

Stabilization of Acute Acromioclavicular Joint Dislocations using Dog Bone Button Technology

Surgical Technique



# C Repair - Dog Bone Button



# Stabilization of Acute Acromioclavicular Joint Dislocations using Dog Bone Button Technology

The Dog Bone Button is a precontoured, titanium button that allows the use of multiple FiberTapes<sup>®</sup> for AC joint reduction, providing a construct that is twice as strong as existing AC joint repair devices. Since the buttons are attached to the FiberTapes independently, only suture material is passed through the clavicle and coracoid tunnels, allowing the repair to be completed through smaller tunnels. Tunnel drilling is made easier with new AC Guide arms and a new 2.4 or 3 mm cannulated Drill. The guide arms feature angled tips and two posts to help seat the guide firmly against the base of the coracoid and the cannulated Drill allows for one-step tunnel drilling, eliminating the need to drill over a guide pin.



### Technique Uses

This technique is used for acute Grade IV-VI AC separations, as well as acute Grade III separations which require operative treatment.

### Warning

It is not intended that this technique be used as the sole means of reconstructing a chronic AC separation. Repair of chronic AC separations should always include a biologic component (i.e. allograft or autograft).

## Surgical Technique

Place the patient in the lateral decubitus or Beach Chair position under a general anesthesia, supplemented with a scalene block (if desired). Introduce a 30° arthroscope into the glenohumeral joint via a standard posterior portal. Create an ASL portal slightly more anterior and inferior than normal, coming in at a slight angle in both the coronal and axial plane. Insert an 8.25 mm cannula through the ASL portal. Utilize a shaver and/or OPES<sup>®</sup> RF electrocautery probe through the ASL portal to open the rotator interval and expose the coracoid. Complete the coracoid exposure along the inferior border of the coracoid all the way to the base. A 70° arthroscope in the posterior portal will enhance arthroscopic visualization of the base of the coracoid. Alternately, you can use a 30° arthroscope through the ASL portal to visualize the entire coracoid base. Create a low anterior portal lateral to the coracoid and insert a 10 mm PassPort Button Cannula<sup>™</sup>. This will be the primary working portal for the entire procedure.





Through the low anterior portal, place the appropriate AC Guide\* under the coracoid base and drill the clavicle and coracoid tunnels using the 2.4 or 3 mm cannulated Drill.

\* Use the left guide (AR-2254L) for a left shoulder and use the right guide (AR-2254R) for a right shoulder.



Remove the trocar from the drill and pass the SutureLasso<sup>™</sup> SD Wire Loop through the drill cannulation loop first and retrieve it through the low anterior cannula. Remove the Cannulated Drill, leaving only the wire in the tunnels.



Clip the limbs of a FiberTape Loop and a TigerTape<sup>®</sup> Loop into the slots of a Dog Bone Button so that the tapes form a U-shape. Slide the button to the base of the tapes. The tapes should wrap around the laser line, ensuring that the concavity of the button will sit against the base of the coracoid.



Load the tails of the FiberTape Loop and TigerTape Loop through the SutureLasso SD Wire Loop and pull the tails up through the coracoid and clavicle tunnels. Use a grasping instrument to turn the button sideways and push it through the PassPort Button Cannula.



Seat the Dog Bone Button at the base of the coracoid. The concavity should seat against the coracoid and the orientation line should be in line with the arch of the coracoid.



Cut the splice from each loop and clip a second Dog Bone Button onto the suture limbs exiting the clavicle. The concavity should face the clavicle and the orientation line should be in line with the axis of the clavicle.



Reduce the AC joint and tie like FiberTape limbs over the button with four alternating half-hitches. Check the AC joint reduction after tying the first knot and then tie the second FiberTape knot. Cut the suture limbs to complete the repair.

### Post-op Protocol

Place the patient in a sling for six weeks, allowing elbow motion and gentle passive external rotation with the elbow by the side. At six weeks, discontinue sling and start PROM and AAROM of the shoulder. At 12 weeks progress to AROM and gentle strengthening of the shoulder. Return to contact sports after six months.

# Ordering Information

Implants:	
Dog Bone Button (two required)	AR-2270
FiberTape Loop	AR-7275
TigerTape Loop	AR-7275T

### **Required Instruments:**

AC Joint Reconstruction Master Set (AR-2255MS) includes:	
Cannulated Drill, 4 mm	AR-1204L
Cannulated Drill, 4.5 mm	AR-1204.5L
Cannulated Headed Reamer 5 mm	AR-1405
Cannulated Headed Reamer 5.5 mm	AR-1405.5
Cannulated Headed Reamer 6 mm	AR-1406
Cannulated Headed Reamer 6.5 mm	AR-1406.5
ACL Guide Frame Handle	AR-1510H
AC Guide, left	AR-2254L
AC Guide, right	AR-2254R
Fixed Guide	AR-2255CG-01
Guide Pin Sleeve	AR-2255CG-02
Clavicle Drill Positioner	AR-2255CG-03
Drill Stop	AR-2255CG-04
Drill Sleeve, 3 mm	AR-2255CG-05
AC Tenodesis Screw Driver	AR-2255D
AC Joint Coracoid Graft Passer, left	AR-2256L
AC Joint Coracoid Graft Passer, right	AR-2256R
Graft Sizer	AR-2265
Forked Probe	AR-6002
AC Joint Reconstruction Instrument Case	AR-2255MC

### Required Disposables:

Drill, cannulated for AC Repair, 2.4 mm Drill, cannulated for AC Repair, 3 mm SutureLasso SD Wire Loop AR-2257D-24 AR-2257D-30 AR-4068-05SD

This surgical technique has been developed in cooperation with Paul Brady, M.D., Knoxville, TN.



This description of technique is provided as an educational tool and clinical aid to assist properly licensed medical professionals in the usage of specific Arthrex products. As part of this professional usage, the medical professional must use their professional judgment in making any final determinations in product usage and technique. In doing so, the medical professional should rely on their own training and experience and should conduct a thorough review of pertinent medical literature and the product's Directions For Use.

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