### Comparative Study between Arthroscopic Bankart Repair and Latarjet Procedure in High Demands Patients with Recurrent Anterior Shoulder Dislocation

A Thesis Submitted for partial fulfillment of MD degree in Orthopaedic Surgery

#### BY

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#### **LIST OF ABBREVIATIONS**

**ALPSA** : anterior labro-periosteal sleeve avulsion

**AP** : Anteroposterior

**ASES** : american shoulder and elbow surgeons

**ASORS** : athletic shoulder outcome rating scale

**BHAGL** . bony humeral avulsion of the glenohumeral

ligament lesion

**CAL** : coracoacromial ligament

**CHL** : coracohumeral ligament

**CM** : constant-murley

**CRPS** : complex regional pain syndrome

**CT** : computed tomography

**DASH** : disabilities of the arm, shoulder and hand

**GLAD** : gleno-labral articular disruption

HAGL . humeral avulsion of the glenohumeral ligament

lesion

**HS**: hill sachs

**IGHL** : inferior glenohumeral ligament

**IGHLC**: inferior glenohumeral ligamentous complex

**ISIS**: intability severity index score

MGHL : middle glenohumeral ligament

MISS : melbourne instability shoulder score

**MRA** : magnetic resonance arthrography

MRI : magnetic resonance imaging

**OA** : osteoarthritis

**OIS** : oxford instability score

**PXR** : Plain X ray

**RCT** : rotator cuff tear

**RI** : rotator interval

**ROM** : range of motion

**SGHL** : superior glenohumeral ligament

**SLAP** : superior labral tear from anterior to posterior

**SRQ** : shoulder rating questionnaire

**SST** : simple shoulder test

**UCLA** : university of California Los anglos

**WOSI** : western Ontario shoulder instability index

## Introduction

Glenohumeral joint dislocation is the most common dislocation seen in human body and accounts for about 50% of all joint dislocations. Anterior shoulder dislocation constitutes 95% of all shoulder dislocations<sup>(1, 2)</sup>. Anterior shoulder dislocation is a common problem in high demands patients<sup>(3)</sup>. Young men with high energy contacts are at the highest risk<sup>(1, 2)</sup>.

Two techniques are widely applied in surgical management of recurrent anterior shoulder dislocation: bone block as described by Latarjet and modified by Patte, and Bankart capsulo-labral reinsertion. Both give good functional results <sup>(4)</sup>.

Despite advanced arthroscopic techniques, concerns have been raised with regard to the high recurrence rates in the high demands patients treated by soft tissue procedure <sup>(3)</sup>.

Very few studies have compared the open Bristow-Latarjet procedure with the Bankart procedure. The relative paucity of studies directly comparing these two procedures can be attributed to several factors. Any single surgeon usually has more experience with one technique that he tends to use for the majority of cases. This can result in an unintended technical bias toward a favored technique.

Another significant challenge in conducting comparative studies is the extreme variability of patients undergoing surgery for shoulder instability. A matching process according to number of dislocations, type of bony defect, and preinjury type of sport could potentially reduce some of these biases. When dealing with shoulder instability in athletes, proper outcome assessment is still controversial. (5)

Key to the treatment of anterior shoulder dislocation in this category of patients is making the right diagnosis and performing the correct operation at the optimum time to prevent unnecessary time away from work or sport (2).

In this study, our goal is to compare the clinical outcomes of anterior shoulder stabilization performed by Latarjet procedure with results using arthroscopic Bankart repair in high demands patients with recurrent anterior shoulder dislocation, in a series performed at a single institution. We hypothesized that the latarjet procedure would allow for earlier return to work and sport activity and lower rate of recurrent instability in short term follow up.

### **AIM OF THE WORK**

The purpose of the present study is to compare the clinical outcomes of anterior shoulder stabilization performed by Latarjet procedure versus arthroscopic Bankart repair in high demands patients with recurrent anterior shoulder dislocation.