



ACROMIOCLAVICULAR JOINT DISLOCATION: AN INNOVATIVE WAY OF FIXATION.

Orthopaedics

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ABSTRACT

We report a case of 25 year male with history of swelling and pain of right shoulder, traumatic in nature. Radiographs revealed Acromioclavicular joint dislocation type 4. He underwent for ac joint fixation with ss wire in fashion of fig of 8, and cc joint fixation with partially threaded cannulated cancellous screw. Post operative period was uneventful.

KEYWORDS

Introduction:

Acromioclavicular joint dislocation injury usually involves a direct blow to the lateral aspect of the shoulder with the arm in an adducted position, leading to downward displacement of the scapula opposed by impaction of the clavicle onto the first rib. Rockwood classified AC dislocation into 6 type. Usually type 1-3 are treated conservatively, and type 4-6 needs operative interventions. Operative interventions can be done by many way.

In this case we present a case where ac joint fixation with ss wire in fashion of fig of 8, and cc joint fixation with partially threaded cannulated cancellous screw.

CASE REPORT:

A 25 year male presented with complains of swelling, pain of the right shoulder, which was traumatic in nature. On examination revealed a hard swelling of 3cm in size above acromion process which was tender and fixed.



Picture 1: preoperative picture

Radiograph showed AC dislocation of type 4.



Picture 2: xray of right shoulder AP view

He underwent open reduction and internal fixation of AC joint by ss wire in figure of 8, by drilling 2 holes in distal end of clavicle and acromion in sagittal plane. CC joint fixation were done by a partial threaded cannulated cancellous screw in coronal plane. site closed in layers. arm pouch applied. post-operative period was uneventful.



Picture 3: intra operative image



Picture 4: post-operative image

DISCUSSION:

Any surgical procedure for acromioclavicular dislocation should fulfill three requirements:

- (1) the acromioclavicular joint must be exposed and debrided;
- (2) the coracoclavicular and acromioclavicular ligaments must be repaired or reconstructed;
- (3) stable reduction of the acromioclavicular joint must be obtained.

There are more than 10 techniques which are tried for that, as there are no gold standard procedure yet.

Many techniques used to repair AC dislocations necessitate exposure and often instrumentation of the coracoid, such as, transfer of the coracoacromial ligament in a Weaver and Dunn1 based approach or to anchor some sort of coracoclavicular fixation such as a Bosworth2

screw or suture anchor. anatomic reconstruction of both the conoid and trapezoid

ligaments described by Mazzocca et al³. In this case we tried a new way to fix AC joint which have less operative time, and proper fixation of both acromioclavicular, and coraco clavicular joint, which is a step forward to this puzzle.

References:

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3. Mazzocca AD, Santangelo SA, Johnson ST, Rios CG, Dumonski ML, Arciero RA. A biomechanical evaluation of an anatomical coracoclavicular ligament reconstruction. *Am J Sports Med.* 2006;34:236-46.