Coraco-Clavicular Ligament Reconstruction In Chronic Acromio-Clavicular Joint Instability – Arthroscopy Guided

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Background:

Of the various open stabilization techniques for chronic AC joint disruption, the Weaver–Dunn method represents the most popular one. We present an arthroscopically assisted stabilization for chronic AC joint dislocation using a gracilis tendon transclavicular-transcoracoid loop technique augmented with a Double button loop fixation system (Karl Storz). In contrast to the classic Weaver–Dunn procedure this technique is designed to stabilize the AC joint by recreating the anatomy of the coraco-clavicular ligaments under arthroscopy guidance.

Surgical Technique:

This technique will be performed on patients with symptomatic high grade chronic AC joint dislocation who present themselves in Hospital Kuala Lumpur from July 2014 onwards. We have so far performed this surgical technique on 2 patients. This technique stabilizes the vertical and horizontal instability in AC and CC joint dislocations. It comprises an anatomic reconstruction of the conoid and trapezoid ligament as well as the acromio-clavicular joint. It involves a rigid fixation with double button to stabilize the CC joint, ligament reconstruction using the Gracilis tendon to reconstruct the conoid and trapezoid ligaments, and a circlage technique to stabilize the AC joint anatomically.

Discussion:

Due to poor strength of the transferred graft and chronic pain over the clavicular resection site causing significant failure rate of the previous surgical techniques, e.g. Weaver Dunn and Graft rope techniques, newer techniques needed to be developed to address the vertical and horizontal stability which were found to be of equal importance in the success of the surgery. The technique above, as described by Scheibel et al, has been performed since 2007 and addresses the above mentioned issues. It has proven to yield better results than the previous techniques. We hope to obtain similar good results in Hospital Kuala Lumpur.