

<b>Case Number:</b>	CM15-0088950		
<b>Date Assigned:</b>	05/13/2015	<b>Date of Injury:</b>	10/17/2014
<b>Decision Date:</b>	06/15/2015	<b>UR Denial Date:</b>	04/24/2015
<b>Priority:</b>	Standard	<b>Application Received:</b>	05/08/2015

### 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: New Jersey, Alabama, California  
 Certification(s)/Specialty: Neurology, Neuromuscular Medicine

### 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 43 year old woman sustained an industrial injury on 10/17/2014 while picking up a metal trashcan lid. Evaluations include right elbow x-rays. Diagnoses include lateral epicondylitis and elbow pain. Treatment has included oral medications and physical therapy. Physician notes dated 4/14/2015 show complaints of lateral elbow pain rated 6/10 with tingling in the arm and hand. Recommendations include ultrasound guided cortisone injection to the lateral epicondyle and follow up in two weeks.

### IMR ISSUES, DECISIONS AND RATIONALES

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

**Outpatient ultrasound-guided cortisone injection right elbow:** Upheld

**Claims Administrator guideline:** Decision based on MTUS ACOEM Chapter 10 Elbow Disorders (Revised 2007). Decision based on Non-MTUS Citation Official Disability Guidelines (ODG), elbow chapter injections (corticosteroids).

**MAXIMUS guideline:** The Expert Reviewer did not base their decision on the MTUS. Decision based on Non-MTUS Citation Injections (corticosteroid) <http://www.odg-twc.com/index.html>.

**Decision rationale:** According to ODG guidelines, elbow injection Not recommended as a routine intervention for epicondylitis, based on recent research. In the past a single injection was suggested as a possibility for short-term pain relief in cases of severe pain from epicondylitis, but beneficial effects persist only for a short time, and the long-term outcome could be poor. (Boisaubert, 2004) The significant short-term benefits of corticosteroid injection are paradoxically reversed after six weeks, with high recurrence rates, implying that this treatment should be used with caution in the management of tennis elbow. (Bisset, 2006) While there is some benefit in short-term relief of pain, patients requiring multiple corticosteroid injections to alleviate pain have a guarded prognosis for continued nonoperative management. Corticosteroid injection does not provide any long-term clinically significant improvement in the outcome of epicondylitis, and rehabilitation should be the first line of treatment in acute cases, but injections combined with work modification may have benefit. (Assendelft, 1996) (Bowen, 2001) (Reveille, 1997) (AHRQ, 2002) (Newcomer, 2001) (Smidt, 2002) (Stahl, 1997) (Crowther, 2002) (Smidt, 2005) A recent clinical trial of treatments for epicondylitis found that, after 12 months, the success rate for physical therapy (91%) was significantly higher than injection (69%), but only slightly higher than in the wait-and-see group (83%). (Korthals-de Bos, 2004) According to another study, botulinum toxin injection may improve pain over a three-month period in some patients with lateral epicondylitis, but injections may be associated with digit paresis and weakness of finger extension. (Wong, 2005) Steroid injection was associated with an increase in reported pain for the first 24 hours of treatment, but the therapeutic benefits compared with naproxen and placebo were evident 3 to 4 days after the start of treatment. (Lewis, 2005) On the basis of the results of this study, the study authors advocate steroid injection alone as the first line of treatment for patients presenting with tennis elbow demanding a quick return to daily activities. (Tonks, 2007) Recent research: In this RCT, corticosteroid injection did not affect the apparently self-limited course of lateral elbow pain. One month after injection, DASH (Disabilities of the Arm, Shoulder, and Hand questionnaire) scores averaged 24 versus 27 points (dexamethasone vs placebo), pain 3.7 versus 4.3 cm, and grip strength 83% versus 87%. At 6 months, DASH scores averaged 18 versus 13 points, pain 2.4 versus 1.7 cm, and grip strength 98% versus 97%. In secondary analyses in a subset of patients, perceived disability associated with lateral elbow pain correlated with depression and ineffective coping skills. (Lindenhovius, 2008) In the short-term (< 6 weeks), corticosteroid injection helps relieve symptoms from lateral epicondylitis. After 6 weeks, however, physical therapy is superior to steroid injection for symptom relief (level of evidence, A). Lateral epicondylitis (tennis elbow) can be treated in the short-term (< 6 weeks) with corticosteroid injection, with better improvement vs nonsteroidal anti-inflammatory drugs. After 6 weeks, physical therapy is more efficacious in reducing symptoms vs corticosteroid injection. During initial physical rehabilitation, corticosteroid injections can help control pain from lateral epicondylitis. (Stephens, 2008) Long-term use of corticosteroid injections for tendinopathy may be harmful, according to the results of a systematic review of randomized controlled trials reported in *The Lancet*. There was moderate evidence of harmful effects of repeated corticosteroid injection on pain, but the optimal number of doses and interval between injections are not known. The authors urged patients and practitioners to consider results of corticosteroid treatment that might not be defined as adverse, including negative long-term outcomes and high recurrence rates. The evidence for specific exercise therapy is more encouraging than the evidence for corticosteroid injection, and exercise therapy is likely to promote protein synthesis via cell signaling. Specific exercise therapy might produce more cures at 6 and 12 months than one or more corticosteroid injections. (Coombes,

2010) An RCT comparing corticosteroid injection to corticosteroid iontophoresis for lateral epicondylitis found that the iontophoresis patients had statistically significant improvement in grip strength, and they were also more likely to get back to work without restriction. However, by six-month follow-up, all groups had equivalent results for all measured outcomes. (Stefanou, 2012) This RCT found that patients treated with a single corticosteroid injection had a 14% greater chance of poor outcome and a 77% increased risk for reinjury at 1 year relative to placebo. Physical therapy did improve short-term pain and disability outcomes, although those benefits were lost when steroid injection was added to the treatment. Lateral epicondylitis is not an inflammatory condition, and steroid shots work best when inflammation is the problem, and even then they usually provide only temporary relief at best. Use of steroid injections to treat tennis elbow has been increasingly discouraged because of lack of long-term efficacy data and high recurrence rates. (Coombes, 2013) Pooled results from this systematic review showed that beyond 8 weeks, glucocorticoid injection was no more effective than placebo in lateral epicondylitis. (Krogh, 2013) There is no documentation supporting the use of elbow injection in this case. Therefore, the request is not medically necessary.