



SHIFT STICK BANKART REPAIR; AN ARTHROSCOPIC REPAIR BY DOING AN L-CUT INFERIOR CAPSULAR SHIFT AND LABRUM FIXATION ON A BLEEDING ANTERIOR GLENOID SURFACE IN RECCURENT SHOULDER DISLOCATION
Mohanad Al-Bayati MD, Basim Flegga MD
Shoulder Service Global Orthopedic Clinic Giza Cairo, EGYPT

Aim

The aim of this study is to evaluate functional and radiological results of a new technique of arthroscopic Bankart repair by doing a glenoid neck abrasion and inferior Capsular shift to reattach the labrum to a bleeding anterior glenoid surface followed by immobilizing the shoulder between 3 and 6 weeks in neutral rotation to allow healing. Studies by Itio, Miller and others have reported that in first time shoulder dislocation, improving the coaptation of the labrum to the glenoid through increasing soft tissue tension by immobilization in external rotation increase healing and reattaching the labrum to the glenoid.

This knowledge led us to simulate the situation in cases of recurrent anterior shoulder dislocation with Bankart lesion by making a bleeding surface on the anterior glenoid with an arthroscopic acromionizer, shaving the posterior part of the detached Labrum followed by lateral shifting of the capsule and compressing the Labrum to the bleeding anterior Glenoid surface by doing an L-Cut Inferior Capsular Shift followed by 3-6 weeks immobilization in 30 degrees abduction, neutral rotation (Shift Stick Bankart Repair).

Itoi E. 1999
IMMOBILIZATION IN EXTERNAL ROTATION FOR FIRST TIME DISLOCATION BANKART LESION

GOOD RESULTS as immobilization in external rotation will pull the labrum to lay on the still bleeding surface of the anterior Glenoid rim leading to refixation of the Labrum

Non-operative Treatment:
 Cadaveric Studies : Immobilization in external rotation : Increased labrum glenoid contact in force
 Itoi E. et al. JGTS 1999 Mar
 Miller DR et al. JOS 2004 Nov
 MRI Study: Immobilization in external rotation : better appositions Bankart lesion
 Itoi E. et al. JGTS 1999

ANATOMICAL. POSTOPERATIVE IMMOBILIZATION
 for 3-6 weeks after Arthroscopic L-cut Inferior Capsular Shift

Enlarged Capsule

ZERO ROTATION

30

Arthroscopic Inferior capsular shift compress the labrum to the Glenoid

2017 ARTHROSCOPIC Shift STICK BANKART REPAIR

stimulation the condition of the acute first time dislocation by abrading a bleeding surface on the glenoid rim and doing a capsular shift to simulate the external rotation and immobilize the shoulder

<p>ITOI</p> <p>First time dislocation -bleeding surface. External Rotation Immobilization</p>	<p>SSBa</p> <p>In Recurrent dislocation we - Create a bleeding surface - Do Inferior Capsular Shift - Immobilization 6 weeks</p>
--	--

Arthroscopic Shift Stick Bankart Repair

PREOPERATIVE
 Bankart Lesion
 Capsular Enlargement

6 MONTHS POSTOPERATIVE
 Anterior capsule tight
 Labrum fixed to the Glenoid

A case of Failed Suture Anchor Repair
Shift Stick Bankart Repair due to capsular redundancy and recurrent Bankart Lesion lesion

<p>Enlarged Capsule</p>	<p>Recurrent Bankart Lesion</p>
<p>Abrasion Anterior Glenoid Rim</p>	<p>Stabilization after Inf. Cap. Shift and Shift Stick Bankart</p>



Methods

41 patients with Bankart lesion and recurrent anterior shoulder dislocation, aged between 16 and 40 years, underwent arthroscopic L-cut inferior capsular shift and Glenoid neck abrasion followed by postoperative immobilization in 20 degrees abduction and neutral rotation. Pre and postoperative evaluations included detailed physical examination, assessment using the Neer and Constant scale for shoulder functions, anteroposterior and axillary radiographs as well as MRI were done. The mean follow up was 40.8 months (from 12 to 55 months).

Results

Forty patients were reexamined. According to Neer score, the results were excellent in 38 patients (95%) and satisfactory in 2 patients (5%). Preoperative mean Constant scale was 64.2 and 87.6 postoperatively. The mean preoperative active external rotation was 45° with positive apprehension, which increased postoperatively to 62° respectively. All the patients were satisfied with the operation. In 33 cases postoperative MRI after more than 6 months from surgery was done, and in 29 of these cases the Labrum was healed to the glenoid.

Conclusions

This study shows arthroscopic Bankart repair with glenoid neck abrasion and , L-cut inferior capsular shift followed by postoperative immobilization is an alternative option to the glenoid invasive anchor fixation. It avoids the anchor fixation complications, takes a shorter time of surgery and is much cheaper.