IN THE L&P...

Tenodesis Screw Rotator Cuff Repair

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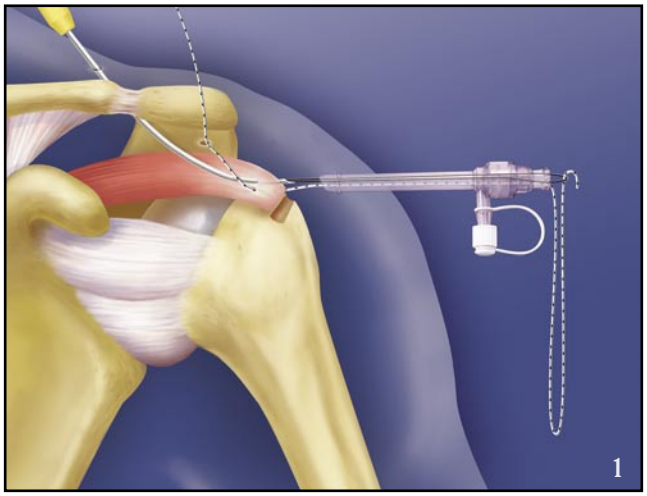
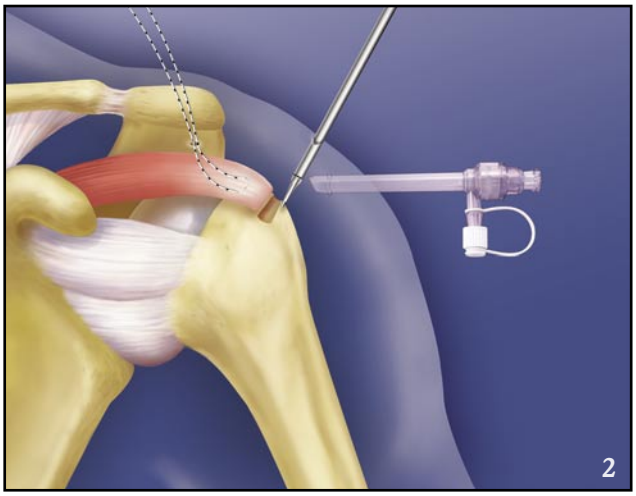
The Bio-Tenodesis Screw fixation of FiberWire traction sutures facilitates anatomical reduction and tension-free repair of the rotator cuff in a simplified arthroscopic technique through a small 5.75 mm diameter cannula in the lateral portal. A FiberWire suture is placed in the rotator cuff in a horizontal mattress fashion using the Banana SutureLasso from one superior percutaneous approach.

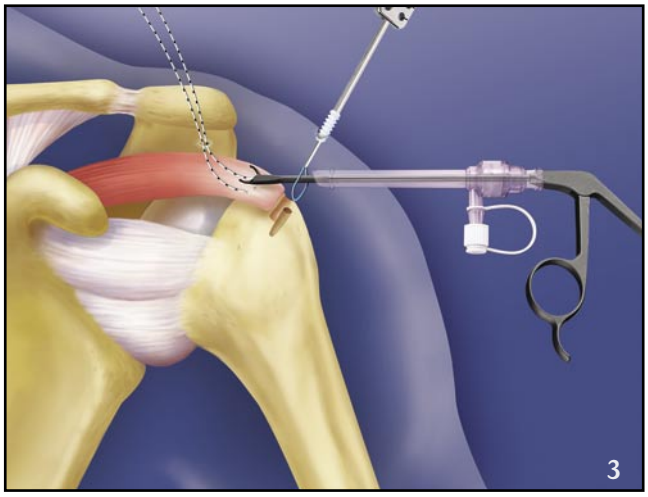


The Banana SutureLasso is inserted percutaneously through the rotator cuff and the Nitinol loop retrieved out of the lateral cannula. A #2 TigerWire is shuttled through the cuff and retrieved out an anterior accessory portal without removing the lasso from the subacromial space.

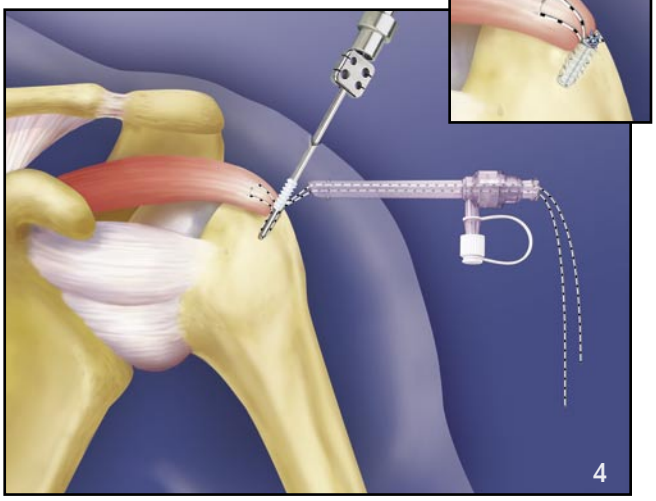
Reinsert the lasso, through the rotator cuff, parallel to the first stitch. Retrieve the Nitinol loop out the lateral cannula, place the opposite end of the TigerWire in the loop and remove the instrument creating a mattress stitch. Retrieve the second suture end out the anterior accessory portal.



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 or 4.5 mm drill near the lateral edge of the shifted tendon through a small stab incision lateral to the border of the acromion.



A 5.5 mm x 15 mm Bio-Tenodesis Screw is inserted onto the Bio-Tenodesis Driver and a #2 FiberWire suture loop is loaded through the driver cannulation. The loaded driver is inserted through the incision created for the pilot hole. The FiberWire loop is advanced into the subacromial space to create a large loop. A Suture Retriever is inserted through the lateral 5.75 mm cannula and the TigerWire suture tails are drawn through the FiberWire loop and out the lateral portal cannula.



The Bio-Tenodesis Screw is inserted to provide interference fixation of the TigerWire mattress suture. Two backup fixation knots are tied over the screw rim by pairing each limb of TigerWire suture with one limb of FiberWire suture from the screw cannulation (5). The screw maintains tissue tension to simplify knot tying. The technique may be repeated for larger tears.