

Case Number:	CM14-0110027		
Date Assigned:	08/01/2014	Date of Injury:	02/14/2011
Decision Date:	09/03/2014	UR Denial Date:	07/08/2014
Priority:	Standard	Application Received:	07/15/2014

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 Orthopedic Surgery, 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 is a 26-year-old male who sustained a vocational injury on 02/14/11. The records provided for review document that the claimant underwent a right medial epicondylectomy and ulnar nerve decompression in June 2014. The office note dated 07/02/14 at two weeks post surgery, the claimant complained of wrist and elbow pain with numbness and tingling of the fingers and was wearing a wrist brace, which provided only slight relief. Examination revealed the incision was closed, clean and dry with slight swelling and tenderness, but no evidence of infection. He had good, early motion of the elbow. Motor sensory exam of the right upper extremity was within normal limits. There was no tenderness over the wrist flexor tendons. He had no pain with resisted active flexion of the wrist and fingers. He had a positive Tinel's sign over the carpal tunnel and a negative Tinel's sign over the Guyon's tunnel and a positive Phalen's test. There was no evidence of intrinsic or thenar weakness or atrophy. He was given a prescription for Norco, he was asked to wear a Heelbo sleeve, and recommended a home exercise program. Surgical intervention was being considered for a right wrist operative arthroscopy with extensive debridement and possible arthroscopic TFCC repair when he recovered from the elbow surgery. It was noted that if he had recurrent carpal tunnel syndrome, repeat surgery could be done at that time. The current request was for a Vascutherm cold therapy with 14 day rental.

IMR ISSUES, DECISIONS AND RATIONALES

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

Vascutherm Cold Therapy 14 Day Rental: Upheld

Claims Administrator guideline: The Claims Administrator did not base their decision on the MTUS. Decision based on Non-MTUS Citation Official Disability Guidelines - TWC Elbow Procedure Summary: Cold Packs, Venous thrombosis Jt Comm J Qual Patient Saf. 2011 Apr;37(4):178-83. Venous thromboembolism prophylaxis in surgical patients: identifying a patient group to maximize performance improvement.

MAXIMUS guideline: The Expert Reviewer did not base their decision on the MTUS. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG) Elbow chapter, Cold packs Recommended. Recommend at-home applications of cold packs during first few days; thereafter applications of either heat or cold packs to suit patient. (AHRQ, 2002) Shoulder chapter: Venous thrombosis Recommend monitoring risk of perioperative thromboembolic complications in both the acute and subacute postoperative periods for possible treatment, and identifying subjects who are at a high risk of developing venous thrombosis and providing prophylactic measures such as consideration for anticoagulation therapy. In the shoulder, risk is lower than in the knee and depends on: (1) invasiveness of the surgery (uncomplicated shoulder arthroscopy would be low risk but arthroplasty would be higher risk); (2) the postoperative immobilization period; & (3) use of central venous catheters. Upper extremity deep vein thrombosis (UEDVT) may go undetected since the problem is generally asymptomatic. The incidence of UEDVT is much less than that of the lower extremity DVT possibly because: (a) fewer, smaller valves are present in the veins of the upper extremity, (b) bedridden patients generally have less cessation of arm movements as compared to leg movements, (c) less hydrostatic pressure in the arms, & (d) increased fibrinolytic activity that has been seen in the endothelium of the upper arm as compared to the lower arm. It is recommended to treat patients of asymptomatic mild UEDVT with anticoagulation alone and patients of severe or extensive UEDVT with motorized mechanical devices in conjunction with pharmacological thrombolysis, without delay beyond 10-14 days. Upper extremity DVT is much less studied compared to lower extremity DVT and the diagnostic and therapeutic modalities still have substantial areas that need to be studied. (Saseedharan, 2012) Although it is generally believed that venous thromboembolism (VTE) after shoulder surgery is very rare, there are increasing reports of deep venous thrombosis (DVT) and pulmonary embolism (PE) associated with shoulder surgery. (Ojike, 2011) Deep vein thrombosis (DVT) has an incidence of 1 case per 1000 and it is very rare after arthroscopy of the shoulder. The administration of DVT prophylaxis is not generally recommended in shoulder arthroscopy procedures. (Garofalo, 2010) On the other hand, the prevalence of DVT after reconstructive shoulder arthroplasty was 13%, compared to 27% after knee arthroplasty. (Willis, 2009) While the absolute rate of upper extremity deep vein thrombosis is low, the incidence is increasing due to more widespread use of peripherally inserted central venous catheters, according to a recent systematic review. A diagnostic algorithm using a clinical prediction score, D-dimer testing, and ultrasound can predict upper extremity deep vein thrombosis. The scoring system gives one point each for presence of venous material (such as a catheter), localized pain, and unilateral pitting edema, and

Decision rationale: California MTUS ACOEM Guidelines and supported by the Official Disability Guidelines do not recommend the use of Vascutherm cold therapy 14-day rental as medically necessary. The ACOEM Guidelines support the use of cold packs for pain control. Currently, no documentation exists to suggest that the claimant is at a high risk for deep venous thrombosis (DVT) from a history of DVTs or comorbidities, which may predispose him to

DVTs. In general, Official Disability Guidelines do not consider compression garments and cold compression therapy medically necessary, and continuous flow cryotherapy is only supported up to seven days following surgical intervention. Therefore, based on the Official Disability Guidelines, the Vascutherm cold therapy 14-day rental is not considered medically necessary.

Compression Therapy Pad: Upheld

Claims Administrator guideline: The Claims Administrator did not base their decision on the MTUS. Decision based on Non-MTUS Citation Official Disability Guidelines - TWC Elbow Procedure Summary: Cold Packs, Venous thrombosis *Jt Comm J Qual Patient Saf.* 2011 Apr;37(4):178-83. Venous thromboembolism prophylaxis in surgical patients: identifying a patient group to maximize performance improvement.

MAXIMUS guideline: The Expert Reviewer did not base their decision on the MTUS. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG); Elbow chapter, Cold packs Recommended. Recommend at-home applications of cold packs during first few days; thereafter applications of either heat or cold packs to suit patient. (AHRQ, 2002) Shoulder chapter: Venous thrombosis Recommend monitoring risk of perioperative thromboembolic complications in both the acute and subacute postoperative periods for possible treatment, and identifying subjects who are at a high risk of developing venous thrombosis and providing prophylactic measures such as consideration for anticoagulation therapy. In the shoulder, risk is lower than in the knee and depends on: (1) invasiveness of the surgery (uncomplicated shoulder arthroscopy would be low risk but arthroplasty would be higher risk); (2) the postoperative immobilization period; & (3) use of central venous catheters. Upper extremity deep vein thrombosis (UEDVT) may go undetected since the problem is generally asymptomatic. The incidence of UEDVT is much less than that of the lower extremity DVT possibly because: (a) fewer, smaller valves are present in the veins of the upper extremity, (b) bedridden patients generally have less cessation of arm movements as compared to leg movements, (c) less hydrostatic pressure in the arms, & (d) increased fibrinolytic activity that has been seen in the endothelium of the upper arm as compared to the lower arm. It is recommended to treat patients of asymptomatic mild UEDVT with anticoagulation alone and patients of severe or extensive UEDVT with motorized mechanical devices in conjunction with pharmacological thrombolysis, without delay beyond 10-14 days. Upper extremity DVT is much less studied compared to lower extremity DVT and the diagnostic and therapeutic modalities still have substantial areas that need to be studied. (Saseedharan, 2012) Although it is generally believed that venous thromboembolism (VTE) after shoulder surgery is very rare, there are increasing reports of deep venous thrombosis (DVT) and pulmonary embolism (PE) associated with shoulder surgery. (Ojike, 2011) Deep vein thrombosis (DVT) has an incidence of 1 case per 1000 and it is very rare after arthroscopy of the shoulder. The administration of DVT prophylaxis is not generally recommended in shoulder arthroscopy procedures. (Garofalo, 2010) On the other hand, the prevalence of DVT after reconstructive shoulder arthroplasty was 13%, compared to 27% after knee arthroplasty. (Willis, 2009) While the absolute rate of upper extremity deep vein thrombosis is low, the incidence is increasing due to more widespread use of peripherally inserted central venous catheters, according to a recent systematic review. A diagnostic algorithm using a clinical prediction score, D-dimer testing, and ultrasound can predict upper

extremity deep vein thrombosis. The scoring system gives one point each for presence of venous material (such as a catheter), localized pain, and unilateral pitting edema, and

Decision rationale: The California MTUS and ACOEM Guidelines do not address compression therapy pads. The Official Disability Guidelines from the elbow and shoulder chapter do not support cold compression therapy as medically necessary either in a nonoperative or the postoperative setting. In addition, existing documentation does not suggest that the claimant is at risk for DVT or has other medical comorbidities that may predispose him to such. Therefore, based on the documentation presented for review and in accordance with Official Disability Guidelines, the request for the compression therapy pad is not considered medically necessary.