

[To Your Clinical Inquiries]

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Q / Surgery vs conservative management for AC joint repair: How do the 2 compare?

EVIDENCE-BASED ANSWER

A / **WHEN NOT CONSIDERING THE GRADE** of acromioclavicular (AC) joint dislocation, both conservative and surgical management lead to positive outcomes, although surgically managed patients require more time out of work (strength of recommendation [SOR]: **B**, Cochrane review of low-quality randomized controlled trials [RCTs]).

For Rockwood grade III dislocations, surgical intervention provides a better cosmetic outcome but increases infection risk (SOR: **B**, meta-analysis of retrospective case series).

Consensus guidelines suggest conservative management for Rockwood grade I to II dislocations and surgical repair for Rockwood grade IV to VI dislocations (SOR: **C**, expert opinion).

Similar outcomes, except when it comes to return to work

A 2010 Cochrane review of 2 RCTs and one quasi-randomized trial (174 patients, 93% male, moderate to high risk of bias) compared surgical intervention with conservative management of acute AC separations of unspecified Rockwood classification.¹ Surgeries included coracoclavicular fixation with a cancellous screw or transfixation of the AC joint with Steinmann pins or Kirschner wires.

Conservative treatment included immobilization of the shoulder using an arm sling for 2 to 4 weeks. Patients were evaluated for a minimum of 12 months with a nonvalidated scoring system that measured pain, motion, and function or strength.

At one year, 63 of 76 patients (83%) in

the post-surgical group and 74 of 84 patients (88%) in the conservative intervention group had either good or excellent results with no significant difference in unsatisfactory outcomes (relative risk [RR]=1.49; 95% confidence interval [CI], 0.75-2.95). (Fourteen patients—7 in each group—were lost to follow-up.) Moreover, the review found no significant difference in treatment failures requiring a subsequent operation between the groups—11 of 83 (13%) surgical patients and 7 of 91 (8%) conservatively managed patients (RR=1.72; 95% CI, 0.72-4.12).

Notably, regardless of activity level, surgical patients consistently returned to previous work functions later than patients managed conservatively. The mean convalescence time ranged from 8 to 11 weeks for surgical patients and 4 to 6 weeks for conservatively managed patients ($P<.05$).

A look at cosmetic results and risk of infection

A 2011 meta-analysis of 6 retrospective case series (379 patients, approximately 88% male) compared operative with nonoperative management in patients with acute, closed Rockwood grade III AC dislocations.² Operative techniques varied; nonoperative patients each received physiotherapy or rehabilitation therapy and most were treated with a sling. Patient follow-up varied from 32 months to 10.8 years.

Four of the included studies suggested that nonoperative management resulted in poorer cosmetic results (methods not defined) compared with the operative group

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(11 of 115 surgical patients [10%], 74 of 88 nonoperative patients [84%]; risk difference [RD]=−0.79; 95% CI, −0.92 to −0.66; number needed to harm [NNH]=>2).

Two of the studies evaluated the duration of sick leave and found a longer leave with operative management (50 operative and 54 nonoperative patients; mean difference=3.3; 95% CI, 2.1-4.5).

Five of the studies observed an increased risk of infection following operative management (8 of 175 [5%] operative patients compared with 0 of 152 [0%] nonop-

erative patients; RD=0.05; 95% CI, 0.01-0.09; NNH=20).

Recommendations depend on the grade of the injury

The American College of Occupational and Environmental Medicine recommends against routine surgical repair for Grade III AC joint separations.³ The College also recommends nonoperative management for patients with grade I to II AC dislocations and surgical repair for patients with grades IV to VI and select grade III AC dislocations. **JFP**

References

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2. Smith TO, Chester R, Pearse EO, et al. Operative versus non-operative management following Rockwood grade III acromioclavicular separation: a meta-analysis of the current evidence base. *J Orthopaed Traumatol*. 2011;12:19-27.
3. Hegmann KT. Shoulder disorders. In: *Occupational Medicine Practice Guidelines. Evaluation and Management of Common Health Problems and Functional Recovery in Workers*. 3rd ed. Elk Grove Village, IL: American College of Occupational and Environmental Medicine; 2011:1-297.



PART 4 Closing the survival gap

By Bobby Daly, MD, MBA, and Olufunmilayo I. Olopade, MD, FACP, OON

AVAILABLE NOW Part 4 of **“A Perfect Storm,”** a 5-part series that discusses the pathologic, genomic, and clinical factors that contribute to the racial survival disparity in breast cancer.

The series was adapted from an article originally published in *CA: A Cancer Journal for Clinicians* (a journal of the American Cancer Society) and reviews innovative interventions to close this survival gap. Part 4 discusses interventions that improve patient education and physician communication, as well as enhanced system-based approaches to closing the gap. The series is available online at jfponline.com. Simply type “Perfect Storm” into the search tool.

➤ **Look for the final installment next month!**