

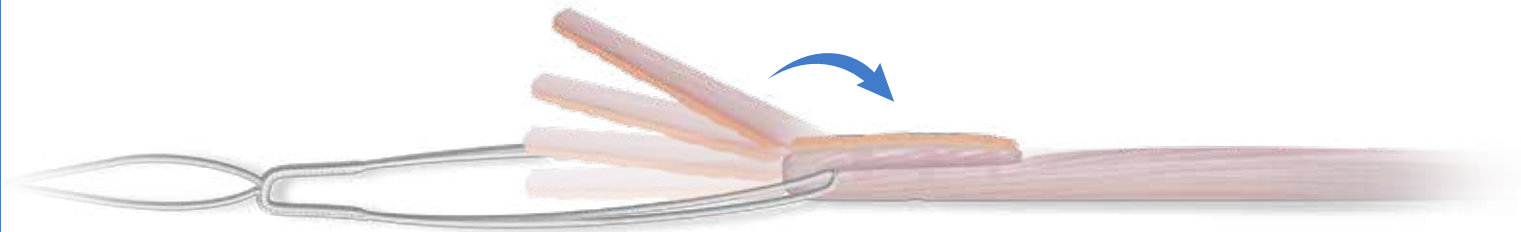
"Based on the clinical success of GraftLink® soft tissue grafts, I wanted to develop a technique using the same tensioning and fixation for BTB grafts. The technique I developed also solves the problem of graft length tunnel mismatch. Aperture stability is achieved in the tibial socket with the flipped graft."*

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GRAFT PREPARATION

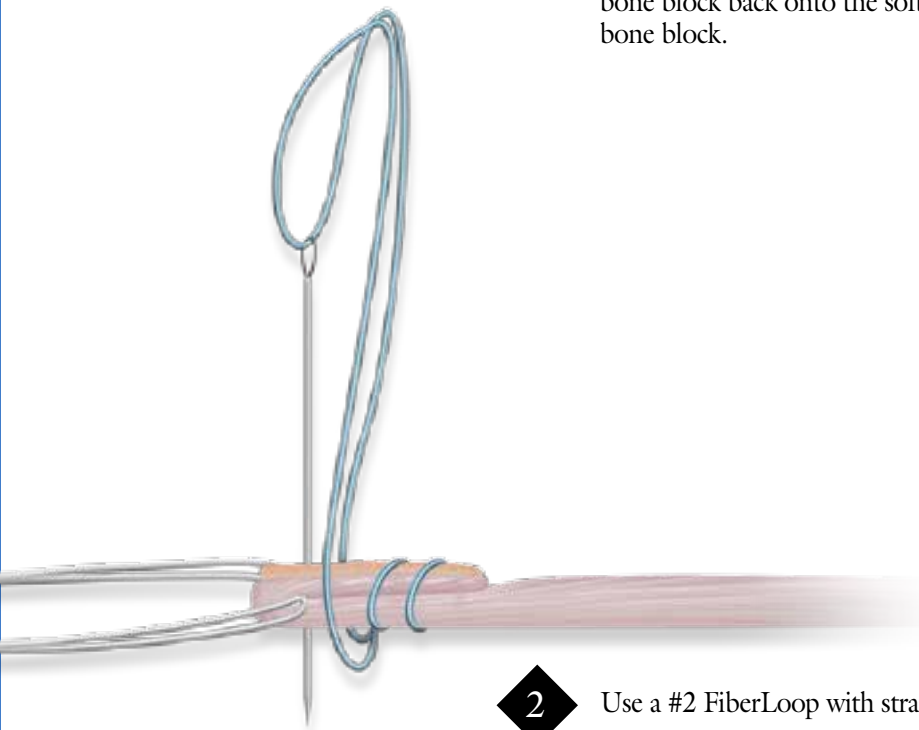
The recommended length of the harvested bone-patellar tendon-bone graft is 65 mm to 75 mm. The femoral bone block should be no greater than 20 mm. The patellar bone portion of the graft should be between 15 mm and 20 mm in length and can be harvested in a trapezoidal shape to reduce harvest site morbidity as this will be the portion of the graft that is flipped towards the soft tissue of the graft.

The soft tissue of the graft may be trimmed to reduce the diameter when flipped.



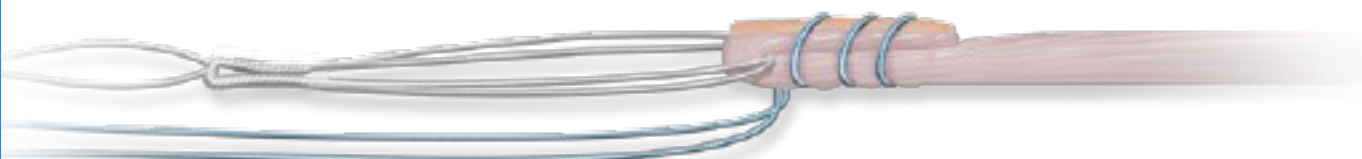
1

Using a 1.1 mm Drill Pin, prepare 2-3 holes in the patellar bone block. These holes will be used for passing the #2 FiberLoop® suture to complete the SpeedWhip™ technique. Orientate the TightRope® ABS on the tendinous portion of the graft where the soft tissue meets the bone block. Then flip the bone block back onto the soft tissue to expose the cancellous portion of the bone block.



2

Use a #2 FiberLoop with straight needle to complete the SpeedWhip.



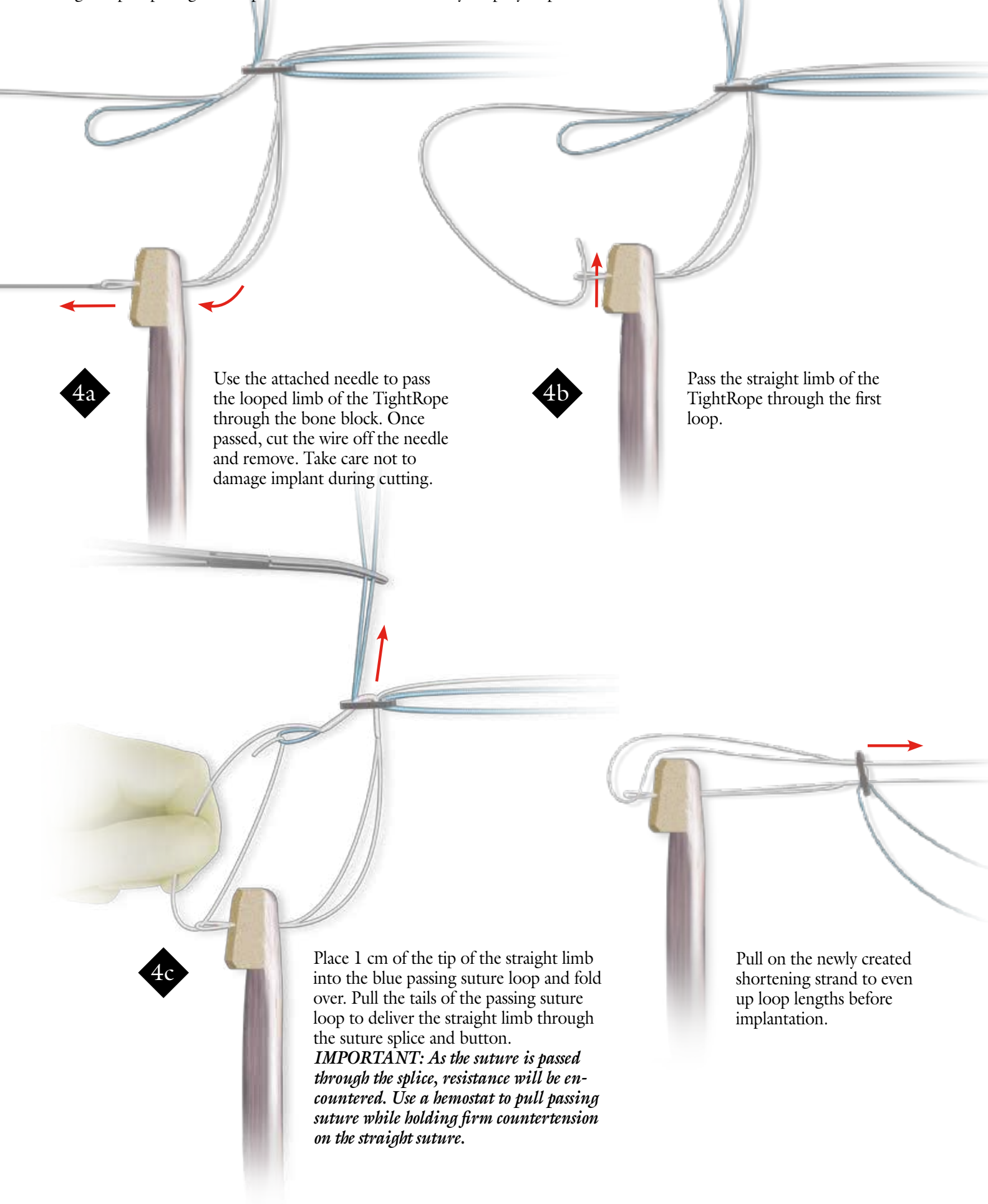
3

Remove the needle from the FiberLoop. The FiberLoop sutures can be passed into the tibia along with the TightRope ABS and secured over the ABS Button.

4

Attach a BTB TightRope to the femoral bone plug.

It is recommended to use the BTB TightRope® implant for bone blocks of 10 mm in diameter and 20 mm in length. Use the 2 mm drill pin to place a hole 10 mm from the end of the bone block, perpendicular to the cortical bone. The BTB TightRope is packaged in a special card to facilitate assembly. Step-by-step instructions are also included on the card.



4a

Use the attached needle to pass the looped limb of the TightRope through the bone block. Once passed, cut the wire off the needle and remove. Take care not to damage implant during cutting.

4b

Pass the straight limb of the TightRope through the first loop.

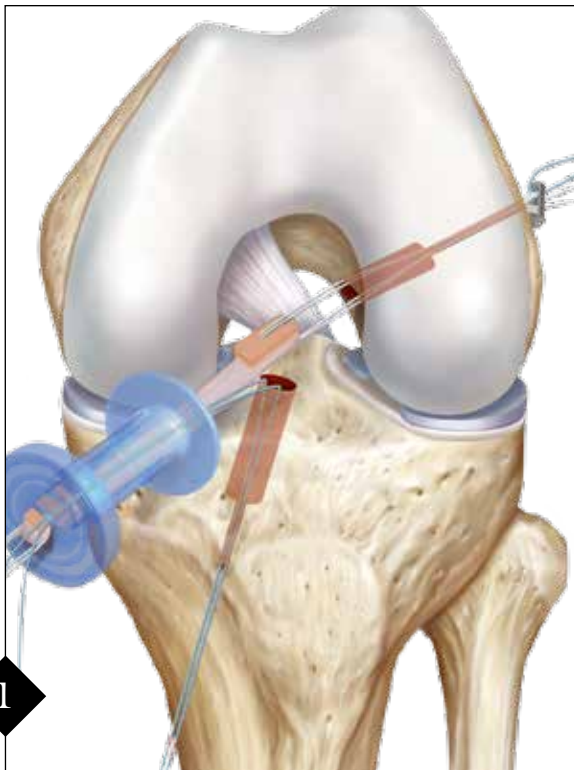
4c

Place 1 cm of the tip of the straight limb into the blue passing suture loop and fold over. Pull the tails of the passing suture loop to deliver the straight limb through the suture splice and button.

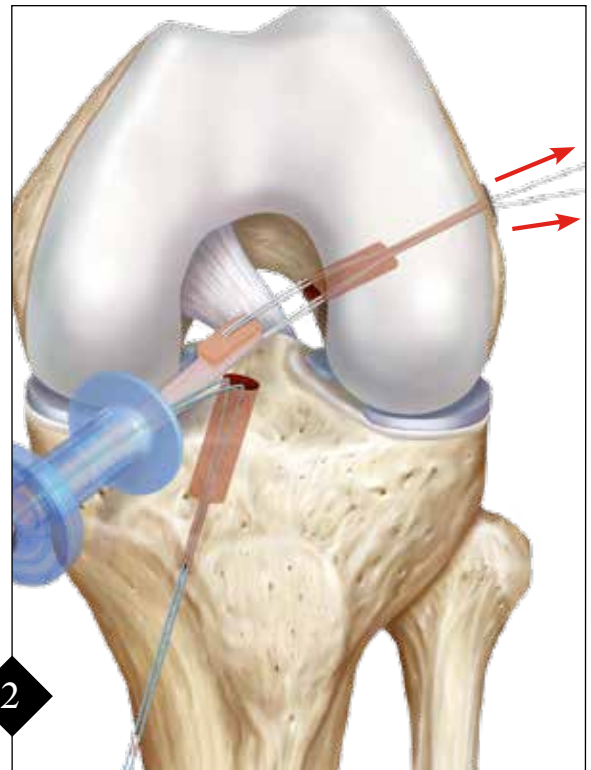
IMPORTANT: As the suture is passed through the splice, resistance will be encountered. Use a hemostat to pull passing suture while holding firm countertension on the straight suture.

Pull on the newly created shortening strand to even up loop lengths before implantation.

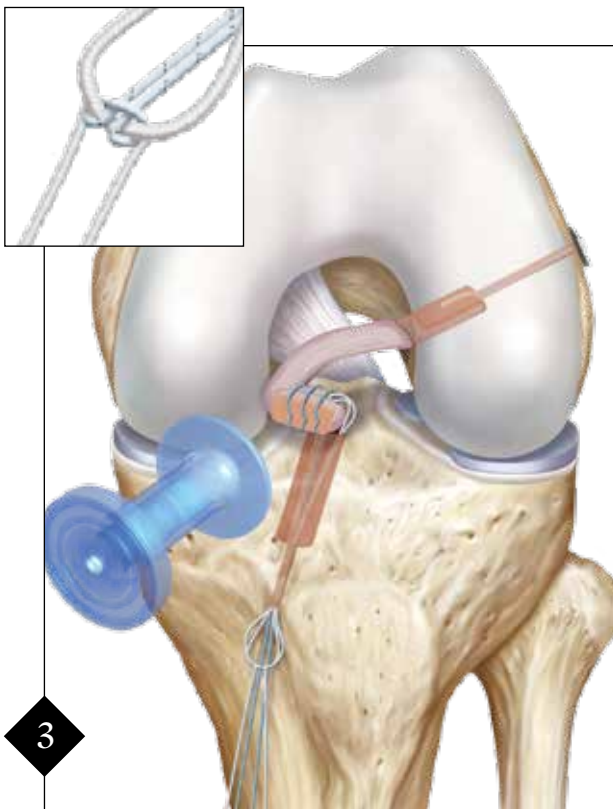
GRAFT PASSING



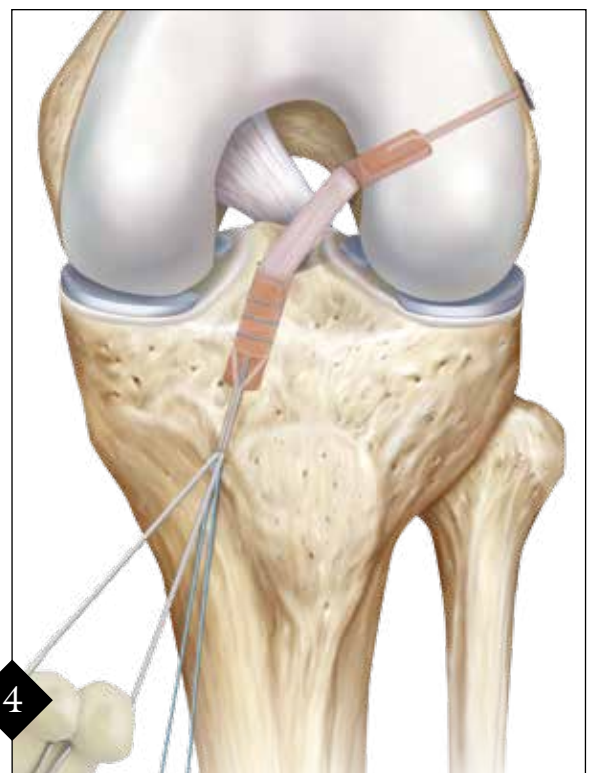
Pass the blue passing suture and the white tensioning strands of the femoral bone block through the femur. Pull even tension on both sets of sutures. Clamp the sutures together and pull to advance button. Pull the button through the femur. A line on the implant marked at the intraosseous length is helpful to signal that the button has exited the femoral cortex.



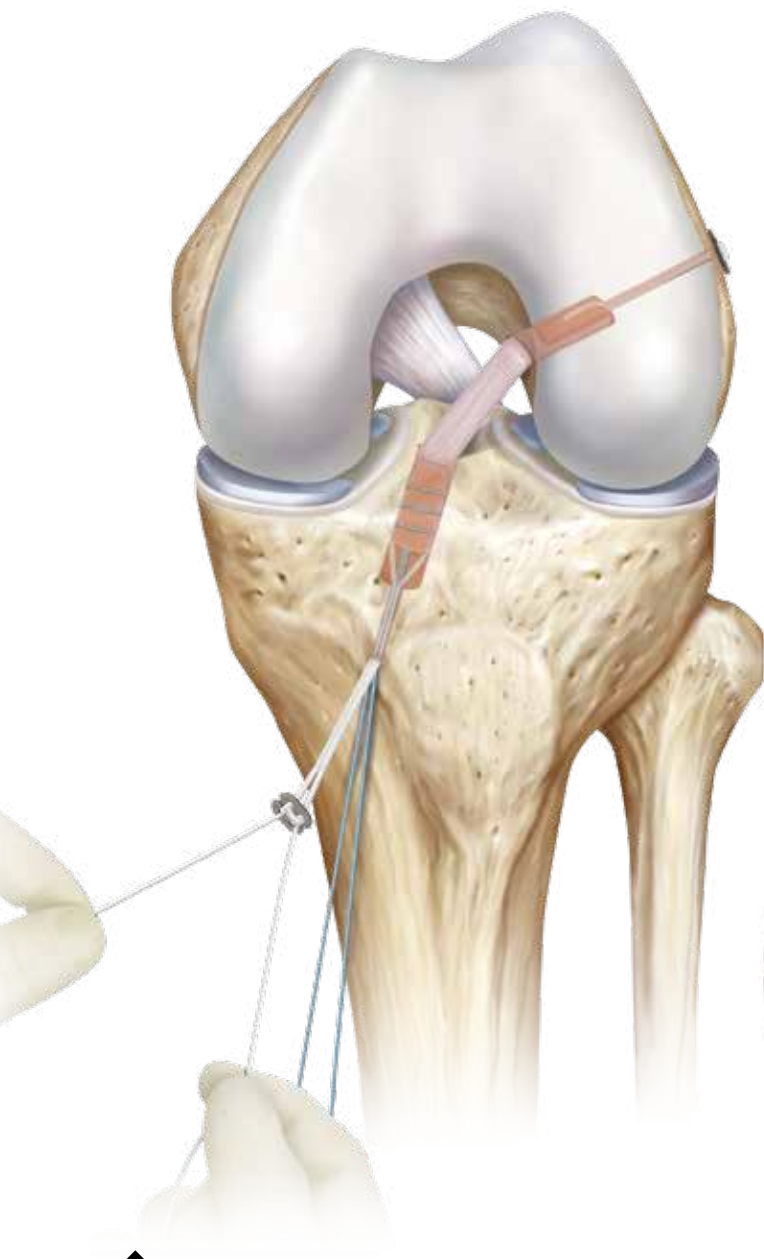
Hold slight tension on the tibial graft sutures during graft advancement. To advance the graft in the femur, pull on the tensioning strands one at a time, alternating approximately 2 cm on each side. *Note: Be sure the proximal tip of the graft is "in-line" with the socket to prevent perpendicular locking of the graft against the socket.*



Once the graft is orientated in the desired location in the femoral socket, attach a cinch suture around the end of the TightRope® ABS loop to use for passing (inset). Shuttle the sutures of the tibial bone plug through the tibia.

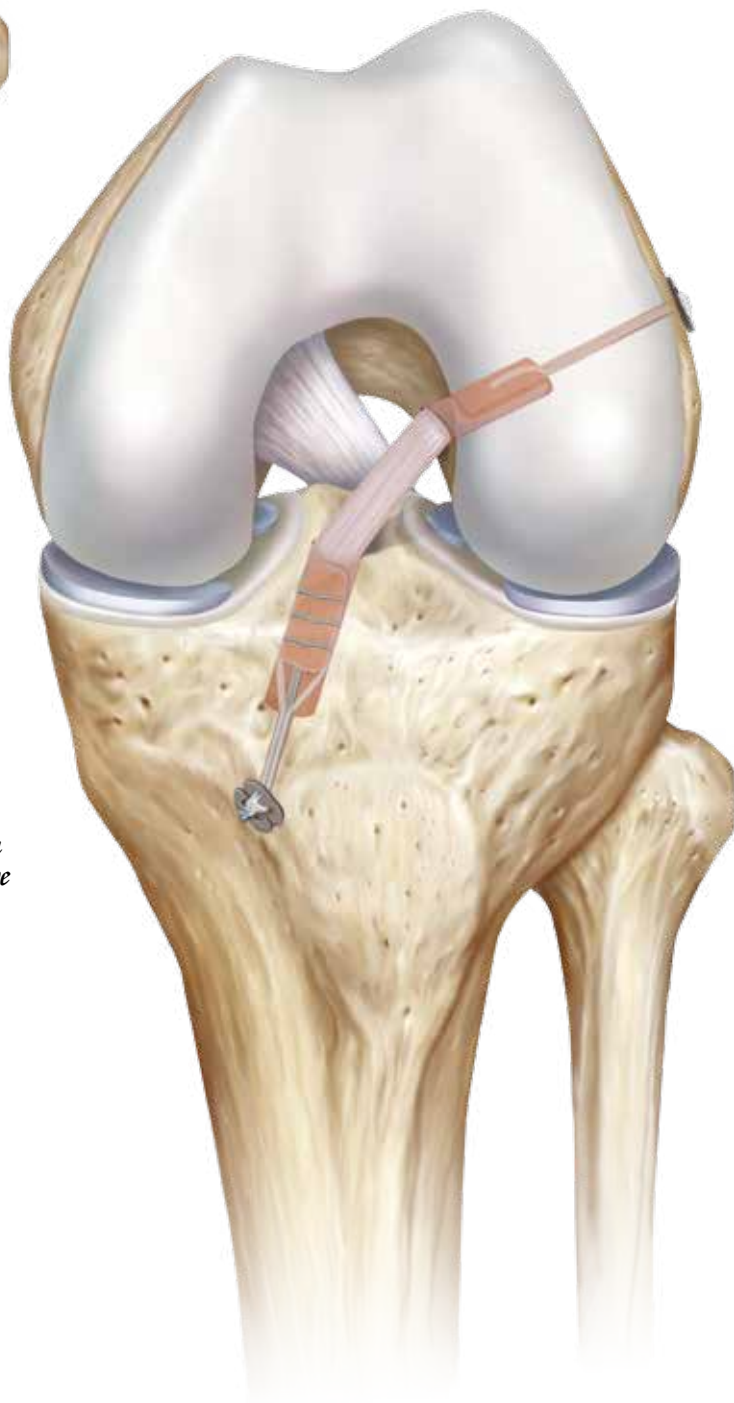


Advance the graft into the tibia by pulling on the inside of the ABS loop.



5

Load the TightRope® ABS Button onto the loop. Pull on the white shortening strands to advance the button to bone and tension the graft. *Note: Ensure the button has a clear path to the bone, as to not entrap soft tissue under the button.*



Ordering Information

Implants

BTB TightRope	AR-1588BTB
ACL TightRope RT	AR-1588RT
TightRope ABS	AR-1588TN
TightRope ABS Button	AR-1588TB
14 mm TightRope ABS Button	AR-1588TB-1
Button Extender	AR-1589RT
ACL TightRope Convenience Pack	AR-1588RTS
Autograft GraftLink Convenience Pack	AR-1588AL-CP

Instruments

RetroConstruction Drill Guide Set	AR-1510S
Pin Tip Tibial Marking Hook ACL Guide, small angle	AR-1510GTS
Footprint Femoral ACL Guide, small angle, right	AR-1510FRS
Footprint Femoral ACL Guide, small angle, left	AR-1510FLS
FlipCutter II, 6 mm – 13 mm	AR-1204AF-60 – 130
Short FlipCutter II, 5 mm – 12 mm	AR-1204AS-50 – 120
Drill Sleeve for RetroConstruction Drill Guide	AR-1510D

Accessories

Suture Retriever	AR-12540
Graft Sizing Block	AR-1886
Graft Prep Station Base	AR-2950
GraftLink Prep Attachment	AR-2951-1
GraftLink Prep Attachment with Tensioner	AR-2951-2
Suture Cutter for ACL TightRope	AR-4520
TightRope Drill Pin, open	AR-1595T
TightRope Drill Pin, closed	AR-1595TC
PassPort Button Cannula, 8 mm I.D. x 2 cm	AR-6592-8-20
PassPort Button Cannula, 8 mm I.D. x 3 cm	AR-6592-8-30
PassPort Button Cannula, 10 mm I.D. x 2 cm	AR-6592-10-20
PassPort Button Cannula, 10 mm I.D. x 3 cm	AR-6592-10-30

Suture

0 FiberWire, 38" (blue) w/Tapered Needle, 22.2 mm 1/2 circle	AR-7250
FiberStick, #2 FiberWire, 50" (blue) one end stiffened	AR-7209
TigerStick, #2 TigerWire, 50" (white/black) one end stiffened	AR-7209T
#2 FiberLoop w/Straight Needle, 20" (blue), 76 mm needle w/7 mm loop	AR-7234
#2 TigerLoop w/Straight Needle, 20" w/TigerWire (white/green), 76 mm needle w/7 mm loop	AR-7234T

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.



View U.S. patent information at www.arthrex.com/corporate/virtual-patent-marking

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