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

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قَالُوا سُبْحَانَكَ
لاَ عِلْمَ لَنَا
إِلاَّ مَا عَلَّمْتَنَا
إِنَّكَ أَنتَ
الْعَلِيمُ الْحَكِيمُ
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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[1, 2]. Anterior shoulder dislocation is a common problem in high demands patients[3].Young men with high energy contacts are at the highest risk[1, 2].

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 [4].

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 [3].

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.