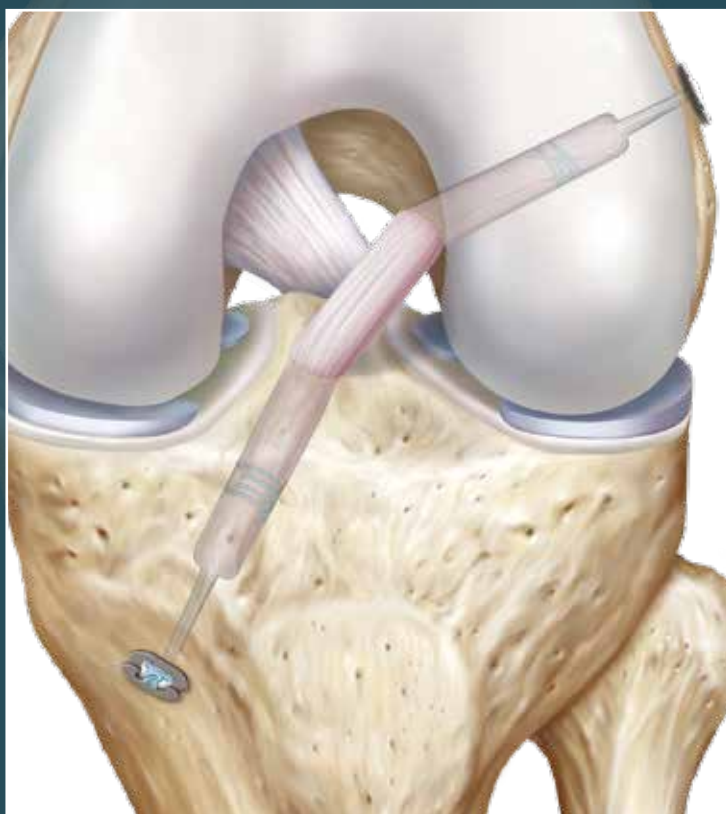




Allograft GraftLink® Construct

Surgical Technique



Allograft GraftLink

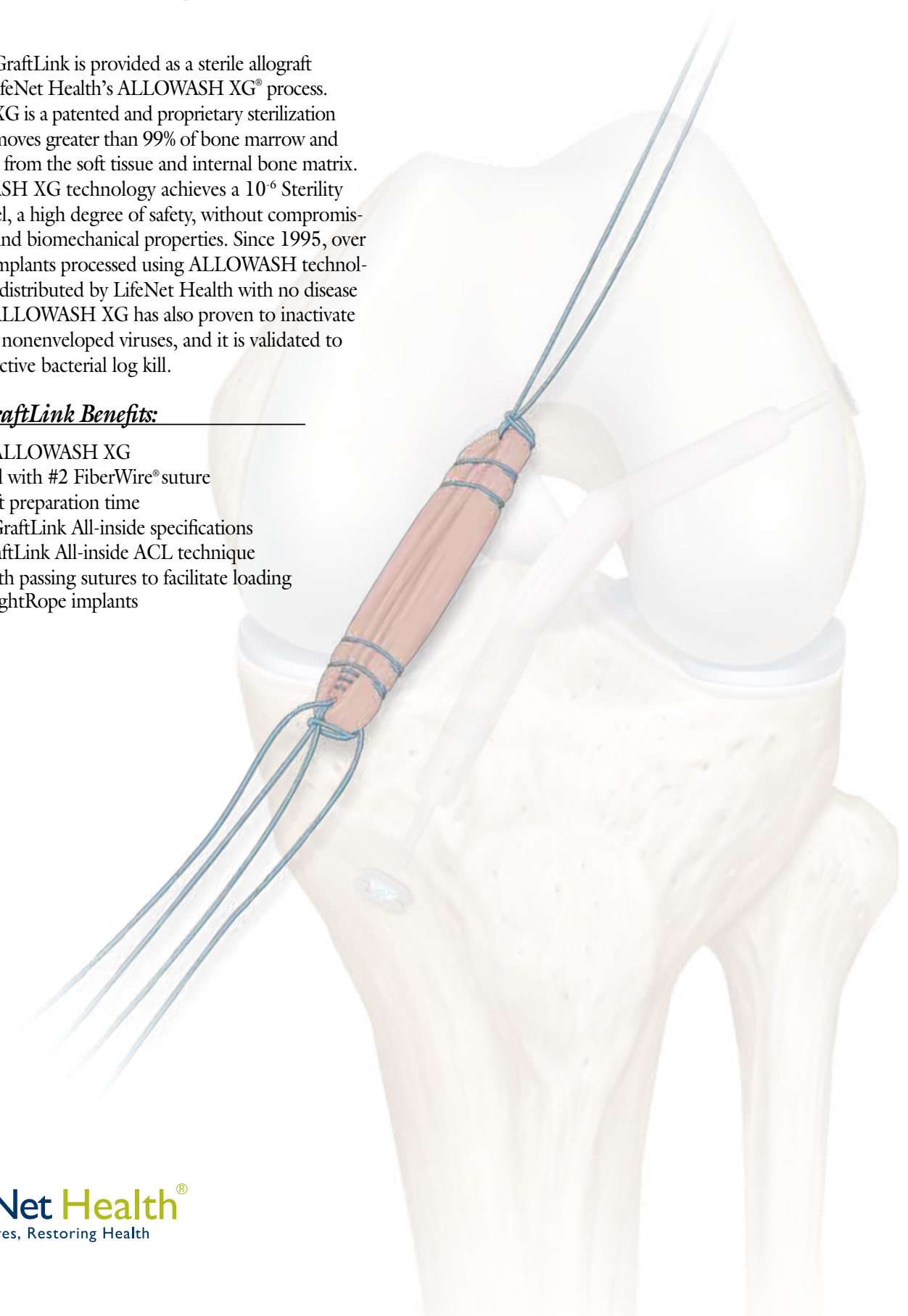
Allograft GraftLink®

The Allograft GraftLink is a preconstructed allograft tendon designed to be used with the GraftLink ACL technique and TightRope® implants. It was precisely assembled according to Arthrex specifications by trained tissue technicians to ensure the presutured construct meets the requirements of the GraftLink technique to allow for an anatomic, minimally invasive and reproducible ACL reconstruction.

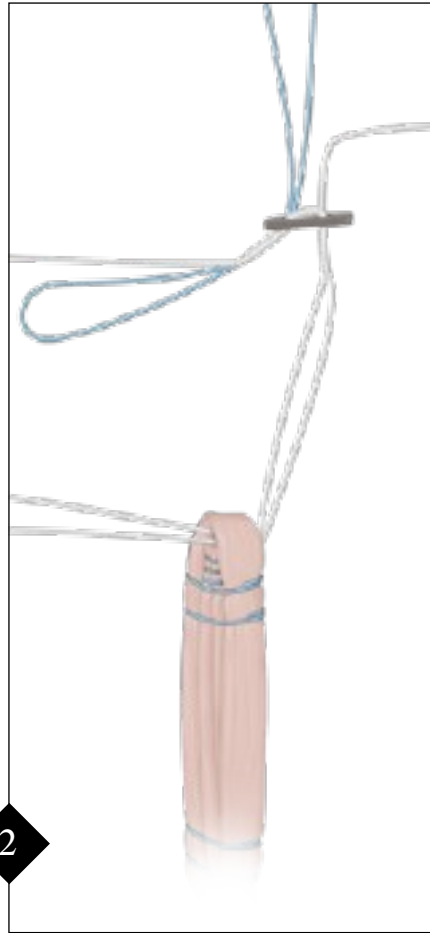
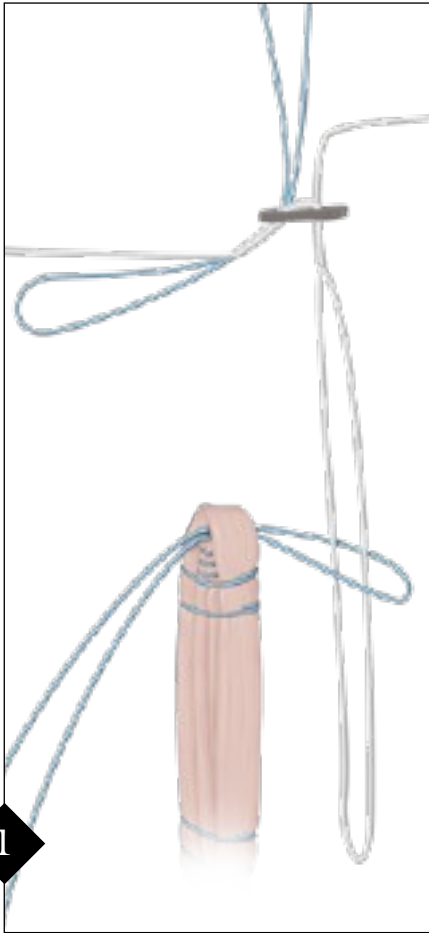
The Allograft GraftLink is provided as a sterile allograft construct via LifeNet Health's ALLOWASH XG® process. ALLOWASH XG is a patented and proprietary sterilization process that removes greater than 99% of bone marrow and blood elements from the soft tissue and internal bone matrix. The ALLOWASH XG technology achieves a 10^{-6} Sterility Assurance Level, a high degree of safety, without compromising biological and biomechanical properties. Since 1995, over 3 million bio-implants processed using ALLOWASH technology have been distributed by LifeNet Health with no disease transmission. ALLOWASH XG has also proven to inactivate enveloped and nonenveloped viruses, and it is validated to provide an effective bacterial log kill.

Allograft GraftLink Benefits:

- Sterile with ALLOWASH XG
- Preassembled with #2 FiberWire® suture
- Minimal graft preparation time
- Presized to GraftLink All-inside specifications
- Use with GraftLink All-inside ACL technique
- Preloaded with passing sutures to facilitate loading with ACL TightRope implants



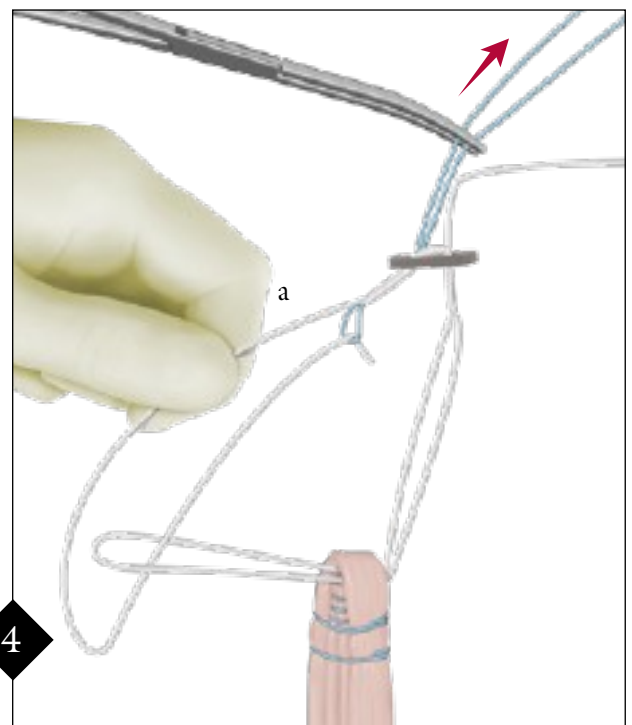
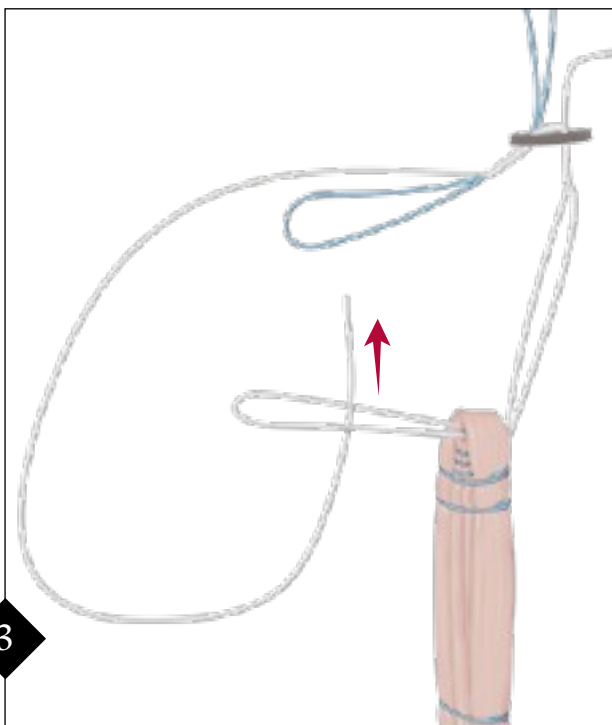
Loading of the femoral graft end with BTB TightRope®



The BTB TightRope, an open loop construct, is used on the femoral side of the graft. Remove the needle from the BTB TightRope loop by cutting the Nitinol wire loop.

Unfold the blue passing suture of the femoral end of the GraftLink® construct, exposing a loop and two tails. Drop the loop of the BTB TightRope into the blue loop of the passing suture (1).

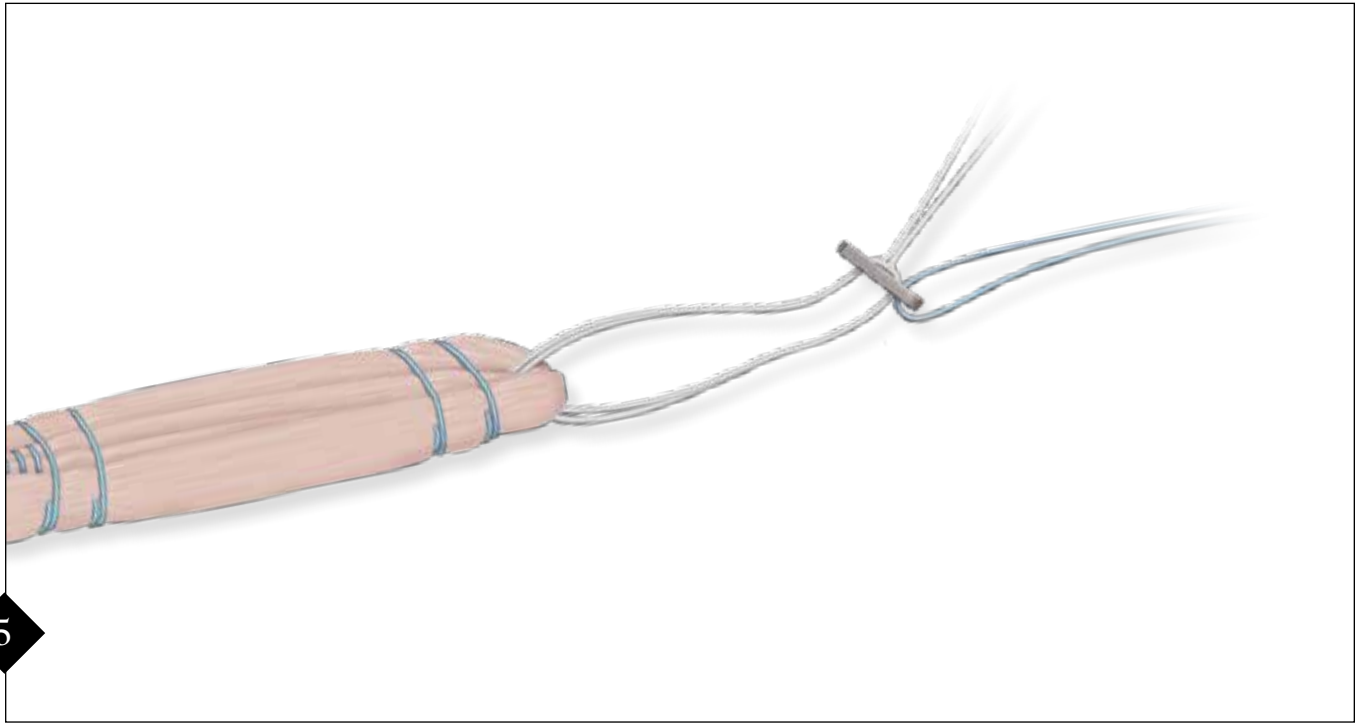
Pull the tails of the passing suture to pass the TightRope loop through the graft (2).



Pass the free end of the TightRope implant through the TightRope loop (3).

Pass about 2 cm of the free end of the implant through the blue passing suture. While holding the white suture in place, pull proximally on the tails of the blue passing loop until the free end is pinched against the splice of the implant (*this will prevent disassembly during passing*).

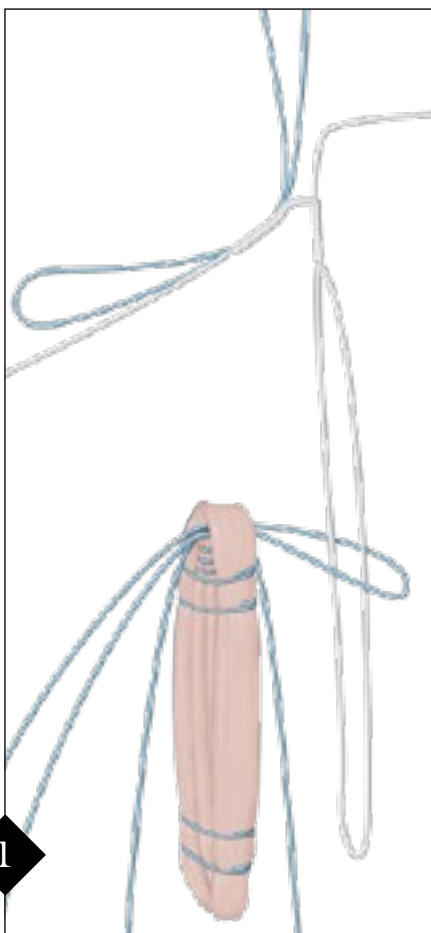
Grip the fixed end of the suture (a) with the left hand. Using a clamp, pull proximally on the blue tails to pass the free end of the implant through the splice and through the TightRope button.



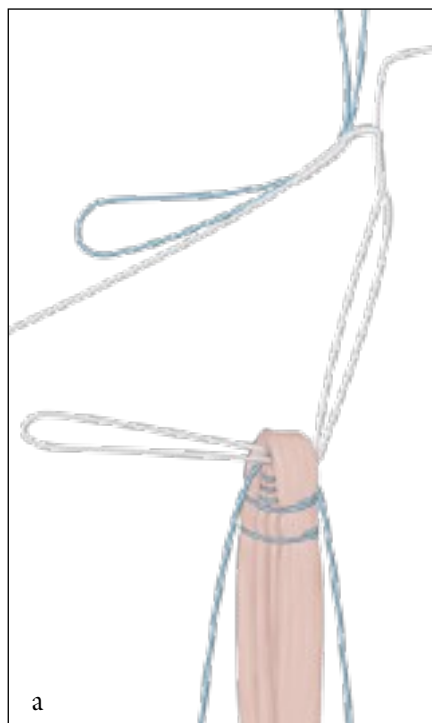
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Once passed, adjust the loop lengths so that they are equal with the loop connection near the apex of the graft.

Loading of the tibial graft end with Open TightRope ABS



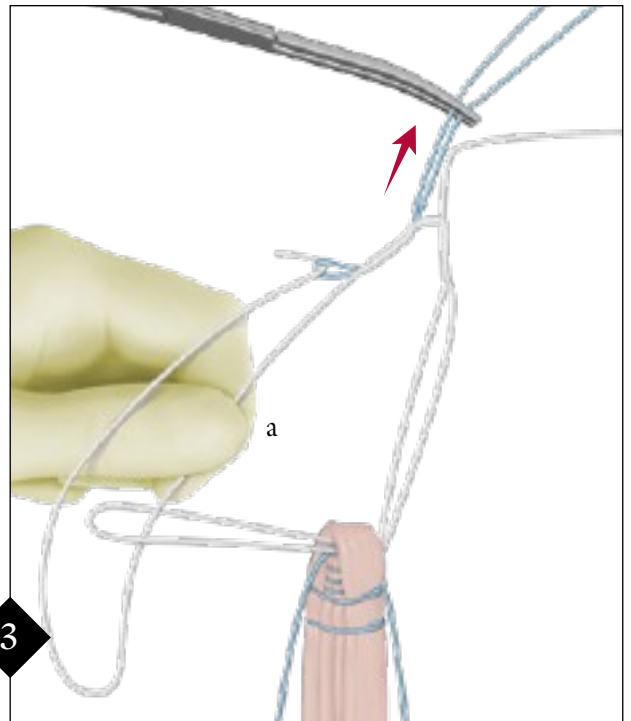
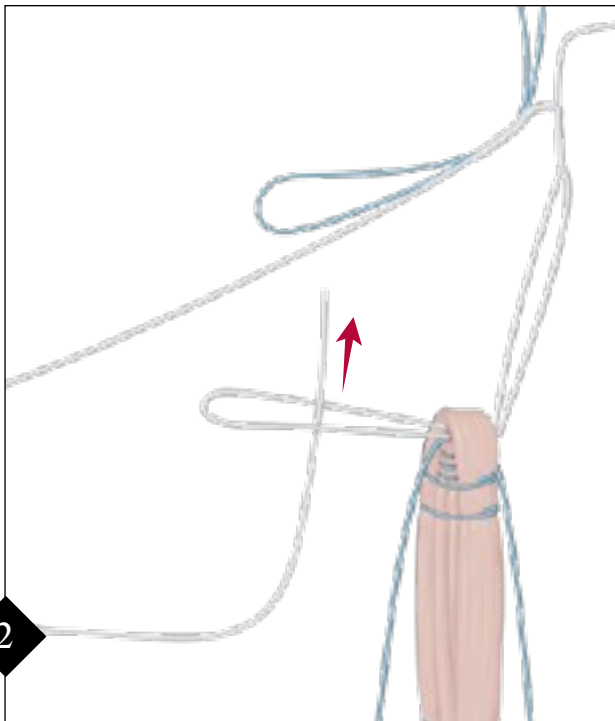
1



Note: Do not cut or remove the blue #2 FiberWire® sutures used to suture the tendon tails together. These should be used to assist with tensioning the graft, passing the graft into the tibial tendon, and as backup fixation.

An Open TightRope® ABS (Attachable Button System) is used for tibial fixation and loaded onto the graft in similar fashion as the BTB TightRope.

Unfold the blue passing suture of the tibial end of the GraftLink® construct, exposing a loop and two tails. Drop the loop of the TightRope into the blue loop of the passing suture (1). Pull the tails of the passing suture to pass the TightRope loop through the graft (a).

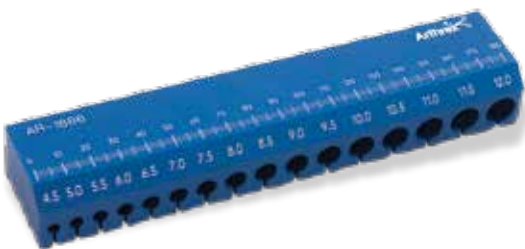


Pass the free end of the TightRope® implant through the TightRope loop (2).

Pass about 2 cm of the free end of the implant through the blue passing suture. While holding the white suture in place, pull proximally on the tails of the blue passing loop until the free end is pinched against the splice of the implant (*this will prevent disassembly during passing*).

Grip the fixed end of the suture (a) with the left hand. Using a clamp, pull proximally on the blue tails to pass the free end of the implant through the splice.

Graft Sizing

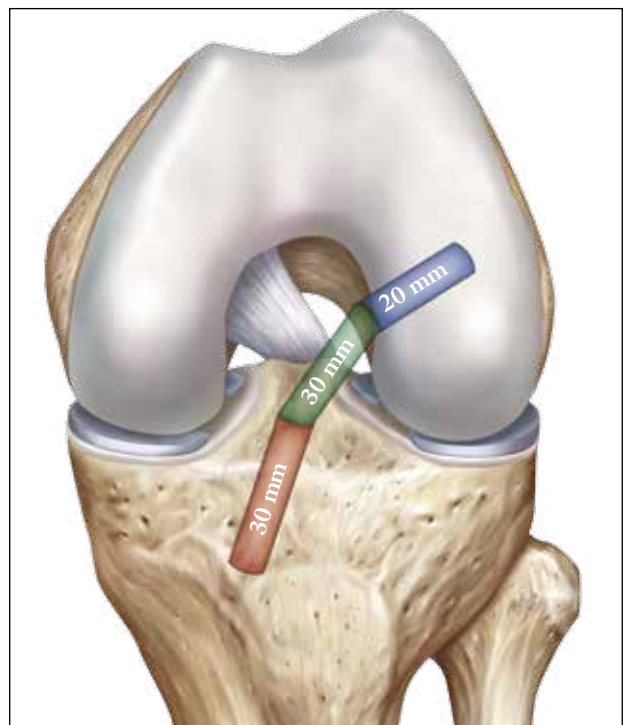


Measure the graft length and diameter. Pass both the femoral and tibial ends of the graft into the sizing block to measure diameter for socket drilling.

Socket Creation

The length from the end of the femoral socket to the end of the tibial socket should be at least 10 mm longer than the graft to ensure that the graft can be tensioned fully.

Example: 70 mm graft length



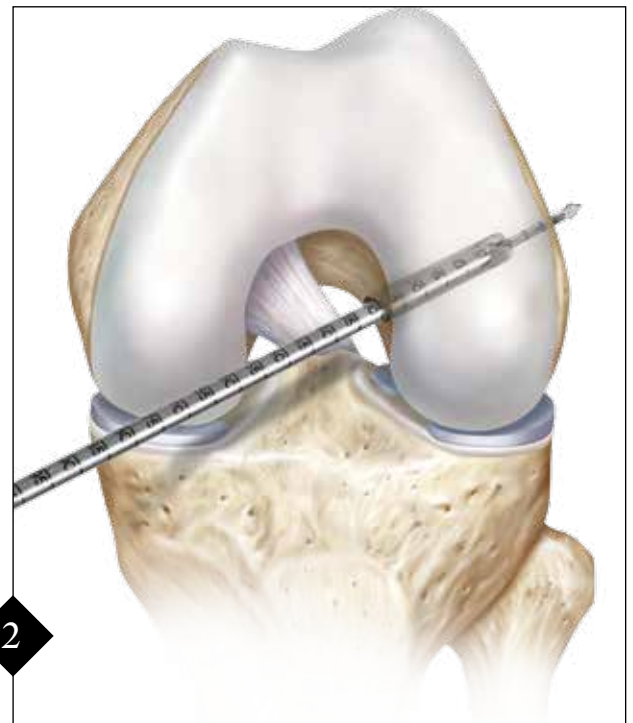
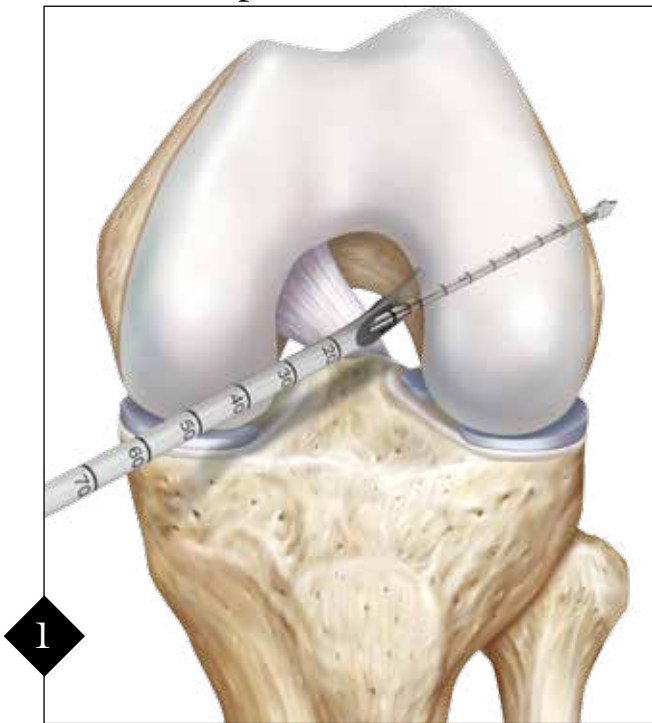
Assuming a maximum intraarticular length of 30 mm, there will be approximately 20 mm of graft in the femoral and tibial socket.

Drill the femur 20 mm deep and the tibia approximately 30 mm deep to allow an extra 10 mm for tensioning.

Femoral Socket Preparation

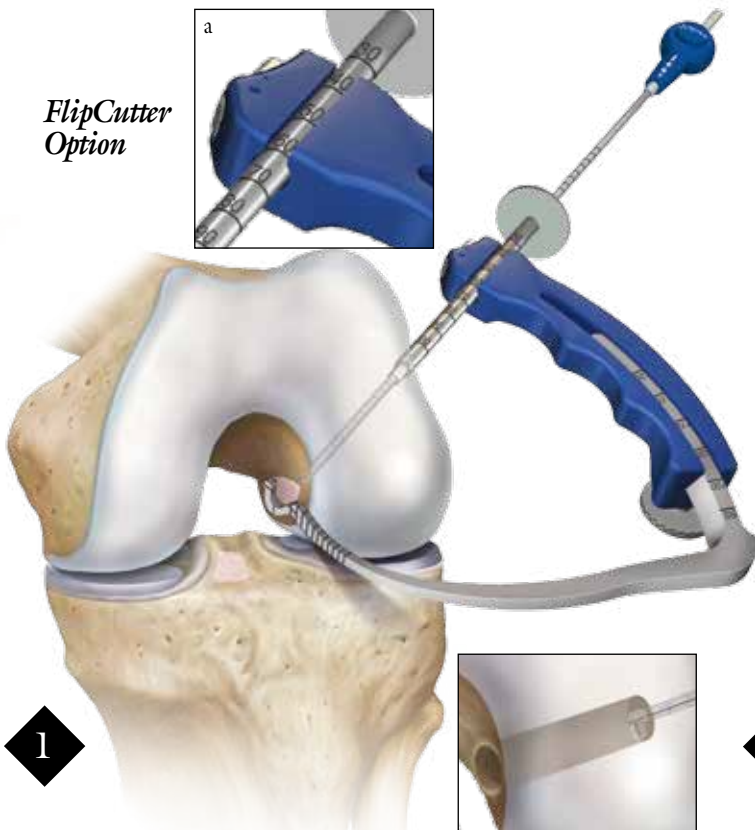
The femoral socket should be created either through the medial portal or from outside/in, using a FlipCutter® II.

Medial Portal Option



For medial portal drilling, use the TightRope Drill Pin, Transportal ACL Guides and Low Profile Reamers. Note the intraosseous length from the TightRope Drill Pin. After socket drilling, pass a suture with the TightRope Drill Pin for later graft passing.

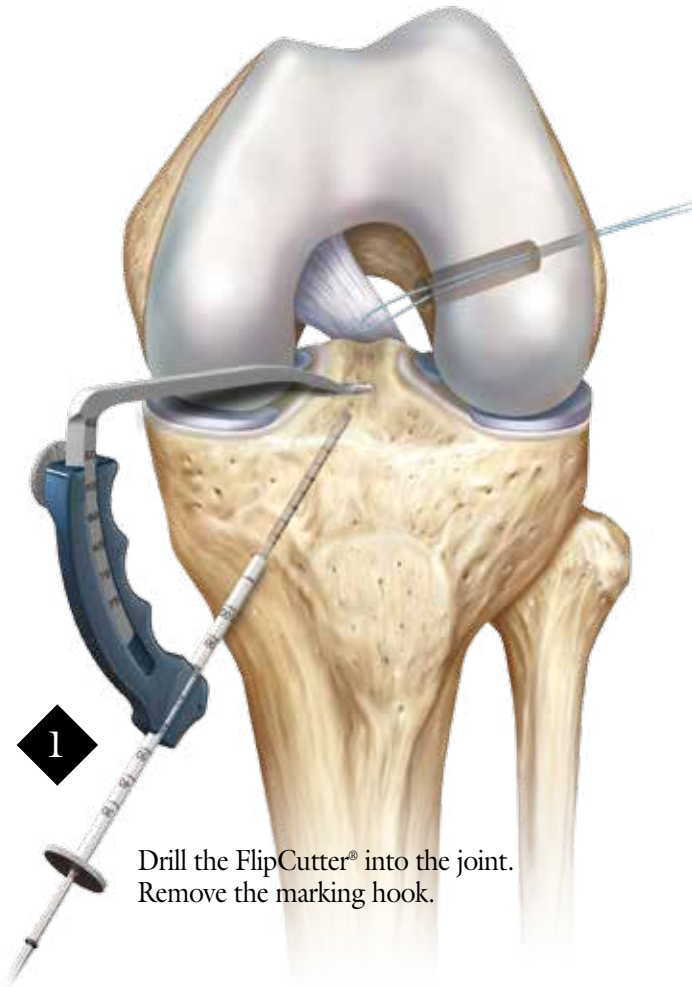
FlipCutter Option



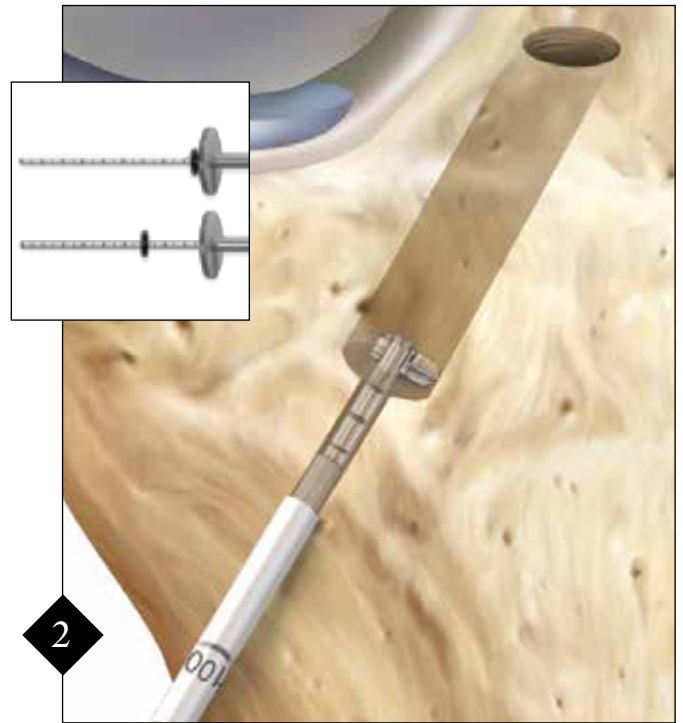
The FlipCutter may also be used to create the femoral socket. Note the intraosseous length on the drill sleeve when pushed down to bone (a).

After “flipcutting”, pass a FiberStick™ suture through the Stepped Drill Sleeve and dock for later graft passing.

Tibial Socket Preparation

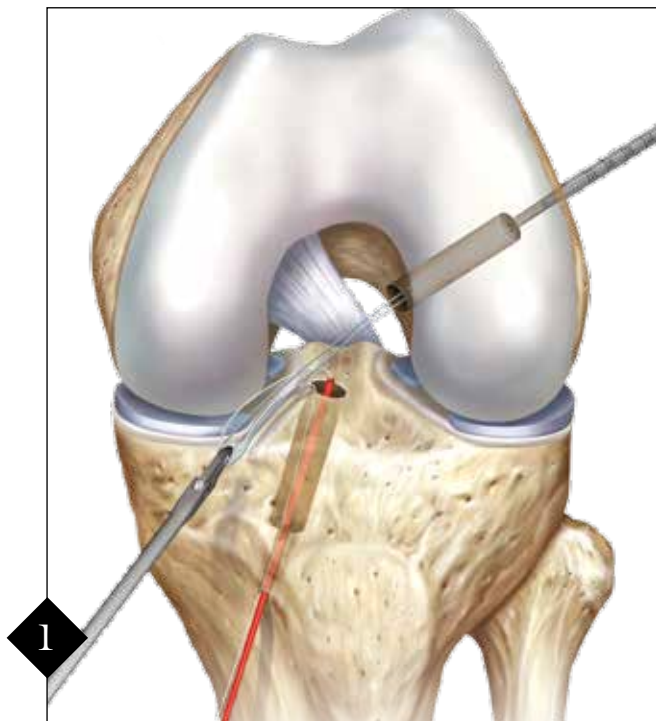


Drill the FlipCutter® into the joint. Remove the marking hook.

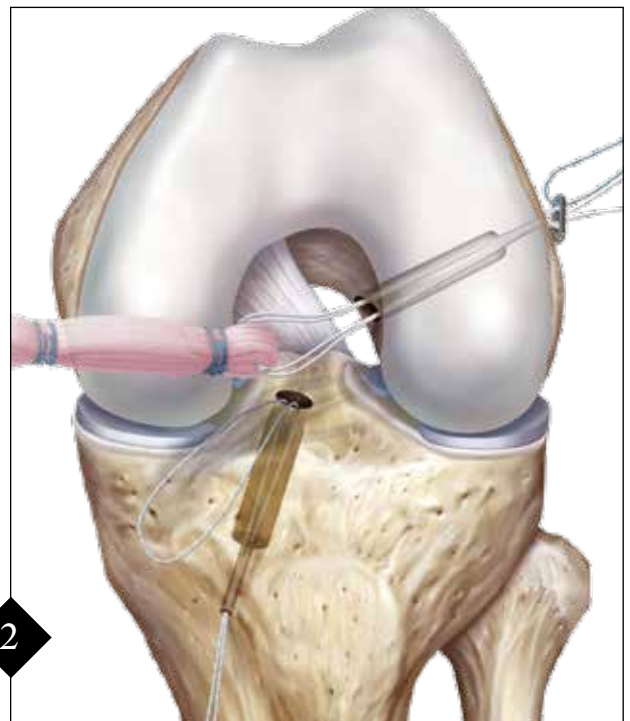


Flip the blade and lock into cutting position. Drill on forward, with distal traction, to cut the socket. Use the rubber ring and 5 mm markings on the FlipCutter to measure socket depth (inset).

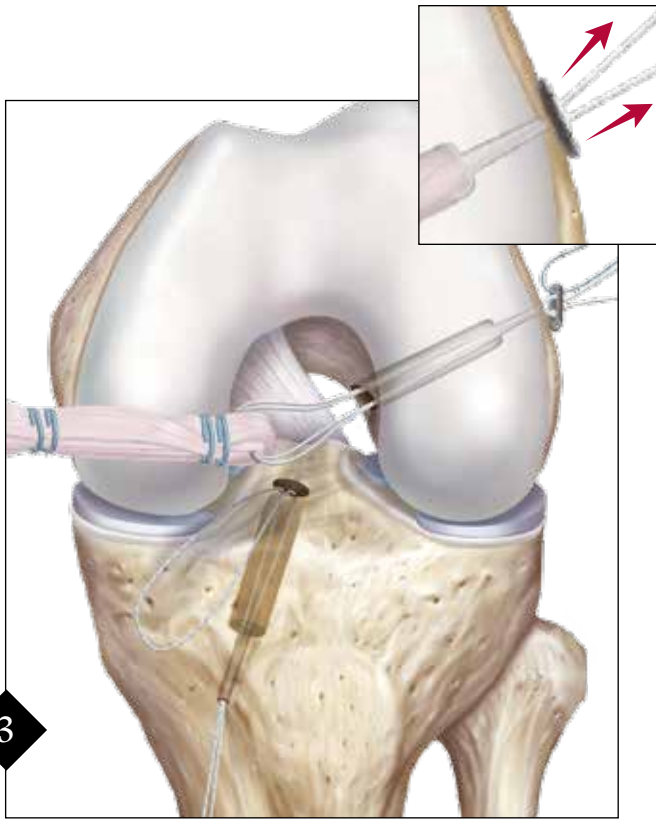
Graft Passing



Straighten the FlipCutter blade and remove from the joint. Pass a TigerStick® into the joint and retrieve both the tibial TigerStick and the femoral FiberStick out the medial portal together with an open Suture Retriever. Retrieving both sutures at the same time will help avoid tissue interposition that can complicate graft passing.
Note: A PassPort Button™ Cannula may also be used in the medial portal to prevent tangling.

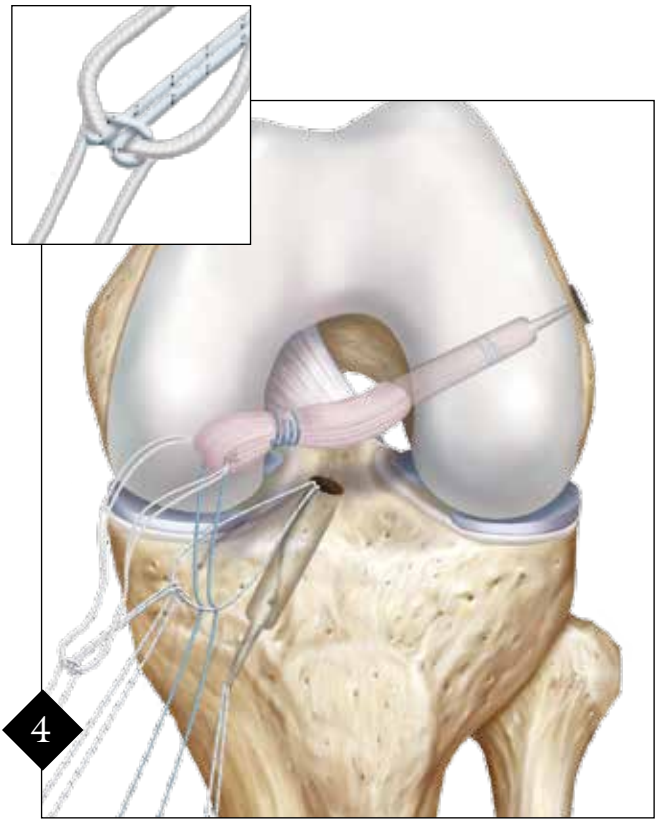


Pass the blue button suture and the white shortening strands through the femur. Remove slack from sutures and ensure equal tension. Clamp or hold both blue and white sutures together and pull them together to advance the button out of the femur. Use markings on the loop and arthroscopic visualization of the button to confirm exit from the femoral cortex. Pull back on the graft to confirm the button is seated.



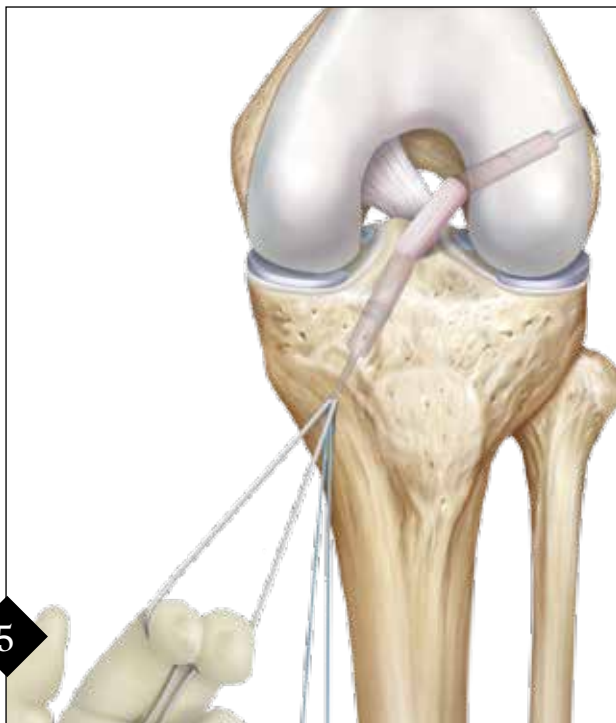
3

While holding slight tension on the graft, pull the shortening strands proximally, one at a time to advance the graft. Pull on each strand in 2 cm increments. *Note: The graft can be fully seated into the femur or left partially inserted until tibial passing is complete. The latter option allows fine tuning of graft depth in each socket.*



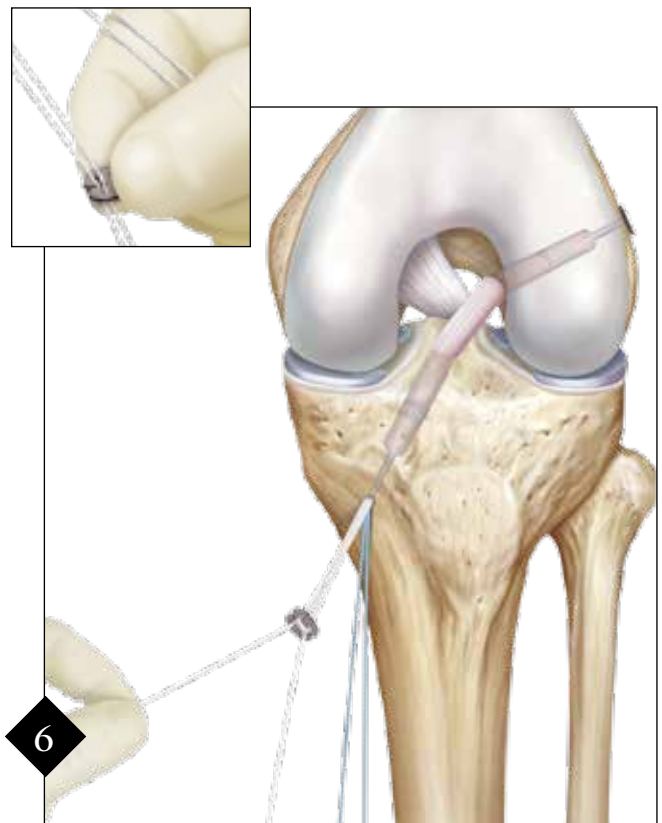
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Cinch a suture around the end of the TightRope® ABS loop to use for passing (inset). Load the cinch suture and the whipstitch tails from the graft into the tibial passing suture. Pull distally on the tibial passing suture to deliver both the TightRope ABS loop and the whipstitch sutures out of the tibia distally.



5

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



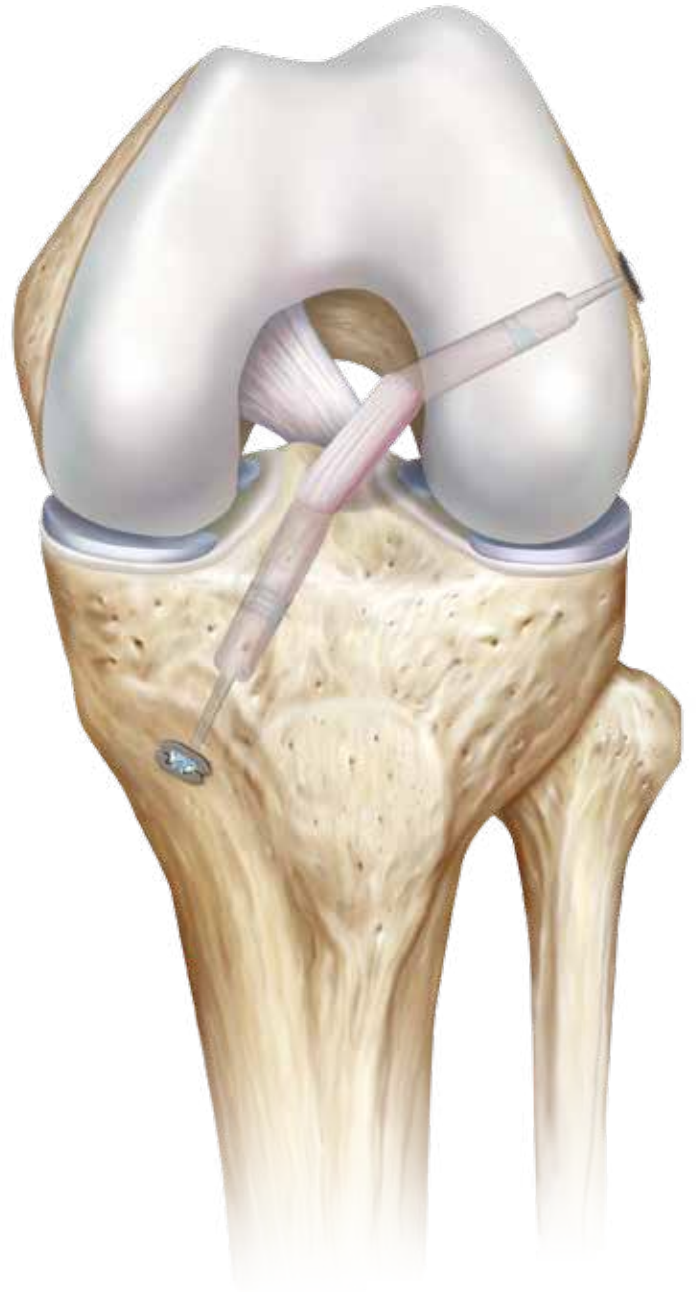
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Load the TightRope ABS Button onto the loop. Pull on the white shortening strands to advance the button to bone and tension graft. *Note: Ensure the button has a clear path to bone, as to not entrap soft tissue under the button.*



7

Load the whipstitch sutures into the button and tie a knot for backup fixation.



Ordering Information

Contact LifeNet Health® Customer Service to order the *Allograft GraftLink® Construct* at 888-847-7831. (*Product Code: FGL*)
Diameters available: 7.5 mm – 10.5 mm (in .5 mm increments)
Lengths available: 60 mm – 80 mm (in 1 mm increments)

Implants:

Allograft GraftLink Convenience Pack	AR-1588AL-CP
BTB TightRope	AR-1588BTB
Open TightRope ABS	AR-1588TN-1
TightRope ABS Button	AR-1588TB
TightRope ABS Button, 14 mm round	AR-1588TB-1

Instruments:

For FlipCutter Technique:

RetroConstruction Drill Guide Set	AR-1510S
Footprint Femoral ACL Guide, right	AR-1510FR
Footprint Femoral ACL Guide, left	AR-1510FL
FlipCutter II, 6 mm	AR-1204AF-60
FlipCutter II, 6.5 mm	AR-1204AF-65
FlipCutter II, 7 mm	AR-1204AF-70
FlipCutter II, 7.5 mm	AR-1204AF-75
FlipCutter II, 8 mm	AR-1204AF-80
FlipCutter II, 8.5 mm	AR-1204AF-85
FlipCutter II, 9 mm	AR-1204AF-90
FlipCutter II, 9.5 mm	AR-1204AF-95
FlipCutter II, 10 mm	AR-1204AF-100
FlipCutter II, 10.5 mm	AR-1204AF-105
FlipCutter II, 11 mm	AR-1204AF-110
FlipCutter II, 11.5 mm	AR-1204AF-115
FlipCutter II, 12 mm	AR-1204AF-120
FlipCutter II, 13 mm	AR-1204AF-130

For Medial Portal Technique:

Transportal ACL Guides (TPGs), 4 mm – 8 mm	AR-1800-04 – 08
Low Profile Reamer, 5 mm	AR-1405LP
Low Profile Reamer, 5.5 mm	AR-1405LP-50
Low Profile Reamer, 6 mm	AR-1406LP
Low Profile Reamer, 6.5 mm	AR-1406LP-50
Low Profile Reamer, 7 mm	AR-1407LP
Low Profile Reamer, 7.5 mm	AR-1407LP-50
Low Profile Reamer, 8 mm	AR-1408LP
Low Profile Reamer, 8.5 mm	AR-1408LP-50
Low Profile Reamer, 9 mm	AR-1409LP
Low Profile Reamer, 9.5 mm	AR-1409LP-50
Low Profile Reamer, 10 mm	AR-1410LP
Low Profile Reamer, 10.5 mm	AR-1410LP-50
Low Profile Reamer, 11 mm	AR-1411LP
Low Profile Reamer, 11.5 mm	AR-1411LP-50
Low Profile Reamer, 12 mm	AR-1412LP
Low Profile Reamer, 12.5 mm	AR-1412LP-50
Low Profile Reamer, 13 mm	AR-1413LP
TightRope Drill Pin, open	AR-1595T
TightRope Drill Pin, closed	AR-1595TC

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

Suture:

FiberStick, #2 FiberWire, 50" (blue) one end stiffened	AR-7209
TigerStick, #2 TigerWire, 50" (white/black) one end stiffened	AR-7209T

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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