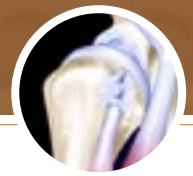


# Open Bicep Tenodesis Procedure Technique with LUPINE™ Loop Anchor



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## Open Bicep Tenodesis with LUPINE™ Loop Anchor

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### TECHNIQUE OF BICEPS TENODESIS

This technique can be utilized with the patient positioned in supine or lateral decubitus position. Arthroscopy of the shoulder is necessary to visualize the intra-articular portion of the long head of the biceps tendon. The standard landmarks that we use for shoulder arthroscopy are identified and marked. A standard posterior viewing portal and anterior portal are established. The intra-articular portion of the biceps is visualized and probed. The portion of the tendon in the groove can be visualized by pulling the tendon into the joint.

If the tendon is judged to be part of the pathological process, then it is released from the supra-glenoid tubercle and labrum using a cautery device placed through an anterior portal. The tendon is not completely released but left attached by a few fibers to prevent it from recoiling down into the arm past the bicipital groove.

Next a mini-open incision is made with the arm at the side, and the deltoid is split between the anterior and middle portions. The deltoid is held open by a self-retain-

ing retractor. Any rotator cuff tear can be repaired at this time. The bicipital groove is identified anteriorly, and the transverse ligament is incised with electrocautery.

Normally, placement of the proximal anchors is typically 1-2cm below the top of the intratubercular groove and the second anchor is placed, at a minimum, 1cm distal to the first. To place anchors, remove DePuy Mitek LUPINE Loop Anchors from packaging -- taking care to leave sutures on the handle. The LUPINE drill guide is placed at the appropriate location and the hole is drilled until the proximal stop on the guide is reached.

Insert anchor until the white inserter handle meets the proximal end of the drill guide. If necessary lightly tap white inserter to fully seat anchor in bone. Remove the suture from the inserter handle and then unscrew inserter counter clockwise to disengage it from the anchor. Remove the anchor inserter and then drill guide. Finally, gently pull on the suture to set the anchor subcortically. Take suture/needle from anchor and load suture needle on a needle driver.



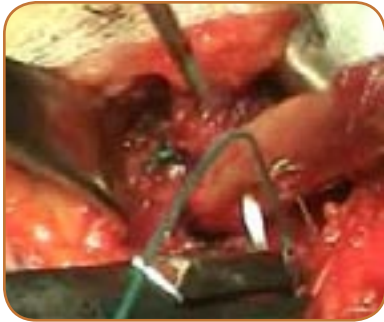
**FIGURE 1.** The biceps tendon is identified and the last few fibers attaching it to supra-glenoid tubercle and labrum is released as the tendon is pulled from the joint using a hemostat.



**FIGURE 2.** The tendon is then tagged with a number 0 VICRYL Absorbable Suture by ETHICON, Inc., Somerville, NJ.



**FIGURE 3.** Two DePuy Mitek LUPINE Loop anchors are placed into the intratubercular groove as inferiorly as possible.



**FIGURE 4.** Place suture limbs through the biceps at points that allow adequate tension on the biceps to ensure good muscle conformation.



**FIGURE 5.** Once sutures are passed through the tendon they are tied, securing the tendon as deep as possible within the intertubercular groove.



**FIGURE 6.** The sutures are then passed again through the tendon a second time and then into the transverse ligament and finally tied down.



**FIGURE 7.** If there is room, the sutures are passed a third time through the tendon into the transverse ligament or periosteum.



**FIGURE 8.** This essentially closes the transverse ligament over the biceps tendon in the groove.



**FIGURE 9.** Excess long head of the bicep tendon is cut once the bicep tendon is securely fixated in the intratubercular groove.

### **POST OPERATIVE COURSE**

The patient is allowed active and passive shoulder and elbow range of motion the day after surgery. They are asked to not lift anything heavier than a coffee cup for six weeks. Afterwards, activity and strengthening can begin progressively as tolerated.

## ORTHOCORD™ HIGH STRENGTH ORTHOPAEDIC SUTURE

CordCutter	214646			
	<i>with MO-6 Tapered Needles</i>	<i>w/MO-7 Tapered Needles</i>	<i>w/OS-6 Reverse Cutting Needles</i>	<i>without needles</i>
ORTHOCORD Violet	223102	223104	223103	223105
ORTHOCORD Blue				223111
ORTHOCORD Violet /Blue	223115	223114	223116	223113

## LUPINE™ COMPREHENSIVE DELIVERY SYSTEM

LUPINE Loop w/ORTHOCORD Violet	22980
LUPINE Loop Dual Suture w/ORTHOCORD	22981
LUPINE Loop w/#2 ETHIBOND	210704
LUPINE Loopw/# 2 PANACRYL	210705

## LUPINE™ COMPREHENSIVE DELIVERY SYSTEM

LUPINE Stabilization Dovetail DrGde	213816
LUPINE Stabilization Fishmouth DrGde	213817
LUPINE Stabilization Hybrid FM DrGde	213818
LUPINE Stabilization Sawtooth DrGde	213819
LUPINE Stabilization Obturator	214639
LUPINE Stabilization Drill Bit	211033