

<b>Case Number:</b>	CM15-0221187		
<b>Date Assigned:</b>	11/18/2015	<b>Date of Injury:</b>	04/28/2005
<b>Decision Date:</b>	12/30/2015	<b>UR Denial Date:</b>	10/12/2015
<b>Priority:</b>	Standard	<b>Application Received:</b>	11/10/2015

### 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: California

Certification(s)/Specialty: Internal 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:

The injured worker is a 56 year old female, who sustained an industrial injury on 4-28-2005. A review of the medical records indicates that the injured worker is undergoing treatment for internal derangement of the left knee. On 8-26-2015, the injured worker reported every motion hurt her knee, off-work as her pain was so severe. The Primary Treating Physician's report dated 8-26-2015, noted he injured worker's current medications included Norco and Zofran. The physical examination was noted to show exquisite tenderness along the left knee with swelling of the knee joint, tenderness across the medial and lateral joint line and limer instability with anterior drawer test. McMurray's test was positive medially and negative laterally. Prior treatments and evaluations have included a left knee MRI dated 8-31-2015 noting a complex tear of the anterior horn of the lateral meniscus, and oblique tear involving the posterior horn of the medial meniscus, Grade 3 chondromalacia of the left femoral condyle, Grade 2-3 chondromalacia of the left lateral tibial plateau, borderline excessive lateralization of the left tibial tuberosity, and left knee joint effusion and thin medial plica, cortisone injections, and physical therapy. The treatment plan was noted to include completion of the approved left knee MRI. The injured worker's work status was noted to be off work. The request for authorization dated 9-24-2015, requested an emergency ultrasound of the left calf. The Utilization Review (UR) dated 10-12-2015, non-certified the request for an emergency ultrasound of the left calf.

### IMR ISSUES, DECISIONS AND RATIONALES

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

## **Emergency ultrasound of the left calf: Upheld**

**Claims Administrator guideline:** The Claims Administrator did not base their decision on the MTUS. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG), Knee Chapter - Online Version, Ultrasound diagnostic, Venous thrombosis.

**MAXIMUS guideline:** The Expert Reviewer did not base their decision on the MTUS. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG) Knee/Leg (Acute & Chronic) Chapter: Ultrasound, Diagnostic.

**Decision rationale:** Based on ODG guidelines, a diagnostic ultrasound is recommended as indicated below. Soft-tissue injuries (meniscal, chondral surface injuries, and ligamentous disruption) are best evaluated by MR. In addition to MR, sonography has been shown to be diagnostic for acute anterior cruciate ligament (ACL) injuries in the presence of a hemarthrosis or for follow-up. (ACR, 2001) See also ACR Appropriateness Criteria. Ultrasound guidance for knee joint injections: In the knee, conventional anatomical guidance by an experienced clinician is generally adequate. Ultrasound guidance for knee joint injections is not generally necessary, but it may be considered in the following cases: (1) the failure of the initial attempt at the knee joint injection where the provider is unable to aspirate any fluid; (2) the size of the patient's knee, due to morbid obesity or disease process, that inhibits the ability to inject the knee without ultrasound guidance; & (3) draining a popliteal (Baker's) cyst. Although there is data to support that ultrasound guidance improves the accuracy of knee joint injections and reduces procedural pain in some cases, the data does not support improved clinical outcomes from ultrasound guidance for all knee joint injections. In addition, package inserts for drugs used for knee joint injections do not indicate the necessity of the use of ultrasound guidance. (CMS, 2010) US guidance significantly improves the accuracy of joint injection, allowing a trainee to rapidly achieve high accuracy, but US guidance did not improve the short-term outcome of joint injection. (Cunnington, 2010) This systematic review confirms that short-term outcome improvements are present using ultrasound-guided injection techniques but can confirm no difference in long-term outcome measures using either technique. (Gilliland, 2011) The accuracy of palpation-guided knee injections is variable and appears to be significantly influenced by clinician experience. Both US-guided knee injections and palpation-guided knee injections by a more experienced injector demonstrated an accuracy rate of 100% in this study. (Curtiss, 2011) In this meta-analysis, needle placement accuracy ranged from 63% to 100% with ultrasound and from 39% to 100% with conventional anatomical guidance. Ultrasound was more valuable in the shoulder than in the knee. Imaging guidance improved the accuracy of intra-articular injections of the knee (96.7% versus 81.0%) and the shoulder (97.3% versus 65.4%). (Berkoff, 2012) Ultrasound guidance for knee joint injections is not generally either recommended or not recommended, but it should not be a substitute for lack of clinical skill or experience, so injections can be done by less qualified personnel. Some areas are difficult to hit with an injection, such as SI joints or pancreatic ducts, but knee injections should not generally require ultrasound guidance. In this case, an emergent ultrasound was recommended due to swelling from foot to knee. There is no good documentation as to chords palpated, size of the calf or if there was a positive Homan's sign. Therefore, based on current guidelines, there is no clear indication for an emergency ultrasound of the left calf and it is not medically necessary.