Knotless SutureTak® Anchor for Instability Repair

Surgical Technique





Knotless SutureTak® Anchor for Instability Repair

Combining a proven anchor design and reproducible insertion technique with knotless soft-tissue fixation, the Knotless SutureTak anchor simplifies arthroscopic glenohumeral joint instability. Use the guide and drill to precisely create a pilot hole, and insert the anchor through the guide, maintaining the same portal and drill trajectory. Pass and shuttle the suture into the locking mechanism for controlled tensioning of the repair under direct visualization.

The anchor body is available in a biocomposite material that combines PLLA with β -TCP and a nonabsorbable thermoplastic material, polyetheretherketone (PEEK). Both materials are strong, revisable, and radiolucent, with no MRI artifact.

Advantages

- 57 lb of secure, low-profile knotless suture fixation
- Potentially lessens risk of knot impingement or knot loosening
- Cannulated design minimizes anchor material volume
- Simple, reproducible percutaneous insertion techniques
- Easily maintain the guide trajectory while drilling and inserting the anchor at the 6 o'clock position



Simple Stitch



Mattress Stitch



Failure mode: Suture pulled through anchor



Controlled suture tension, adjustable under direct visualization

Knotless SutureTak® Anchor: Self-Locking Technology



Just pass it, cinch it, cut it.

Surgical Technique



Mobilize the labrum and create a bleeding bed to enhance tissue healing to bone. Pass the spear through the cannula and place it on the glenoid rim. Create a bone socket for the anchor by advancing the drill through the spear until its collar contacts the spear's handle. *Cycle the drill 2-3 times in hard bone to allow the drill flutes to clear debris from the bottom of the hole.*

If desired, an offset guide **(a)** can be used to place the Knotless SutureTak suture anchor 1.5 mm onto the face of the glenoid to help create a larger labral bumper.



Insert the anchor through the spear and into the bone by gentle impaction until the inserter handle is flush with the back of the spear. Remove the suture release tab and pull out the inserter and spear.



Retrieve the repair suture through the anterosuperior portal using a KingFisher® retriever. Insert a curved SutureLasso[™] suture passer (right curve for right shoulder) into the anteroinferior cannula and pass it through the capsulolabral tissue inferior to the anchor. Advance the nitinol wire loop into the joint. Retrieve the wire loop through the anterosuperior portal using the KingFisher retriever.



Load the repair suture through the nitinol wire loop. Retract the wire loop through the SutureLasso suture passer to pull the suture to the distal end of the suture passer inside the joint. Remove the SutureLasso suture passer and wire loop together to shuttle the repair suture through the labral tissue.



Load the repair suture through the loop of the shuttling suture. *Fold the white section of the repair suture in half* (a) and crease the suture with your fingers. Pull the free end of the shuttling suture to shuttle the repair suture back into the anchor. Advance the shuttle suture with repeated light tugs until the suture is passed through the suture splice locking mechanism and back out of the cannula.



Pull the free end of the repair suture until the desired tension on the repair is achieved. A tissue grasper can be used to position the labrum to its desired location while applying tension on the repair.

Cut the suture flush using a mini suture cutter. In poorquality bone, use the knotless suture tensioner and cutter to provide counter pressure against the anchor to resist anchor pullout during final tensioning of the repair suture. Cut the suture by pressing the plunger on the tensioner cutter handle.

Precise Anchor Placement

Using the Percutaneous Insertion Kit

Knotless SutureTak® Anchor Percutaneous Insertion Kit AR-1938PK:

- Tensioner Cutter
- Disposable Spear (4.5 mm OD)
- Spinal Needle, 17-gauge
- Guidewire, 1.1 mm
- Portal Dilator
- Drill, 2.6 mm, hard bone
- PEEK Cannula (4.7 mm ID/5.4 mm OD)





Insert a 17-gauge spinal needle to precisely localize any portal. Introduce a 1.1 mm guidewire through the needle.



Insert a portal dilator over the guidewire then a spear over the dilator. Drill a bone socket and tap in the anchor.

Knotless Suture Tensioner and Cutter

Knotless SutureTak® Anchors, 3 mm × 12.7 mm, #2 FiberWire® CL Suture

Product Description	Item Number
BioComposite Knotless SutureTak anchor	AR-1938BC
PEEK	AR-1938PS

Required Instruments

Product Description	Item Number
Spear, trocar, and blunt-tip obturator for SutureTak anchor	AR- 1949
Step Drill, for 3.0 mm Knotless SutureTak anchor	AR- 1938D
Knotless suture tensioner and cutter	AR- 1938TC

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Optional Instruments

Product Description	Item Number
Knotless SutureTak Disposable Kit (tensioner cutter, spear/trocar [AR- 1949S], drill, 2.6 mm)	AR- 1938DS
Knotless SutureTak Anchor Percutaneous Insertion Kit	AR- 1938PK
Disposable spear and trocar-tip obturator for SutureTak anchor	AR- 1949S
Offset guide for SutureTak suture anchor	AR- 1934R
Disposable offset guide for SutureTak anchor	AR-1934GS
Circumferential teeth spear and trocar-tip obturator for SutureTak anchor	AR- 1946
SutureTak instrument case	AR- 1934C
ShaverDrill [™] disposable for Knotless SutureTak anchor	AR-1938DSSK

Knotless SutureTak Anchor, ShaverDrill Device

Ordering Information

Product Description

PEEK

BioComposite

A Knotless SutureTak[®] open-repair anchor is also available for soft-tissue, open-repair procedures. With the same suture-locking mechanism and anchor strength as the Knotless SutureTak anchor, the open-repair anchor offers more precise anchor placement.

Item Number

AR-1938PSS AR-1938BCS

Knotless SutureTak Open-Repair Anchor, 3 mm × 12.7 mm, #2 FiberWire® CL Suture

Required	Instruments

Product Description	Item Number
Disposable kit, 3.0 mm Knotless SutureTak anchor,	AR- 1938DSS
open repair	



Reference

1. Arthrex, Inc. Data on file (APT 3585). Naples, FL; 2015.



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. Postoperative management is patient-specific and dependent on the treating professional's assessment. Individual results will vary and not all patients will experience the same postoperative activity level or outcomes.



Arthrex manufacturer, authorized representative, and importer information (Arthrex eIFUs)



US patent information

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