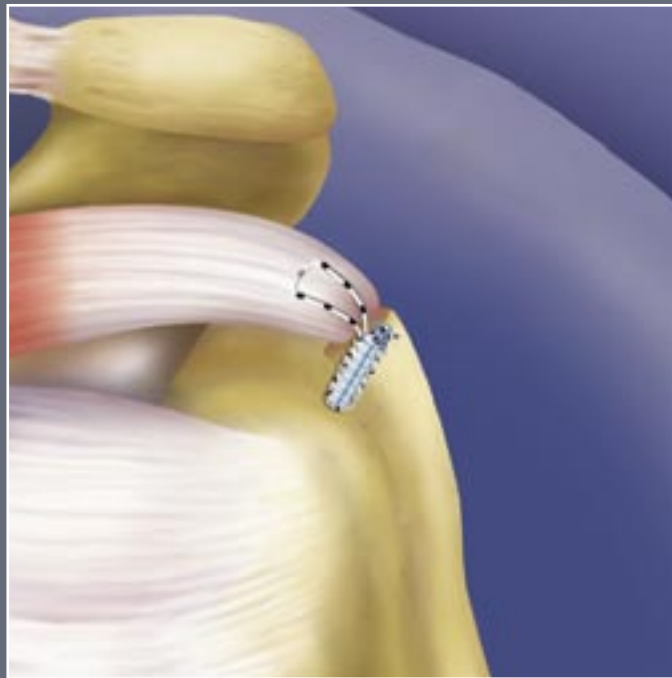




Rotator Cuff Repair using the Bio-Tenodesis™ Screw

Surgical Technique



# Bio-Tenodesis Rotator Cuff Repair

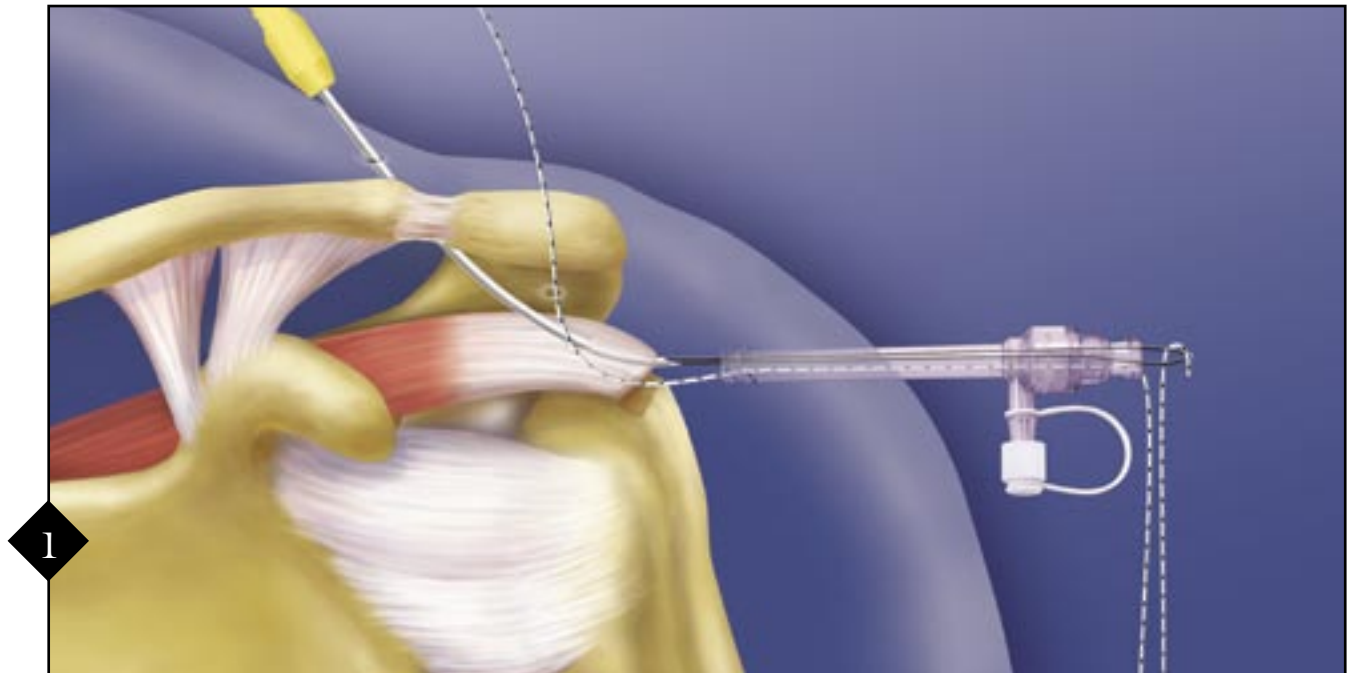
*The Bio-Tenodesis Screw fixation of FiberWire® traction sutures facilitates anatomical reduction repair of the rotator cuff in a simplified arthroscopic technique with a small 5.75 mm diameter Crystal Cannula® in the lateral portal.*

*This Bio-Tenodesis Screw technique facilitates intraoperative tissue tensioning and positioning. Mattress suture tails are secured to bone with a Bio-Tenodesis Screw. Final backup fixation with simple arthroscopic knots tied over the screw rim, while the screw maintains suture tension to tissue, is performed at the end of the procedure.*

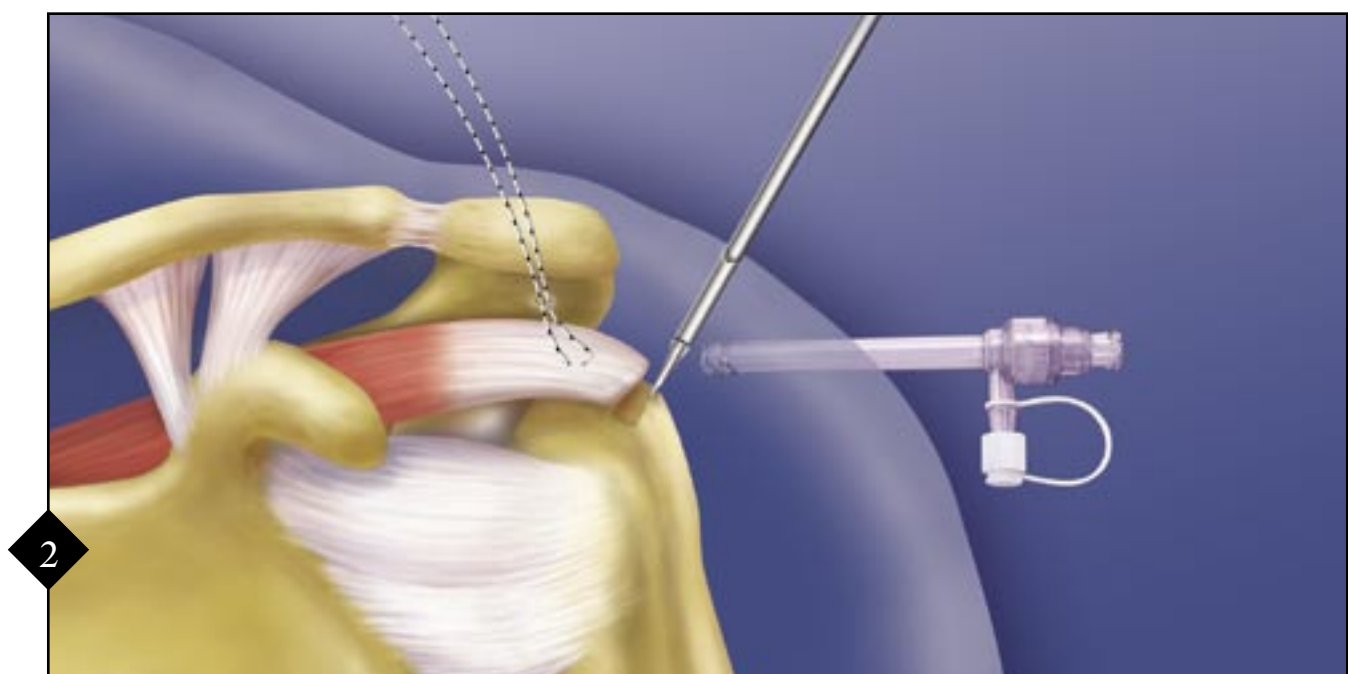
*The 5.5 mm diameter full threaded Bio-Tenodesis Screw provides maximum purchase flush to cortical bone.*

### Surgical Technique

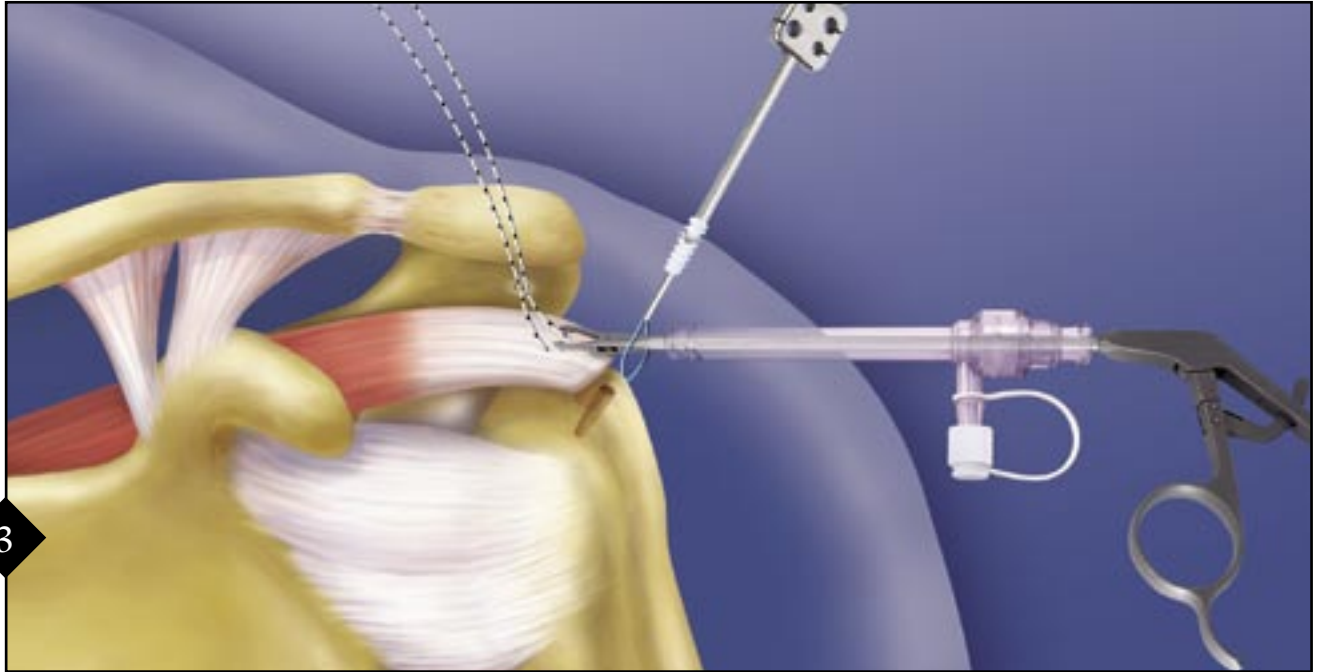
Subacromial preparation of the bursa, acromion, torn rotator cuff tissue and bone bed are performed in a standard arthroscopic fashion to include side-to-side repair, if indicated.



A FiberWire suture is placed in the rotator cuff in a horizontal mattress fashion using the Banana SutureLasso™ from a superior percutaneous approach. The Banana SutureLasso is inserted through the rotator cuff and the Nitinol loop retrieved out of the lateral cannula. A #2 TigerWire™ is shuttled through the cuff and retrieved out of an anterior accessory portal without removing the lasso from the subacromial space. Reinsert the lasso, through the rotator cuff, parallel to the first stitch. Retrieve the Nitinol loop out of the lateral cannula, place the opposite end of the TigerWire in the loop and remove the instrument creating a mattress stitch. Retrieve the second suture end out of the anterior accessory portal.

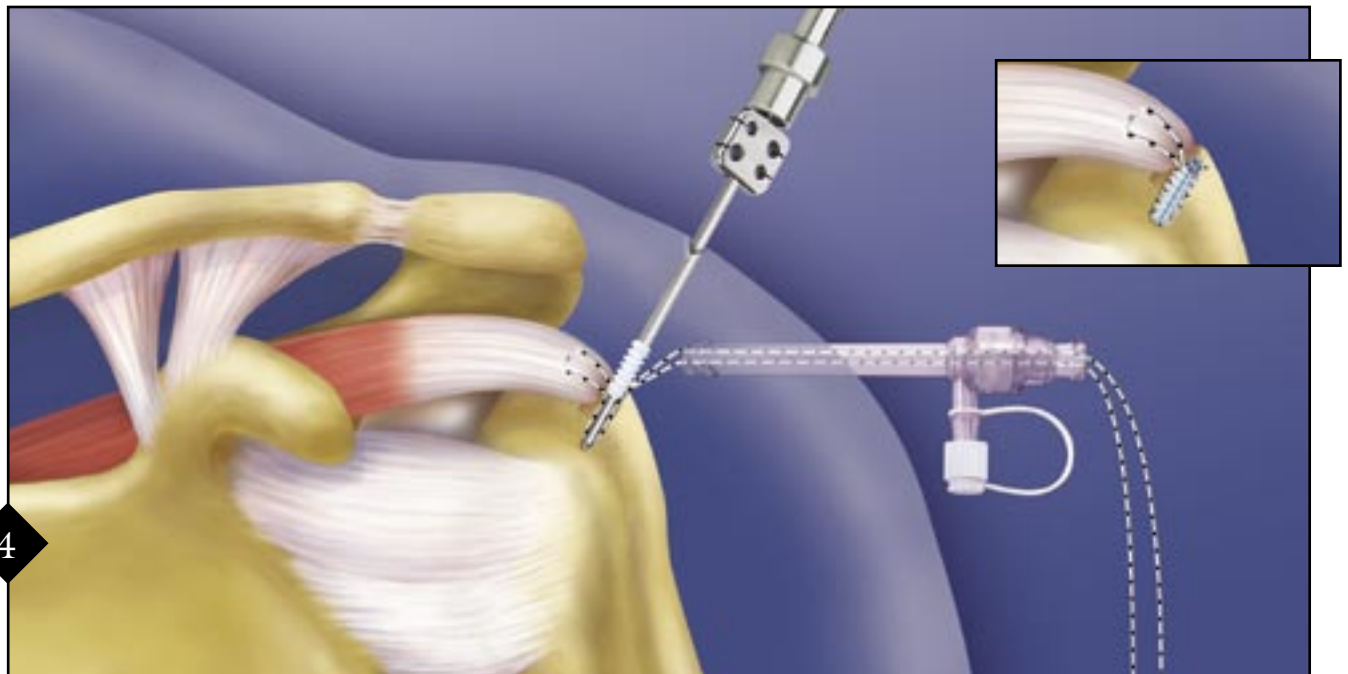


A Rotator Cuff Grasper is used to test tendon reduction and assist in determining placement of the Bio-Tenodesis Screw. A pilot hole, for the Bio-Tenodesis Screw, is created with a Bio-Corkscrew™ Punch near the lateral edge of the shifted tendon through a small incision lateral to the border of the acromion.



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A 5.5 mm Bio-Tenodesis Screw is inserted onto an extended Bio-Tenodesis Driver and a #2 FiberWire suture is loaded through the driver cannulation in a loop fashion with a Suture Passing Wire. The loaded driver is inserted through the portal created for the pilot hole. The FiberWire loop is advanced into the subacromial space to create a large loop. The KingFisher™ Suture Retriever is inserted through the lateral 5.75 mm Crystal Cannula and the TigerWire suture tails are drawn through the FiberWire loop and out the lateral portal cannula.



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The driver tip is positioned over the pilot hole, the mattress sutures are tensioned and the FiberWire loop is tightened around the suture tails. The driver tip is inserted fully into the pilot hole and mattress suture tension is adjusted to position the lateral edge of the tendon at an anatomical position with the desired tension. The Bio-Tenodesis Screw is inserted to provide interference fixation of the TigerWire mattress suture. A surgeon's knot with three half-hitches reversing posts and throws are tied over the screw rim by pairing each limb of TigerWire suture with one limb of FiberWire suture from the screw cannulation. The screw maintains tissue tension to simplify knot tying. The technique may be repeated for larger tears.

Bio-Tenodesis Screw, 5.5 mm x 15 mm

Banana SutureLasso

KingFisher Suture Retriever/Tissue Grasper

#2 FiberWire, 38 inches, 2 strands

(1 blue, 1 white/black)

AR-1555B

AR-4065B

AR-13970SR

AR-7201

Crystal Cannula, 5.75 mm x 7 cm

Tear Drop Handle w/suture cleat

Driver for 15 mm long Bio-Tenodesis Screws

AR-6560

AR-2001BT

AR-1350DL



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*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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