

# California Orthopaedic Association

## Workers' Compensation Utilization Review Checklist

### Rotator Cuff Repair

This checklist is intended to help orthopaedic surgeons document important factors for utilization reviewers (UR) when determining the medical necessity for this procedure(s). The checklists, developed by members of COA's Workers' Compensation Committee, will help our members anticipate what questions Utilization Reviewers will need to have documented in order for them to make more informed decisions. COA cannot guarantee that if you document the below issues, the procedure(s) will be approved, but it should help clarify the conservative treatment that the injured worker may have received, the results of the diagnostic imaging tests, and why you believe surgery is indicated.

Please remember that medical treatment requests should be based on the DWC's Medical Treatment Utilization Schedule (MTUS) [http://www.dir.ca.gov/dwc/mtus/mtus\\_regulationsguidelines.html](http://www.dir.ca.gov/dwc/mtus/mtus_regulationsguidelines.html) whenever possible as the MTUS guidelines are presumed correct. If the procedure is not covered by MTUS, you are able to utilize other nationally-recognized treatment guidelines such as ACOEM or ODG. The below checklist incorporates recommendations from the ODG treatment guidelines. You can utilize other high quality guidelines to document medical necessity.

Attach the below checklist along with a copy of the research justifying the procedure to your Request for Authorization (RFA). Having a summary of care to date to add to the checklist facilitates approval.

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## Workers' Compensation Utilization Review Checklist

### Rotator Cuff Repair

Patient name: \_\_\_\_\_ Claim #: \_\_\_\_\_

| Criteria for Rotator Cuff Repair                                                | Check if documented |
|---------------------------------------------------------------------------------|---------------------|
| DWC - MTUS Treatment Guidelines- are not applicable to this case                |                     |
| <b>Full thickness Rotator Cuff Repair- r/o Cervical and adhesive capsulitis</b> |                     |
| Document examination of cervical spine                                          |                     |
| Pain                                                                            |                     |
| Inability to elevate arm                                                        |                     |
| Tenderness over Greater tuberosity                                              |                     |
| <b>PLUS</b>                                                                     |                     |
| May be Weakness of Abduction                                                    |                     |
| May have Atrophy                                                                |                     |
| Full passive ROM may be present                                                 |                     |
| <b>PLUS</b>                                                                     |                     |
| X-rays AND MRI, UTZ, or arthrogram show deficit in RC                           |                     |
|                                                                                 |                     |
| Make sure your report addresses these findings                                  |                     |
|                                                                                 |                     |
|                                                                                 |                     |
|                                                                                 |                     |
|                                                                                 |                     |

### Rotator Cuff Repair for Small, Medium, or Large Tears

**Moderately Recommended.** Rotator cuff repair is moderately recommended for treatment of small, medium, or large tears (<5cm).

#### Surgical Considerations

*Strength of Evidence* – **Moderately Recommended, Evidence (B)**

*Indications:* All the following: 1) shoulder joint pain; 2) reduced ROM of the shoulder or impaired function; 3) imaging findings by MRI, MR arthrography, or ultrasound of rotator cuff tear. Patient must agree to participate fully in post operative active rehabilitation and understand there is a long recovery time. Pre-operative physical therapy is an option (but not a pre-operative requirement) as many patients sufficiently recover without surgery. (Moosmayer 10, 14; Kukkonen 14)

### Addition of Claviclectomy or Subacromial Decompression to a Rotator Cuff Repair for Isolated Supraspinatus Tears

**Moderately Not Recommended.** Adding claviclectomy or subacromial decompression to a rotator cuff repair is moderately not recommended for treatment of isolated supraspinatus tears.

## **Surgical Considerations**

### ***Strength of Evidence – Moderately Not Recommended, Evidence (B)***

*Rationale:* While surgery tends to produce modestly superior outcomes over 1 to 5 years (Moosmayer 10,14), non-operative treatment is often successful.(Moosmayer 10, 14; Kukkonen 14) Thus, physical therapy is a reasonable option for many patients, (Moosmayer 10, 14; Kukkonen 14) although data are insufficient to make it a pre-operative requirement. Surgical cuff repair is believed to be a superior option among patients for whom occupational shoulder exposures and demands are greater, although quality data that address this issue are not available. Many quality studies necessitated non-operative treatment prior to surgery (see evidence table). (Mohtadi 08; Spangehl 02) Some have included non-operative treatment for prolonged periods of at least 3 months prior to surgery (Mohtadi 08; Franceschi 07, 08; Iannotti 06) and up to 33 months (these trials are typically reported from countries with waiting lists for procedures). (Ko 08) Some studies have required failure of a glucocorticosteroid injection. (Franceschi 07; Dorrestijen 07)

There are a few quality studies comparing surgical repair of rotator cuff tears with non-operative treatment (see evidence table) that suggest physical therapy may be a reasonable option for initially presenting rotator cuff tear patients. (Moosmayer 10, 14; Kukkonen 14; MacDermid 06; Ejnisman 04) There are no sham-controlled trials.

Rotator cuff repair has evolved from open to mini-open to all arthroscopic techniques. Currently, arthroscopic techniques are evolving with the advent of new technology and instrumentation. (Neviaser InsCourseLect 89; Neer JBJS 1972; Hata 01; Rockwood 93; Ellman 93; Baker 95; Sauerbrey 05; Verma 06; Skoff 95; Youm 05; Ogilvie-Harris 93; Seida 10) Rates of arthroscopic anterior acromioplasty have increased 5.8-fold from 1980 to 2005. (Yu 10) There are quality studies available on short- and long-term comparisons between arthroscopic and open or mini-open repairs. (Nho 07; Morse 08) Arthroscopic repair is associated with lower complication rate- infection, deltoid dehiscence. There is high-quality evidence there are no long-term differences associated with arthroscopic repair and mini-open compared to open repair, (Mohtadi 08; Spangehl 02)<sup>14</sup> although evidence suggests a modest short-term advantage of arthroscopic mini-open repair versus open repair of rotator cuff tears. (Mohtadi 08)

There is moderate-quality evidence suggesting there is no demonstrable benefit in adding subacromial decompression to a rotator cuff repair for treatment of isolated supraspinatus tears with a Type II acromion in quality studies with up to 2 years follow-up data (Milano 07; Rubenthaler 03; Gartsman 04; Chahal 12; Kukkonen 14; Oh 14) or a repair using transosseous equivalent suture-bridge technique along with subacromial decompression. (Cuff 12) There are two moderate quality studies comparing arthroscopic debridement and subacromial decompression in treatment of full-thickness tears of the rotator cuff. (Melillo 97; Montgomery 94) There is one moderate-quality trial suggesting SLAP lesions found at the same time as rotator cuff tears in those over 50 years old do not require repair, rather biceps tenotomy outperforms the SLAP repair. (Franceschi 08)

Post-operative rehabilitation results have been found to be comparable regardless of early or delayed range of motion (Cuff 12) and in comparing 4 with 8 weeks of postoperative immobilization. (Koh 14) Post-operative anesthetic injections have been used, but without a placebo group. (Lee 15)

Re-tear rates vary widely, depending on numerous factors especially the size of the tear and the quality of the tendon and rotator cuff muscles. The re-tear rate for a single row

arthroscopic repair has been estimated at 40%, but varies considerably depending on the size of original tear. (Burks 09; Bishop 06; Fealy 06; Galatz 04; Gladstone 07; Liu 94) There is little quality evidence for superiority of one type of repair over another (e.g., single stitch versus double stitch); (Franceschi 07, Grasso 09, Lapner 12; Carbonel 12, Ma 12, Burks 09, Koh 11) or No. 3 Ethibond Mason-Allen sutures versus 1.0 mm polydioxanone cord with modified Kessler sutures. (Boehm 05) A meta-analysis and systematic review found double-row repair to have lower re-tear rates and greater internal rotation ROM but showed no other differences compared to single-row repair. (Xu 14, Saridakis 10) There is one moderate-quality study that has suggested a modified mattress-locking stitch is modestly superior to simple stitches; however, the study has considerable weaknesses that raise questions about the validity of the conclusions. (Ko 08) One study of arthroscopic repairs with long-term follow-up of up to 14 years looked at staple fixation repairs and side-to-side suture and anchor repairs; both kinds of repairs appear to document surgical success, although larger tears appear associated with lower success rates. (Wilson 02). Almost all repairs require reattachment of tendon to bone. Isolated side-to-side repair or margin convergence means that there is an incomplete repair as is usually present in cases of chronic massive tears. Tendon to bone repair has been suggested to be modestly better than side-to-side repair in one moderate-quality study. (Bigoni 09) Re-tears do not necessarily equate to pain and functional loss, just as some people have primary asymptomatic rotator cuff tears.

Most quality evidence included patients with small to moderate tears. Patients who are candidates for surgery generally have pain and impaired function. There are no quality studies suggesting better or worse results for earlier or delayed surgery (see evidence table), and current evidence does not support a need to rush surgical decisions. Until quality evidence becomes available to provide evidence-based guidance, the decision as to which surgical procedure to perform should be left to the surgeon and patient as there appear to be only modest short-term improvements for arthroscopic rotator cuff repair over open rotator cuff repairs (Mohtadi 08) or for impingement syndrome including trends towards shorter sick leave in one study (mean 10 versus 5.7 weeks); (Husby 03) but not all. (Rubenthaler 03) Early surgery should be considered in cases of acute traumatic tears; especially larger tears in healthy, active individuals. Surgery is invasive, involves prolonged recovery (many months), has adverse effects, and is costly. However, benefits appear to outweigh risks for most patients and surgery is recommended.

## Rotator Cuff Repair for Acute Massive Tears

**Recommended.** Rotator cuff repair is recommended for treatment of acute massive tears (>5cm).

### Surgical Considerations

*Strength of Evidence – Recommended, Evidence (C)*

*Indications:* All of the following: 1) shoulder joint pain; 2) reduced range of motion of the shoulder or impaired function; 3) imaging findings by MRI, MR arthrography, or ultrasound of massive rotator cuff tear.

## Rotator Cuff Repair for Chronic Massive Tears

**Not Recommended.** Rotator cuff repair is not generally recommended for treatment of chronic massive tears (>5cm).

### Surgical Considerations

*Strength of Evidence – Not Recommended, Evidence (C)*

*Indications:* While generally not recommended, if surgery is felt to be indicated for a particular patient, all of the following should be present: 1) shoulder joint pain; 2) reduced range of motion of the shoulder or impaired function; and 3) imaging findings by MRI, MR arthrography, or ultrasound of massive rotator cuff tear, 4) poor function that is felt to both necessitate surgical intervention and, 5) there is likelihood for significant improvement with surgery for that particular patient.

November, 2018