improve test specificity. (Stapleton, 2009)" While the arterial evaluation using Doppler ultrasound is suggested, there are risks of false positive outcomes and questionable validity of positive responses from extreme arm positions. Given the lack of support from ODG guidelines, the request is not medically necessary.