

# Labral Repair

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Surgical Technique



Using STATIV® All Suture Anchor

**SIRONIX**  
*Arthroscopy Solutions*

MAY THE SP<sup>ORT</sup> OF LIFE NEVER STOP

# Table of content

• Shoulder Instability Repair	01
• Patient Positioning	02
• Portal Placement	03
• Bone Preparation	03
• Preparation of Pilot Hole	03
• Anchor Insertion & Deployment	04
• Suture Management & Knotting Technique	06
• Ordering Information	07

## Shoulder Instability Repair

Arthroscopic Labral repair is commonly utilized for shoulder stabilization in patients with anterior shoulder instability with minimum glenoid bone loss.(1)

When indicated, arthroscopic stabilization is the treatment of choice for many surgeons due to its lower morbidity and low overall complication rate.(1)

All-suture anchors are advantageous because they preserve bone stock, improve postoperative imaging after surgery, and may facilitate easier revision surgery if necessary.(2)

The use of all-suture anchors for arthroscopic glenoid labral lesion repair for the treatment of recurrent traumatic anterior shoulder instability yields satisfactory clinical results. It's a safe and effective option. (3)

### **Bankart Lesion**

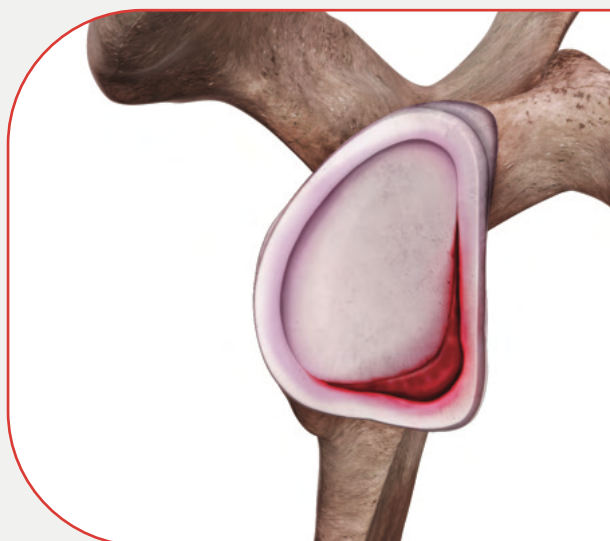


Figure 1

### **Slap Lesion**



Figure 2

## Surgical Guide

### Patient Positioning

The patient may be positioned in the beach chair position or in the lateral decubitus position depending on surgeon preference. Lateral traction device can be used to provide traction and positioning of the limb during the surgery.

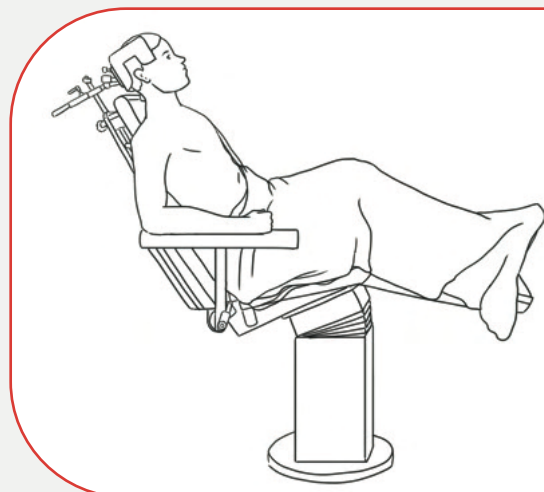


Figure 3

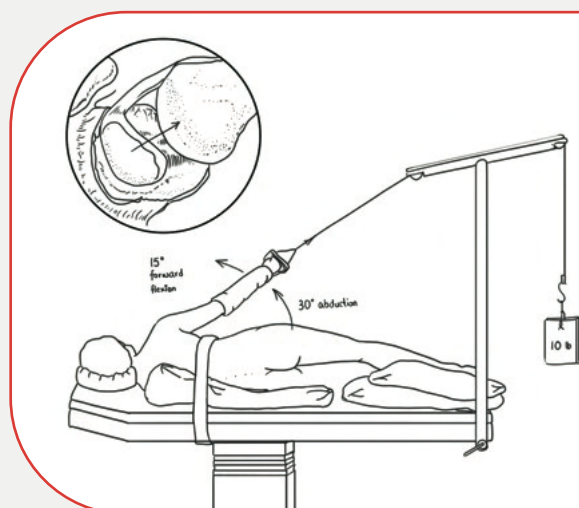


Figure 4

#### Portal placement

1. Posterior portal (camera) - soft spot about 1cm below & behind angle of acromion.
2. Anterior Superior portal (working) - in line with the corocoacromial ligament (CAL)
3. Anterior portal (drill guide) - above subscapularis

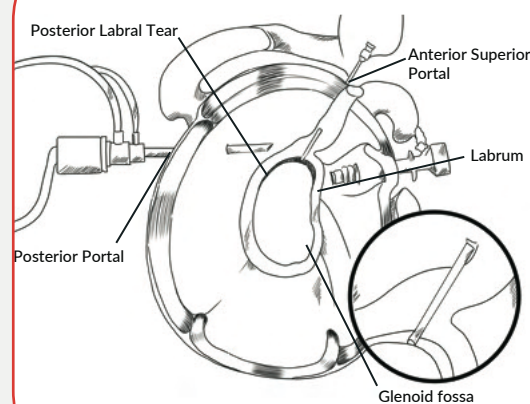


Figure 5

## Bone preparation

It is necessary to utilize the SIRONIX instrumentations to prepare the Anchor insertion site with liberator/rasp/shaver/RF and to maintain axial alignment between the insertion site. Debride the frayed edge of the labrum & create a bleeding surface to enhance soft tissue for bone healing.

### Note

- 1) use blunt liberators to work on glenoid, elevate labrum up to 6-7 'O' clock position on glenoid
- 2) satisfactory release will show subscapularis muscle below.

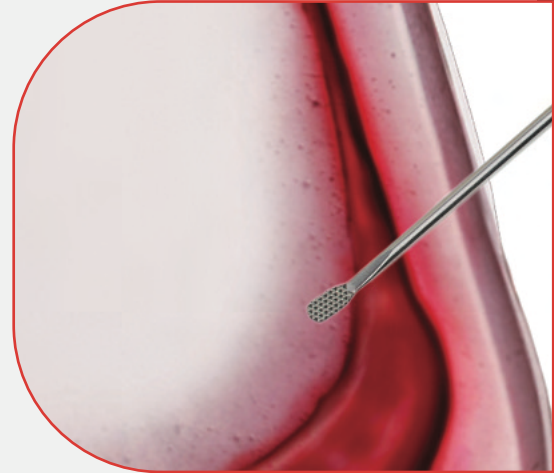


Figure 6

## Preparation of pilot hole

Pass the universal guiding cannula through the anterior portal and place it on the glenoid rim, position the pronged tip of cannula on the glenoid rim at 20 - 45° angle to the articular surface of the glenoid.

Gently mallet on proximal end of guiding cannula with SIRONIX mallet which prevents the guide from slipping or sliding over the glenoid rim

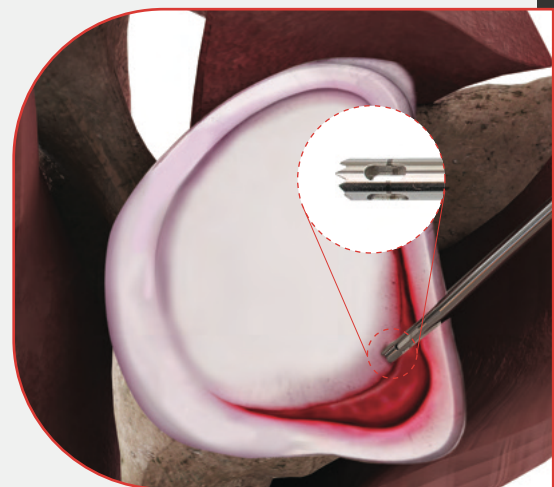


Figure 7

## Anchor Insertion

Create a pilot hole in the bone for the anchor by advancing the drill bit of respective size (1.5mm, 1.8 mm or 2.5 mm) through the guiding cannula until the stopper of drill bit (on proximal end) contacts the Universal guiding cannula handle.

**NOTE:** Maintain the guide alignment throughout drilling to ensure it doesn't move

Safely remove the drill bit and ensure there is no movement of guiding cannula.

Open a sterile STATIV® All Suture anchor, insert through the guiding cannula and into pilot hole by gentle impaction using only SIRONIX mallet until the anchor handle is flush with the cannula handle which indicates the anchor has been fully inserted below the cortex of bone. (Figure 11)

### Note:

To insert the anchor, gently push/ tap the proximal end of the anchor handle. Do not impact inserter handle on the top of the guiding cannula, as it may drive the cannula through the cortex/cartilage of the bone.

## Anchor Identification

- 1) 1.5mm anchor Single Suture/Tape
- 2) 1.8mm anchor Double Suture/ Tape
- 3) 2.5mm anchor Double Suture/ Tape, Triple Suture



Figure 8



Figure 9

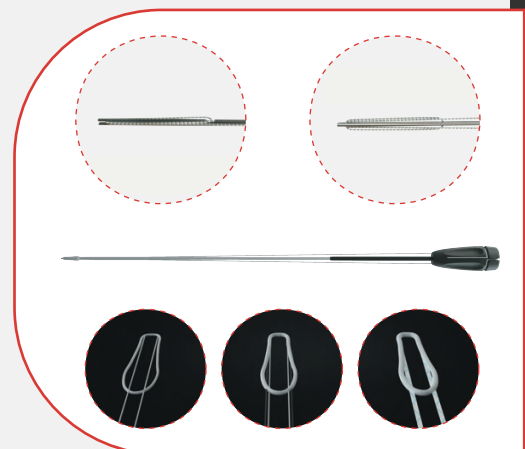


Figure 10



Figure 11



## Anchor Deployment

Remove the red ring holding sutures & release the sutures/tapes from the anchor handle. Do not rotate/twist the inserter handle after inserting the anchor inside the bone.

**Consistently pull in a straight line. Never pull the sutures in any other direction of the anchor.**



Figure 12

The inserter handle is slowly removed, pull all the sutures/tapes upwards together to deploy/ bunch the SIRONIX® STATIV® all suture anchor with appropriate force.

**NOTE : Make sure the sleeve will be in the right anatomical site for bunching the STATIV sutures**



Figure 13

Apply even force without twitching to ensure complete deployment. [Forms unique Tri-Pod bunch] (Figure 14)

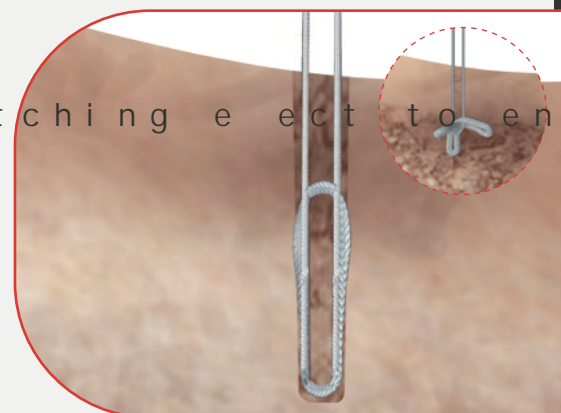


Figure 14

Use SIRONIX Sixters or SIRONIX Lassos to shut suture through the labral tissue at appropriate (Figure 15)

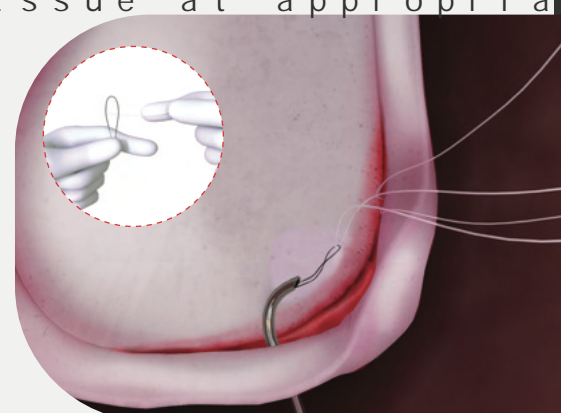


Figure 15

Then, advance sliding knot followed by half hitches knots down to the capsule slide using a SIRONIX knot pusher to complete the repair, place double - loaded STATIV All Suture Anchor in a similar manner, with two points of fixation for more tissue compression.

Note: Untangle suture strands that may have become twisted.

- (1) Similar step can be performed to repair SLAP tear, KIM'S lesion & other labral tear
- (2) Can use single & double loaded anchors for repair.

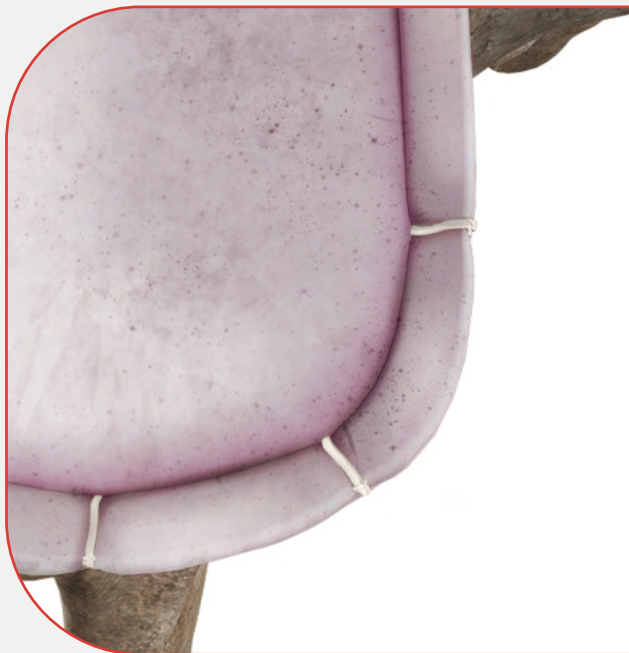


Figure 16



Figure 17



# Ordering Information

- **Implants**

Order Code	Description
S33-1501-S	STATIV All Suture Anchor 1.5mm SS
S33-15E1-S	STATIV All Suture Anchor 1.5mm ST
S33-1801-S	STATIV All Suture Anchor 1.8mm SS
S33-18E1-S	STATIV All Suture Anchor 1.8mm ST
S33-1802-S	STATIV All Suture Anchor 1.8mm DS
S33-18E2-S	STATIV All Suture Anchor 1.8mm DT
S33-2502-S	STATIV All Suture Anchor 2.5mm DS
S33-2503-S	STATIV All Suture Anchor 2.5mm TS
S33-25E2-S	STATIV All Suture Anchor 2.5mm DT

## ● Instruments

Order Code	Description
S36-0003-T	Crochet Hook Straight
S36-0004-T	Switching Stick
S36-0006-T	Knot Pusher Full Loop
S36-0007-T	Sliding Suture Cutter Straight
S36-0010-T	Sixter Left
S36-0011-T	Sixter Right
S36-0012-T	Penetrating Grasper Straight
S36-0018-T	Tape Cutter
S36-0019-T	Suture Manipulator
S36-0020-T	Mallet
S36-0024-T	Rasp down bend 20 degree
S36-0025-T	Tissue Liberator Blade Down
S36-0013-T	Rasp up bend 20 degree
S36-0014-T	Tissue Liberator Blade Up
S39-3003-T	Clean Pass Suture Passing Needle 45 degr
S39-3004-T	Clean Pass Suture Passing Needle 45 degr
S39-0011-T	Cannula Introducer (8mm)
S39-0012-T	Cannula Introducer (6mm)
S45-0075-LU	Universal Guiding cannula
S35-0015-D	1.5 mm Anchor Drill
S35-0018D	1.8 mm Anchor Drill
S35-0025-D	2.5 mm Anchor Drill

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## References:

1. DeFroda S, Bokshan S, Stern E, Sullivan K, Owens BD. Arthroscopic Bankart Repair for the Management of Anterior Shoulder Instability: Indications and Outcomes. Curr Rev Musculoskelet Med. 2017;10(4):442-451. doi:10.1007/s12178-017-9435-2
2. (Lubis A.M.T., Oktari P.R. Arthroscopic Bankart revision using all suture anchor in recurrent anterior shoulder dislocation: A case report International Journal of Surgery Case Reports, Volume 79, 2021)
3. (Gül O, Okutan AE, Ayas MS. Arthroscopic glenoid labral lesion repair using all-suture anchor for traumatic anterior shoulder instability: short-term results. J Shoulder Elbow Surg. 2019 Oct;28(10):1991-1997. doi: 10.1016/j.jse.2019.03.003. Epub 2019 May 14. PMID: 31101476.)

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