

REVISION SURGERY IN CHRONIC ACROMIOCLAVICULAR JOINT INJURY

Muhamad Amir Azfar Sahadun¹, Norlizam Mohd Nor¹

¹Hospital Melaka

Introduction: The acromioclavicular joint (ACJ) represents a connection between clavicle and scapula which is responsible for the dynamics of shoulder girdle. The approach to chronic ACJ instability is different from acute injury. In acute phase, acromioclavicular (AC) and coracoclavicular (CC) ligaments still have the potential to heal. Therefore, surgical treatment is aimed at aligning the ends of torn ligament for soft tissue healing by means of suspensory implants with or without direct repair of the ACJ ligaments. However, management of chronic injury requires mechanical and biological augmentation as AC and CC ligament lose their healing potential from 3 weeks onwards.

Discussion: 23 years old gentleman right hand dominant with Rockwood type III right ACJ injury which was treated acutely with open tightrope procedure following a motor vehicle accident. At 7 months follow up, he complained of right shoulder deformity and pain following heavy lifting at workplace. Radiographic imaging showed complete AC joint dislocation with superior displacement of the distal clavicle. There was also evidence of osteolysis over the lateral end of clavicle with minimal osteophytes and subchondral sclerosis. Revision surgery with reconstruction of coracoclavicular ligament (CC) using hamstring autograft, AC dog bone technique and distal clavicle resection (Mumford procedure) was performed at 18 months post initial trauma. Post revision surgery, his pain score improved and was able to return to work. He has no limitation in daily activities.

Conclusion: Distal clavicle resection may represent a solution to a painful chronic ACJ injury. The fact that biological tendon augmentation should be used in chronic setting means that, protection with mechanical fixation is necessary until integration of tendon graft to the bone occurs. In our case, this is achieved using hamstring autograft tunneled at the clavicle and looped around the coracoid followed by AC dog bone technique and post-operative sling.