

# CASEREVIEW

8017 Sitka Street  
Fort Worth, TX 76137  
Phone: 817-226-6328  
Fax: 817-612-6558

## Notice of Independent Review Decision

**DATE OF REVIEW:** December 20, 2011

**IRO CASE #:**

**DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE:**

Outpatient right shoulder arthroscopy, subacromial decompression and distal clavicle excision.

**A DESCRIPTION OF THE QUALIFICATIONS FOR EACH PHYSICIAN OR OTHER HEALTH CARE PROVIDER WHO REVIEWED THE DECISION:**

This physician is Board Certified in Orthopedic Surgery with over 40 years of experience.

**REVIEW OUTCOME:**

Upon independent review the reviewer finds that the previous adverse determination/adverse determinations should be:

Overturned (Disagree)

Provide a description of the review outcome that clearly states whether or not medical necessity exists for each of the health care services in dispute.

**INFORMATION PROVIDED TO THE IRO FOR REVIEW:**

03/22/11: MRI of the right shoulder interpreted by  
04/12/11: Consultation report by  
04/28/11: Follow-up evaluation by  
08/11/11: Follow-up evaluation by  
10/13/11: Follow-up evaluation by  
11/02/11: UR performed by  
11/21/11: UR performed by

**PATIENT CLINICAL HISTORY [SUMMARY]:**

This claimant injured his right shoulder on xx/xx/xx while working. A hose became stuck and he sustained an extension and twisting-type injury.

On March 22, 2011, MRI of the right shoulder revealed: 1. A superior labral tear that extends anterior to posteriorly. The tear also extends into the biceps anchor. These findings are compatible with Type III SLAP tear. 2. There is also irregularity involving the anterior labrum that extends from 12 to 3 o'clock position suspicious for a labral tear. 3. Tendinopathy changes are present in the supraspinous, infraspinous, and subscapularis tendons. 4. There is partial tear involving proximal long head of biceps tendon. 5. There is edema and fluid surrounding the proximal long head of biceps tendon. 6. Hypertrophic degenerative joint change present at the AC joint.

On April 12, 2011, the claimant was evaluated by who diagnosed right shoulder tendinosis with impingement syndrome, acromioclavicular joint hypertrophic changes creating outlet stenosis with SLAP type III tear with partial thickness biceps tendon tear. On physical examination the shoulder did not reveal any atrophy. He elevated to 160 degrees, external rotation to 55 degrees. Internal rotation to the L2 level. Lift-off test was negative. Speeds test was mildly positive, but he did not have significant pain surrounding the biceps tendon region. Crepitations were noted in the subacromial space. Abduction strength appeared satisfactory. Apprehension sign was negative in the anterior and the posterior direction. Neurologically, no focal deficits distally. X-rays revealed a type 3 acromion. Acromioclavicular joint hypertrophic changes were noted. The glenohumeral joint did not reveal degenerative changes. recommended conservative care in the form of exercises for the right shoulder. An injection of Lidocaine and Depo Medrol was performed into the subacromial space.

On April 28, 2011, the claimant had a follow-up evaluation with who noted he received 3 days of relief from the injection. Physical therapy was recommended.

On August 11, 2011, the claimant had a follow-up evaluation with who noted he had been completing physical therapy and felt that it had been helping. On physical examination there was no appreciable limited motion. Elevation was to 165 degrees, external rotation to 65 degrees, internal rotation to the T12 level. Abduction strength showed significant improvement, mildly positive impingement sign. No crepitations. Continuation of physical therapy was recommended. The option of operative intervention was discussed.

On October 13, 2011, the claimant had a follow-up evaluation with who noted the claimant continued to have a catching sensation when he attempts to externally rotate the arm. On physical examination, his range of motion was decreased. He elevated to 155 degrees, external rotation to 55 degrees, internal rotation to the L3 level. Crepitations were noted. Palpable click within the subacromial space was noted. He had a positive impingement sign and a positive cross arm adduction test. He was tender over the acromioclavicular joint and the biceps tendon. opined he failed conservative treatment and recommended arthroscopic examination of the right shoulder with indicated procedures including debridement, subacromial decompression, distal claviclectomy, arthroscopic.

On November 2, 2011, performed a UR on the claimant. Rationale for Denial: The request does not meet ODG criteria in that films do not show complete or incomplete separation of the ac joint and no bone scan has been done. Also no evidence of impingement was seen on imaging. Therefore, at this time and on this information the request is not authorized.

On November 21, 2011, performed a UR on the claimant. Rationale for Denial: The medical records continue to fail to document AC joint evaluation in the medical records supporting it being a pain generator requiring the distal clavicle resection. Therefore, I would agree with the non-authorization of the requested surgery at this time.

**ANALYSIS AND EXPLANATION OF THE DECISION INCLUDE CLINICAL BASIS, FINDINGS AND CONCLUSIONS USED TO SUPPORT THE DECISION:**

The previous decisions have been overturned. The case meets all the requirements for arthroscopic surgery with debridement or repair of the SLAP tear, and debridement and/or repair of the biceps tendon, and possible subacromial decompression and resection of the distal clavicle. The MRI on March 22, 2011 showed a superior labral tear that extended anterior to posteriorly. The tear also extended into the biceps anchor. Those findings were compatible with Type III SLAP tear. There was also a partial tear involving proximal long head of biceps tendon. There was also tendinopathy changes present in the supraspinous, infraspinous, and subscapularis tendons and hypertrophic degenerative joint change present at the AC joint. On physical exam on October 13, 2011, crepitations were noted and a palpable click within the subacromial space was noted. The claimant had a positive impingement sign and was tender over the acromioclavicular joint and the biceps tendon. He had failed conservative treatment including physical therapy and injections, therefore I believe the outpatient right shoulder arthroscopy, with subacromial decompression and possible distal clavicle excision is reasonable and necessary.

**ODG:**

Diagnostic arthroscopy	Recommended as indicated below. <b>Criteria</b> for diagnostic arthroscopy (shoulder arthroscopy for diagnostic purposes): Most orthopedic surgeons can generally determine the diagnosis through examination and imaging studies alone. Diagnostic arthroscopy should be limited to cases where imaging is inconclusive and acute pain or functional limitation continues despite conservative care. Shoulder arthroscopy should be performed in the outpatient setting. If a rotator cuff tear is shown to be present following a diagnostic arthroscopy, follow the guidelines for either a full or partial thickness rotator cuff tear. ( <a href="#">Washington, 2002</a> ) ( <a href="#">de Jager, 2004</a> ) ( <a href="#">Kaplan, 2004</a> ) For average hospital LOS if criteria are met, see <a href="#">Hospital length of stay</a> (LOS).
Surgery for rotator cuff repair	Recommended as indicated below. Repair of the rotator cuff is indicated for significant tears that impair activities by causing weakness of arm elevation or rotation, particularly acutely in younger workers. However, rotator cuff tears are frequently partial-thickness or smaller full-thickness tears. For partial-thickness rotator cuff tears and small full-thickness tears presenting primarily as impingement, surgery is reserved for cases failing conservative therapy for three months. The preferred procedure is usually arthroscopic decompression, but the outcomes from open repair are as good or better. Surgery is not indicated for patients with mild symptoms or those who have no limitations of activities. ( <a href="#">Ejnisman-Cochrane, 2004</a> ) ( <a href="#">Grant, 2004</a> ) Lesions of the rotator cuff are best thought of as a continuum, from mild inflammation and degeneration to full avulsions. Studies of normal subjects document the universal presence of degenerative changes and conditions,

including full avulsions without symptoms. Conservative treatment has results similar to surgical treatment but without surgical risks. Studies evaluating results of conservative treatment of full-thickness rotator cuff tears have shown an 82-86% success rate for patients presenting within three months of injury. The efficacy of arthroscopic decompression for full-thickness tears depends on the size of the tear; one study reported satisfactory results in 90% of patients with small tears. A prior study by the same group reported satisfactory results in 86% of patients who underwent open repair for larger tears. Surgical outcomes are much better in younger patients with a rotator cuff tear, than in older patients, who may be suffering from degenerative changes in the rotator cuff. Referral for surgical consultation may be indicated for patients who have: Activity limitation for more than three months, plus existence of a surgical lesion; Failure of exercise programs to increase range of motion and strength of the musculature around the shoulder, plus existence of a surgical lesion; Clear clinical and imaging evidence of a lesion that has been shown to benefit, in both the short and long term, from surgical repair; Red flag conditions (e.g., acute rotator cuff tear in a young worker, glenohumeral joint dislocation, etc.). Suspected acute tears of the rotator cuff in young workers may be surgically repaired acutely to restore function; in older workers, these tears are typically treated conservatively at first. Partial-thickness tears are treated the same as impingement syndrome regardless of MRI findings. Outpatient rotator cuff repair is a well accepted and cost effective procedure. ([Cordasco, 2000](#)) Difference between surgery & exercise was not significant. ([Brox, 1999](#)) There is significant variation in surgical decision-making and a lack of clinical agreement among orthopaedic surgeons about rotator cuff surgery. ([Dunn, 2005](#)) For rotator cuff pain with an intact tendon, a trial of 3 to 6 months of conservative therapy is reasonable before orthopaedic referral. Patients with small tears of the rotator cuff may be referred to an orthopaedist after 6 to 12 weeks of conservative treatment. ([Burbank2, 2008](#)) Patients with workers' compensation claims have worse outcomes after rotator cuff repair. ([Henn, 2008](#))

Revision rotator cuff repair: The results of revision rotator cuff repair are inferior to those of primary repair. While pain relief may be achieved in most patients, selection criteria should include patients with an intact deltoid origin, good-quality rotator cuff tissue, preoperative elevation above the horizontal, and only one prior procedure. ([Djurasovic, 2001](#))

Recent research: Evidence on the pros and cons of various operative and nonoperative treatments for rotator cuff tears is limited and inconclusive, an AHRQ comparative effectiveness review concluded. While the data are sparse, patients improved substantially with all interventions; there were few clinically important differences between approaches, and complications were rare. Most patients try to resolve their pain and disability with a course of physical therapy before attempting surgery, but the study found very little good quality research to guide the choice of nonoperative treatment, the timing of treatment, and who would most benefit from various forms of treatment. Four out of five studies comparing surgical and nonsurgical management favored operative repair, but the evidence was too limited to make conclusions regarding comparative effectiveness. 113 studies comparing various operations found no differences in functional outcomes between open vs mini-open repair, mini-open vs arthroscopic repair, arthroscopic repairs with vs without acromioplasty, and single-row vs double-row fixation. Patients who had mini-open repair returned to work about a month earlier than patients who had open repair. On the other hand, functional improvement was better after open repair compared with arthroscopic debridement. With regard to adding continuous passive motion to postoperative physical therapy, 11 trials yielded moderate evidence for no difference in function or pain. One study found no difference in range of motion or strength, while another suggested that adding continuous passive motion shortened the time until return to work and the time to 90 degrees abduction. For other postoperative rehabilitation strategies, one study showed that progressive loading reduced pain compared to traditional loading. In general, though, most studies found no difference in health-related quality of life, function, pain, range of motion, and strength with one approach versus another (e.g., with or without aquatics, individualized vs at home alone,

videotape vs therapist-based, etc.). In the 72 studies that assessed prognostic factors, older age, increasing tear size, and greater preoperative symptoms were consistently associated with recurrent tears, whereas gender, workers' compensation status, and duration of symptoms usually did not predict poorer outcomes. (Seida, 2010) "Rotator cuff surgery is a viable option for many patients, but, as with any surgery, it is not for everybody," said AHRQ Director Carolyn M. Clancy, M.D. "This report has good news: most interventions work, and each patient should talk to his or her doctor about which to option to pursue." Most older patients who suffer a rotator cuff tear are first treated with up to 3 months of nonsurgical treatment such as pain and anti-inflammatory medications, exercise, and rest. If treatments other than surgery do not work, the rotator cuff may be repaired surgically, using a variety of methods ranging from minimally invasive techniques to an open operation. Patients can then undergo rehabilitation to restore their range of motion, muscle strength, and function following surgery. Rotator cuff tears also can occur in younger adults, usually as a result of traumatic injury. In such cases they are almost always treated with surgery. Some doctors have maintained that earlier surgery results in less pain and better use of the shoulder, leading to an earlier return to work and decreased costs; so, patients often face the difficult decision of opting for surgery rather than waiting for nonoperative treatments to work. However, researchers found little evidence that earlier surgery benefits patients. Comparative Effectiveness of Nonoperative and Operative Treatments for Rotator Cuff Tears is the newest comparative effectiveness report from the AHRQ's Effective Health Care Program. The Effective Health Care Program represents the leading federal effort to compare alternative treatments for health conditions and make the findings public, to help doctors, nurses, pharmacists and others work together with patients to choose the most effective treatments. (Clancy, 2010) This prospective cohort study concluded that PT is effective for most patients with atraumatic full-thickness rotator cuff tears and shoulder pain, without the need for surgery. At six weeks fewer than 10% of patients had decided to undergo surgery, and after 2 years, only 2% of the rest had opted for surgery. Patients did most of their physical therapy at home and usually made only 1 weekly visit to the physical therapist. (Kuhn, 2011) One-third of rotator cuff repairs fail, and 74% of the failures occur within three months of surgery. Healed tendons, or recurrent tears, at six months can predict outcomes at seven years. (Kluger, 2011)

ODG Indications for Surgery™ -- Rotator cuff repair:

Criteria for rotator cuff repair with diagnosis of full thickness rotator cuff tear AND Cervical pathology and frozen shoulder syndrome have been ruled out:

1. Subjective Clinical Findings: Shoulder pain and inability to elevate the arm; tenderness over the greater tuberosity is common in acute cases. PLUS
2. Objective Clinical Findings: Patient may have weakness with abduction testing. May also demonstrate atrophy of shoulder musculature. Usually has full passive range of motion. PLUS
3. Imaging Clinical Findings: Conventional x-rays, AP, and true lateral or axillary views. AND Gadolinium MRI, ultrasound, or arthrogram shows positive evidence of deficit in rotator cuff.

Criteria for rotator cuff repair OR anterior acromioplasty with diagnosis of partial thickness rotator cuff repair OR acromial impingement syndrome (80% of these patients will get better without surgery.)

1. Conservative Care: Recommend 3 to 6 months: Three months is adequate if treatment has been continuous, six months if treatment has been intermittent. Treatment must be directed toward gaining full ROM, which requires both stretching and strengthening to balance the musculature. PLUS
2. Subjective Clinical Findings: Pain with active arc motion 90 to 130 degrees. AND Pain at night (Tenderness over the greater tuberosity is common in acute cases.) PLUS
3. Objective Clinical Findings: Weak or absent abduction; may also demonstrate atrophy. AND Tenderness over rotator cuff or anterior acromial area. AND Positive impingement sign and temporary relief of pain with anesthetic injection (diagnostic injection test).

PLUS

	<p>4. Imaging Clinical Findings: Conventional x-rays, AP, and true lateral or axillary view. AND Gadolinium MRI, ultrasound, or arthrogram shows positive evidence of deficit in rotator cuff.  <a href="#">(Washington, 2002)</a>  For average hospital LOS if criteria are met, see <a href="#">Hospital length of stay</a> (LOS).</p>
<p>Surgery for ruptured biceps tendon (at the shoulder)</p>	<p>Not recommended except as indicated below. Nonsurgical treatment is usually all that is needed for tears in the proximal biceps tendons (biceps tendon tear at the shoulder). Surgery may be an appropriate treatment option for tears in the distal biceps tendons (biceps tendon tear at the elbow) for patients who need normal arm strength. <a href="#">(Mazzocca, 2008)</a> <a href="#">(Chillemi, 2007)</a> Ruptures of the proximal (long head) of the biceps tendon are usually due to degenerative changes in the tendon. It can almost always be managed conservatively, since there is no accompanying functional disability. Surgery may be desired for cosmetic reasons, especially by young body builders, but is not necessary for function. <a href="#">(Rantanen, 1999)</a> When patients having rotator cuff surgery also have a torn biceps tendon, repairing it with tenodesis takes only 10 minutes longer than tenotomy but yields better outcomes. In tenodesis, the surgeon cuts the normal attachment of the biceps tendon on the shoulder socket and reattaches it to the humerus. This maneuver takes pressure off the cartilage rim of the shoulder socket (the labrum), and a portion of the tendon can be resected. The alternative, a tenotomy, simply involves cutting and suturing the tendon. With tenodesis, patients have a longer recovery, but they're also more likely to have better function and a normal appearing biceps muscle. With tenotomy, there can be arm cramping, weakness, and a biceps tendon abnormality called a "Popeye deformity". Tenodesis is a better approach except for the aged, senile, and less active. <a href="#">(Koh, 2010)</a></p> <p>ODG Indications for Surgery™ -- Ruptured biceps tendon surgery:  Criteria for tenodesis of long head of biceps (Consideration of tenodesis should include the following: Patient should be a young adult; not recommended as an independent stand alone procedure. There must be evidence of an incomplete tear.) with diagnosis of incomplete tear or fraying of the proximal biceps tendon (The diagnosis of fraying is usually identified at the time of acromioplasty or rotator cuff repair so may require retrospective review.):</p> <ol style="list-style-type: none"> <li>1. Subjective Clinical Findings: Complaint of more than "normal" amount of pain that does not resolve with attempt to use arm. Pain and function fails to follow normal course of recovery. PLUS</li> <li>2. Objective Clinical Findings: Partial thickness tears do not have classical appearance of ruptured muscle. PLUS</li> <li>3. Imaging Clinical Findings: Same as that required to rule out full thickness rotator cuff tear: Conventional x-rays, AP and true lateral or axillary view. AND Gadolinium MRI, ultrasound, or arthrogram shows positive evidence of deficit in rotator cuff.</li> </ol> <p>Criteria for tenodesis of long head of biceps with diagnosis of complete tear of the proximal biceps tendon: Surgery almost never considered in full thickness ruptures. Also required:</p> <ol style="list-style-type: none"> <li>1. Subjective Clinical Findings: Pain, weakness, and deformity. PLUS</li> <li>2. Objective Clinical Findings: Classical appearance of ruptured muscle.</li> </ol> <p>Criteria for reinsertion of ruptured biceps tendon with diagnosis of distal rupture of the biceps tendon: All should be repaired within 2 to 3 weeks of injury or diagnosis. A diagnosis is made when the physician cannot palpate the insertion of the tendon at the patient's antecubital fossa. Surgery is not indicated if 3 or more months have elapsed. <a href="#">(Washington, 2002)</a></p>
<p>partial claviclectomy (Mumford procedure)</p>	<p>See <a href="#">Surgery for shoulder dislocation</a> for more information and references.  ODG Indications for Surgery™ -- Partial claviclectomy:  Criteria for partial claviclectomy (includes Mumford procedure) with diagnosis of post-traumatic arthritis of AC joint:</p> <ol style="list-style-type: none"> <li>1. Conservative Care: At least 6 weeks of care directed toward symptom relief prior to surgery. (Surgery is not indicated before 6 weeks.) PLUS</li> <li>2. Subjective Clinical Findings: Pain at AC joint; aggravation of pain with shoulder</li> </ol>

	<p>motion or carrying weight. OR Previous Grade I or II AC separation. PLUS</p> <p>3. Objective Clinical Findings: Tenderness over the AC joint (most symptomatic patients with partial AC joint separation have a positive bone scan). AND/OR Pain relief obtained with an injection of anesthetic for diagnostic therapeutic trial. PLUS</p> <p>4. Imaging Clinical Findings: Conventional films show either: Post-traumatic changes of AC joint. OR Severe DJD of AC joint. OR Complete or incomplete separation of AC joint. AND Bone scan is positive for AC joint separation.</p>
<p>Surgery for impingement syndrome</p>	<p>Recommended as indicated below. Surgery for impingement syndrome is usually arthroscopic decompression (acromioplasty). However, this procedure is not indicated for patients with mild symptoms or those who have no limitations of activities. Conservative care, including cortisone injections, should be carried out for at least three to six months prior to considering surgery. Since this diagnosis is on a continuum with other rotator cuff conditions, including rotator cuff syndrome and rotator cuff tendonitis, see also <a href="#">Surgery for rotator cuff repair</a>. (<a href="#">Prochazka, 2001</a>) (<a href="#">Ejnisman-Cochrane, 2004</a>) (<a href="#">Grant, 2004</a>) Arthroscopic subacromial decompression does not appear to change the functional outcome after arthroscopic repair of the rotator cuff. (<a href="#">Gartsman, 2004</a>) This systematic review comparing arthroscopic versus open acromioplasty, using data from four Level I and one Level II randomized controlled trials, could not find appreciable differences between arthroscopic and open surgery, in all measures, including pain, UCLA shoulder scores, range of motion, strength, the time required to perform surgery, and return to work. (<a href="#">Barfield, 2007</a>) Operative treatment, including isolated distal clavicle resection or subacromial decompression (with or without rotator cuff repair), may be considered in the treatment of patients whose condition does not improve after 6 months of conservative therapy or of patients younger than 60 years with debilitating symptoms that impair function. The results of conservative treatment vary, ongoing or worsening symptoms being reported by 30-40% patients at follow-up. Patients with more severe symptoms, longer duration of symptoms, and a hook-shaped acromion tend to have worse results than do other patients. (<a href="#">Hambly, 2007</a>) A prospective randomised study compared the results of arthroscopic subacromial bursectomy alone with debridement of the subacromial bursa followed by acromioplasty in patients suffering from primary subacromial impingement without a rupture of the rotator cuff who had failed previous conservative treatment. At a mean follow-up of 2.5 years both bursectomy and acromioplasty gave good clinical results, and no statistically significant differences were found between the two treatments. The authors concluded that primary subacromial impingement syndrome is largely an intrinsic degenerative condition rather than an extrinsic mechanical disorder. (<a href="#">Henkus, 2009</a>) A recent RCT concluded that arthroscopic acromioplasty provides no clinically important effects over a structured and supervised exercise program alone in terms of subjective outcome or cost-effectiveness when measured at 24 months, and that structured exercise treatment should be the basis for treatment of shoulder impingement syndrome, with operative treatment offered judiciously. (<a href="#">Ketola, 2009</a>)</p> <p>ODG Indications for Surgery™ -- Acromioplasty:  Criteria for anterior acromioplasty with diagnosis of acromial impingement syndrome (80% of these patients will get better without surgery.)</p> <ol style="list-style-type: none"> <li>1. Conservative Care: Recommend 3 to 6 months: Three months is adequate if treatment has been continuous, six months if treatment has been intermittent. Treatment must be directed toward gaining full ROM, which requires both stretching and strengthening to balance the musculature. PLUS</li> <li>2. Subjective Clinical Findings: Pain with active arc motion 90 to 130 degrees. AND Pain at night. PLUS</li> <li>3. Objective Clinical Findings: Weak or absent abduction; may also demonstrate atrophy. AND Tenderness over rotator cuff or anterior acromial area. AND Positive impingement sign and temporary relief of pain with anesthetic injection (diagnostic injection test). PLUS</li> <li>4. Imaging Clinical Findings: Conventional x-rays, AP, and true lateral or axillary view. AND Gadolinium MRI, ultrasound, or arthrogram shows positive evidence of</li> </ol>

**A DESCRIPTION AND THE SOURCE OF THE SCREENING CRITERIA OR OTHER CLINICAL BASIS USED TO MAKE THE DECISION:**

- ACOEM- AMERICAN COLLEGE OF OCCUPATIONAL & ENVIRONMENTAL MEDICINE UM KNOWLEDGEBASE**
- AHCPR- AGENCY FOR HEALTHCARE RESEARCH & QUALITY GUIDELINES**
- DWC- DIVISION OF WORKERS COMPENSATION POLICIES OR GUIDELINES**
- EUROPEAN GUIDELINES FOR MANAGEMENT OF CHRONIC LOW BACK PAIN**
- INTERQUAL CRITERIA**
- MEDICAL JUDGEMENT, CLINICAL EXPERIENCE AND EXPERTISE IN ACCORDANCE WITH ACCEPTED MEDICAL STANDARDS**
- MERCY CENTER CONSENSUS CONFERENCE GUIDELINES**
- MILLIMAN CARE GUIDELINES**
- ODG- OFFICIAL DISABILITY GUIDELINES & TREATMENT GUIDELINES**
- PRESSLEY REED, THE MEDICAL DISABILITY ADVISOR**
- TEXAS GUIDELINES FOR CHIROPRACTIC QUALITY ASSURANCE & PRACTICE PARAMETERS**
- TEXAS TACADA GUIDELINES**
- TMF SCREENING CRITERIA MANUAL**
- PEER REVIEWED NATIONALLY ACCEPTED MEDICAL LITERATURE (PROVIDE A DESCRIPTION)**
- OTHER EVIDENCE BASED, SCIENTIFICALLY VALID, OUTCOME FOCUSED GUIDELINES (PROVIDE A DESCRIPTION)**