

A STUDY ON FUNCTIONAL OUTCOME OF BIOLOGICAL RECONSTRUCTION OF ACROMIOCLAVICULAR JOINT DISLOCATIONS TYPE III TO VI USING SEMITENDINOSUS GRAFT WITH ENDOBUTTON – PROSPECTIVE STUDY

ABSTRACT

Background: Acromio clavicular joint dislocations are common in physically active young adults that too most common in persons who are participating in sports activities . incidence is more in males who are participating in contact sports like rugby , basket ball, hockey. It accounts for 9% of all shoulder injuries. The injury severity is graded according to the Rockwood classification system. The aim of surgical treatment is to restore normal anatomy and to regain normal shoulder function in type III to VI. Many surgical procedures have been reported, including transarticular pins or screws; AC wire or suture fixation; coracoclavicular (CC) screws; and CC fixation with synthetic grafts.

Patients and methods: This was a prospective study of 14 patients with acute grades III–V AC joint dislocations through anatomic reconstruction of the coracoclavicular and acromioclavicular ligament using autogenous semitendinosus tendon. There were 12 male and 2 female patients, ranging in age from 26 to 60 years (mean 39 years). The right shoulder was involved in 10 patients (70%) and the left shoulder was involved in four (30%). The primary diagnosis was AC joint dislocation Rockwood type III in thirteen patients, type V in one.

Results : The mean follow-up period was 12 months (12–24 months). On constant score , 7 patients had excellent outcome, 6 patient had good outcome and 1 patient had adequate outcome. The procedure allowed for both satisfactory functional outcome and a low complication rate, with excellent or good results in 94% of the patients, with full return to previous activities in 12 months.

Conclusion: biological reconstruction with autogenous semitendinosus graft provides near normal anatomical reconstruction of Acromioclavicular joint with ligament complex (AC&CC) with better stability and mobility.

Keywords: acromioclavicular dislocation, acromioclavicular joint, Acromioclavicular&coracoclavicular ligaments, semitendinosus graft.