

Acromioclavicular Joint (ACJ) Reconstruction Using Lockdown Technique. Seremban Experience.

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INTRODUCTION:

ACJ disruption occurs following a direct blow or a traumatic fall over the shoulder. ACJ separation will lead to instability related pain. ACJ reconstruction are indicated to achieve good functional outcomes. There are currently no gold standard in surgical management as it varies from coracoclavicular screws, hook plates, endobutton coracoclavicular fixations and anatomic ligament reconstructions with tendon grafts[1]. This article highlights on functional outcome following Lockdown technique at our centre.

MATERIALS & METHODS:

Total of 5 patients who had Rockwood type V acromioclavicular injuries were included in this case series. The surgery was done on a beach chair position under general anesthesia. A strap incision was used, anterior and posterior flaps were dissected to visualize base of coracoid process, clavicle and ACJ. Length gauge was looped over coracoid process and used to measure the Lockdown size after achieving ACJ reduction. Length gauge was substituted with the Lockdown, securing a loop over the coracoid process. The loose end of the Lockdown was brought from bottom to top of clavicle posteriorly. The Lockdown was pulled to achieve ACJ reduction before securing it superiorly over clavicle with a screw and washer. Patient's outcome was assessed clinically using Constant Shoulder score and Zanca view X-Ray.

RESULTS:

Upon final follow up, all patients showed improvement in Constant Shoulder score with a mean of 81.6% (range 80-84%). Post operatively, Zanca view X-Ray taken showed anatomical restoration of ACJ and acceptable shoulder function.

Table 1 showing preoperative and postoperative Constant Shoulder Score score at end of 3rd month.

PATIENTS	ROCKWOOD CLASSIFICATION	CONSTANT SHOULDER SCORE	
		PRE-OPERATIVE	POST-OPERATIVE
1	V	48	82
2	V	48	80
3	V	52	82
4	V	54	84
5	V	50	80

DISCUSSIONS:

Regardless of the multiple surgical techniques for ACJ injury, there is no proven single best surgical technique. We highly recommend this technique as it has good clinical outcome and accelerates early return to work.

CONCLUSION:

Lockdown shoulder stabilization demonstrates the ability of artificial construct to restore native ACJ stability and good functional outcome without complication.

REFERENCES:

1. A. D. Mazzocca, R. A. Arciero, and J. Bicos, "Evaluation and treatment of acromioclavicular joint injuries," American Journal of Sports Medicine, vol. 35, no. 2, pp. 316–329, 2007