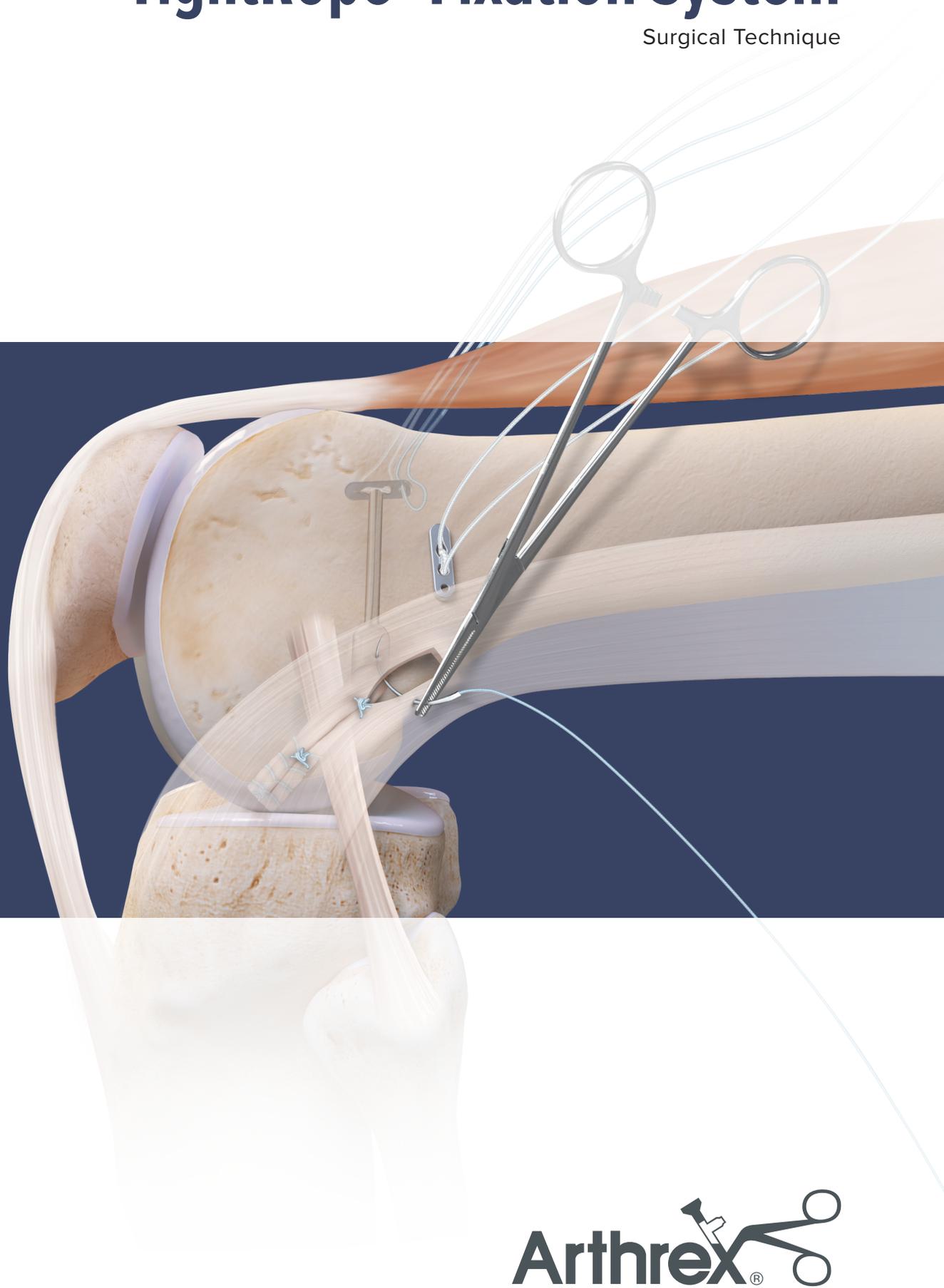


Iliotibial Band Tenodesis With TightRope[®] Fixation System

Surgical Technique



Arthrex[®] 

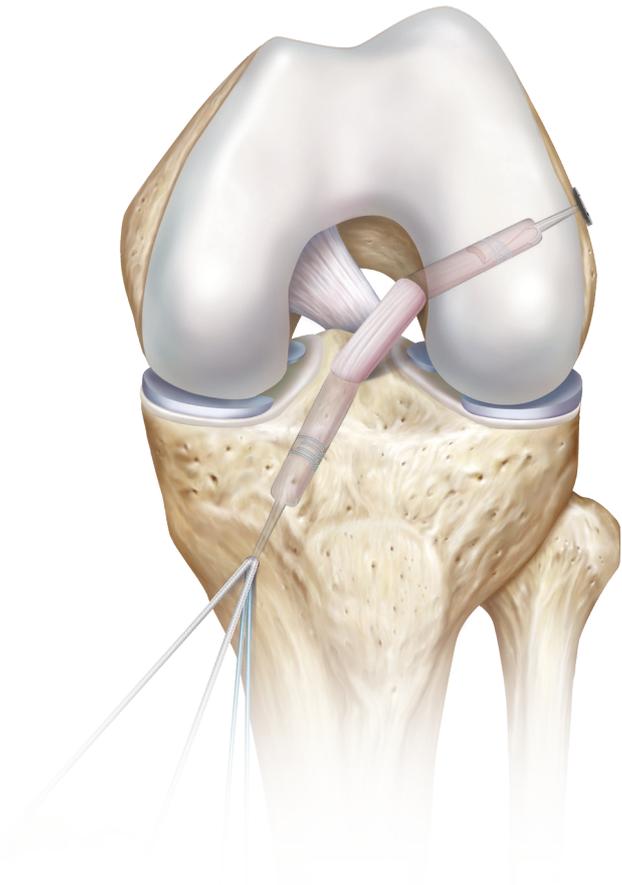
Introduction

Historically, surgeons have recognized that lateral extra-articular tenodesis (LET) can help control knee rotation.¹⁻⁶ The approaches were developed and popularized in the 1960s through the early 1980s before the widespread adoption of arthroscopy and modern ACL reconstruction (ACLR) techniques. Although LET was effective at reducing or eliminating the pivot-shift, it fell out of favor when studies suggested that intra-articular ACLR in isolation would sufficiently treat knee instability.⁷

There has been increased interest in and research of rotational stability of the knee following ACLR, particularly in high-risk athletes and those with nonmodifiable risk factors.⁸⁻¹¹ This renewed interest in adding a lateral extra-articular reconstruction to an ACLR stems from research around the anterolateral complex (ALC).¹²⁻¹⁶ The ALC consists of the superficial and deep aspects of the iliotibial band (ITB), the anterolateral ligament (ALL), and the anterior arm of the short head of the biceps. Biomechanical studies have shown that the ALC functions to provide anterolateral rotatory stability as a secondary stabilizer to the ACL.¹⁷⁻²⁰

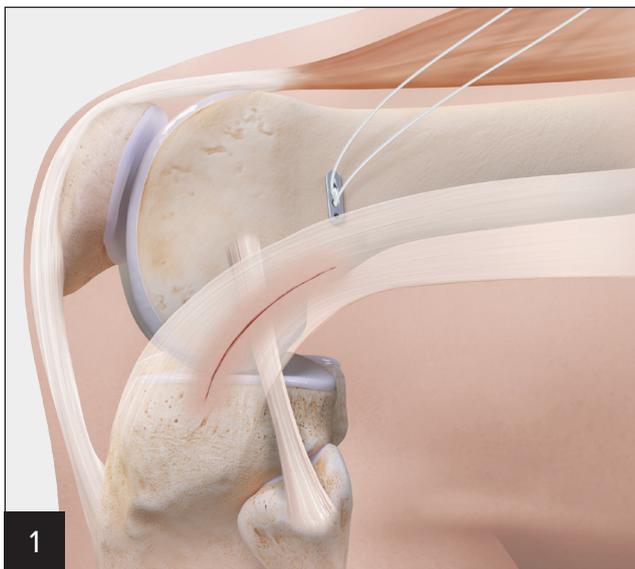
ALC reconstruction techniques include isolated ALL reconstruction with hamstring autograft or allograft,¹⁷ combined ACLR and ALL hamstring reconstruction as popularized by Sonnery-Cottet,¹¹ and LET including the modified Lemaire procedure.^{8,21}

GraftLink® Technique With All-Inside ACL Reconstruction



Perform an ACLR using the standard technique. Position the graft in position within the femoral and tibial sockets as per surgeon preference with respect to technique and graft type. Secure fixation of the femoral aspect of the graft. **Note: Do not secure fixation of the tibial aspect of the graft.**

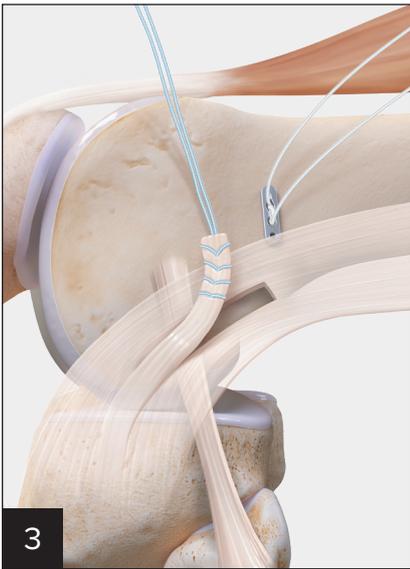
Iliotibial Band Tenodesis Surgical Technique



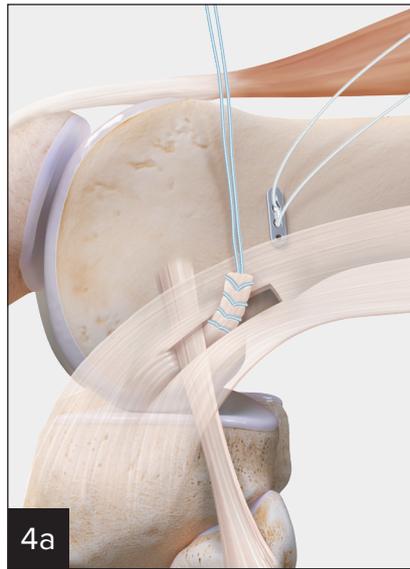
1 Perform a lateral extra-articular approach by making a 4 cm incision starting just proximal to Gerdy's tubercle and extending to the lateral femoral epicondyle. Expose and identify the ITB and leave it intact distally at Gerdy's tubercle.



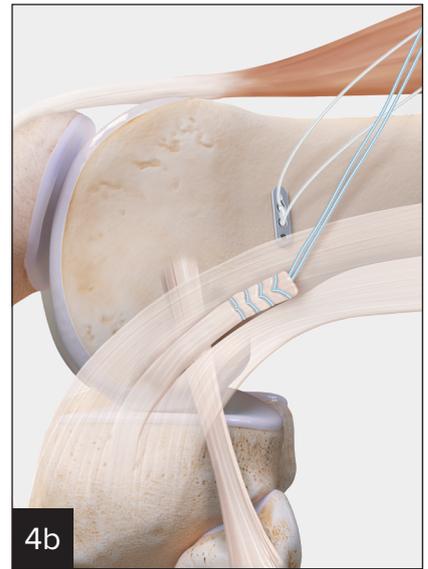
2 Obtain a distally based ITB graft measuring 10 mm x 70 mm. Avoid the proximal and distal Kaplan fibers posteriorly. These fibers have been demonstrated to be important in providing anterolateral knee rotatory stability and should be preserved. **Note: Identify the lateral collateral ligament (LCL).**



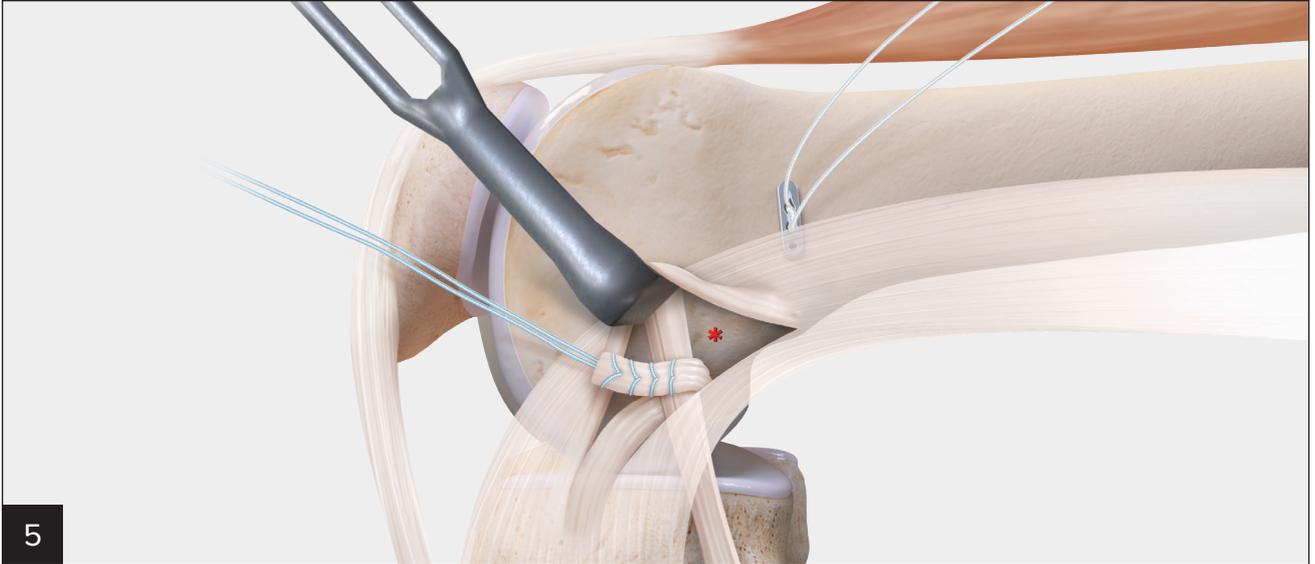
Whipstitch the proximal ITB graft with a FiberLoop® suture and measure the diameter of the graft.



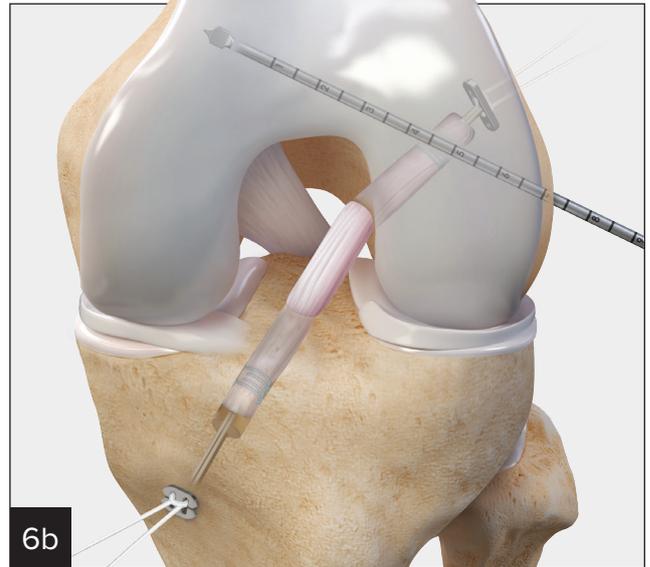
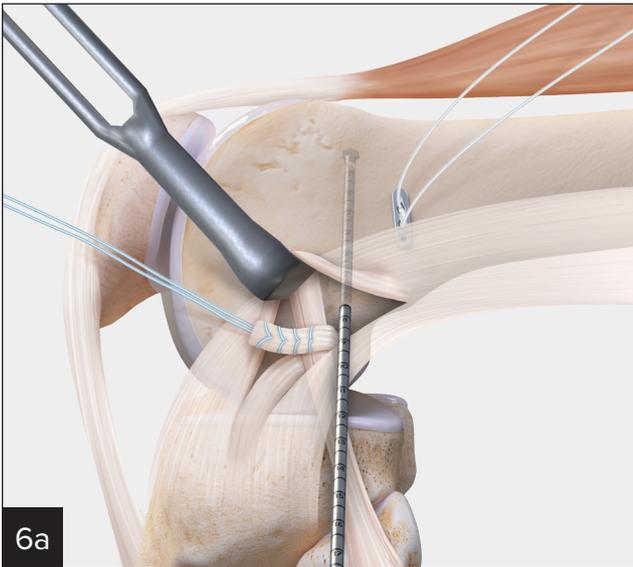
Pass the ITB graft deep (medial) to the LCL.



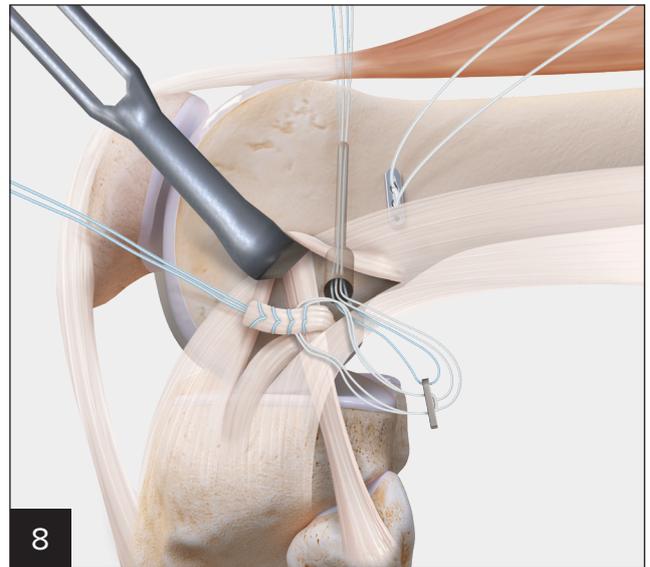
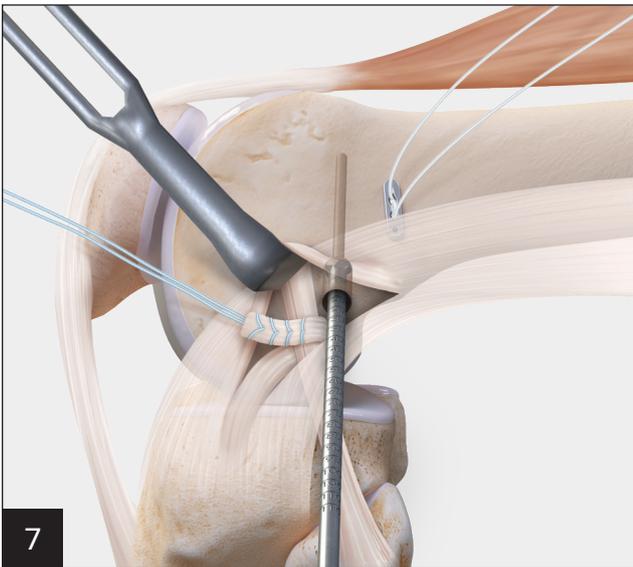
Alternatively, some surgeons prefer to pass the graft over the LCL.



Identify the fixation site posterior and proximal to the femoral origin of the LCL.

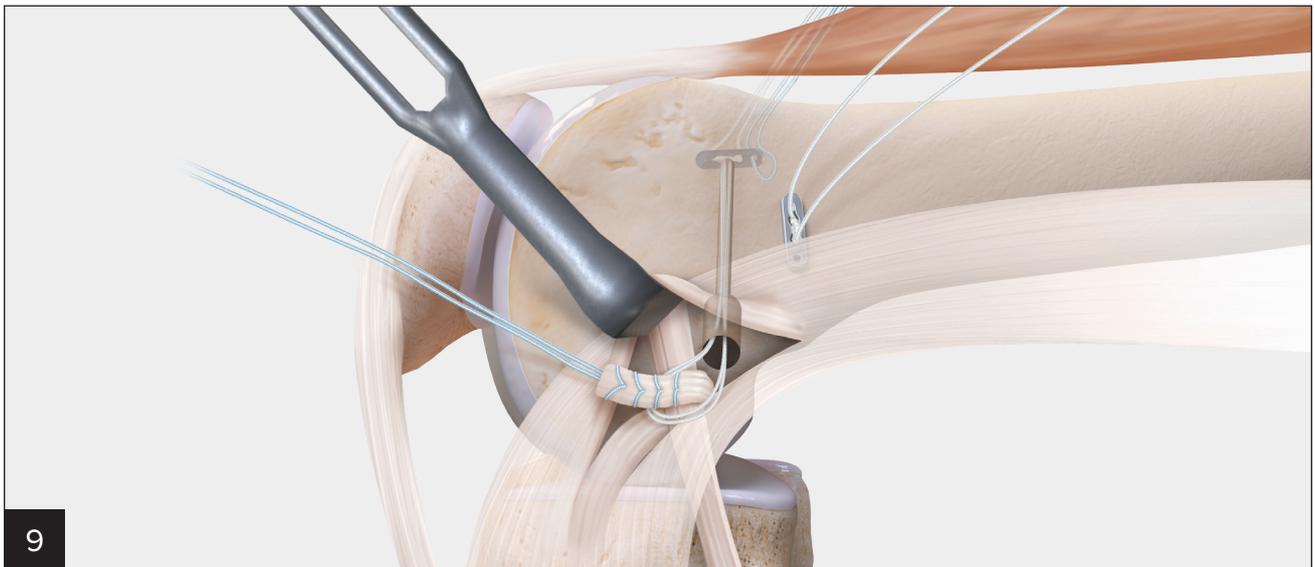


Direct the TightRope® pin from the fixation site anteriorly and proximally taking care to avoid the femoral socket of the ACL reconstruction. Pass the TightRope pin through the femur, perforating the anteromedial cortex, anteromedial thigh soft tissue, and skin.

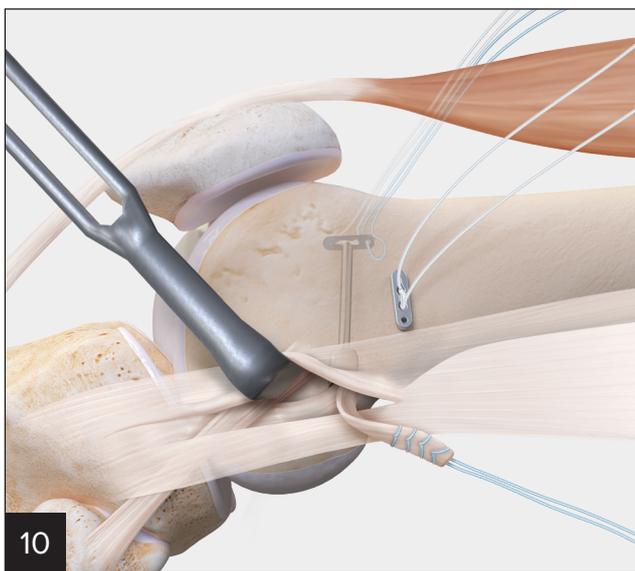


Use a low-profile reamer, slightly larger than the diameter of the ITB autograft to create a 15 mm-long socket. **Note: This is typically a 6 mm reamer.**

Attach a #2 FiberWire® suture to the TightRope pin and pull the drill from the medial side. Deliver the tails of the suture out through the anteromedial soft tissue.

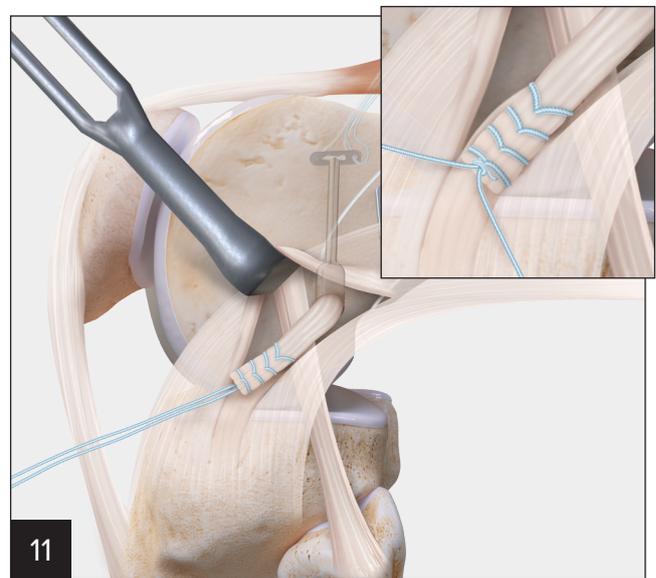


Use the looped end of the #2 FiberWire® suture to pull a TightRope® RT button implant through the femoral intramedullary canal. As the TightRope RT button exits the anteromedial femoral cortex, confirm that it has flipped by pulling back on the graft. **Note: Deployment of the TightRope RT button implant on the anteromedial femoral cortex can be confirmed with intraoperative imaging.**

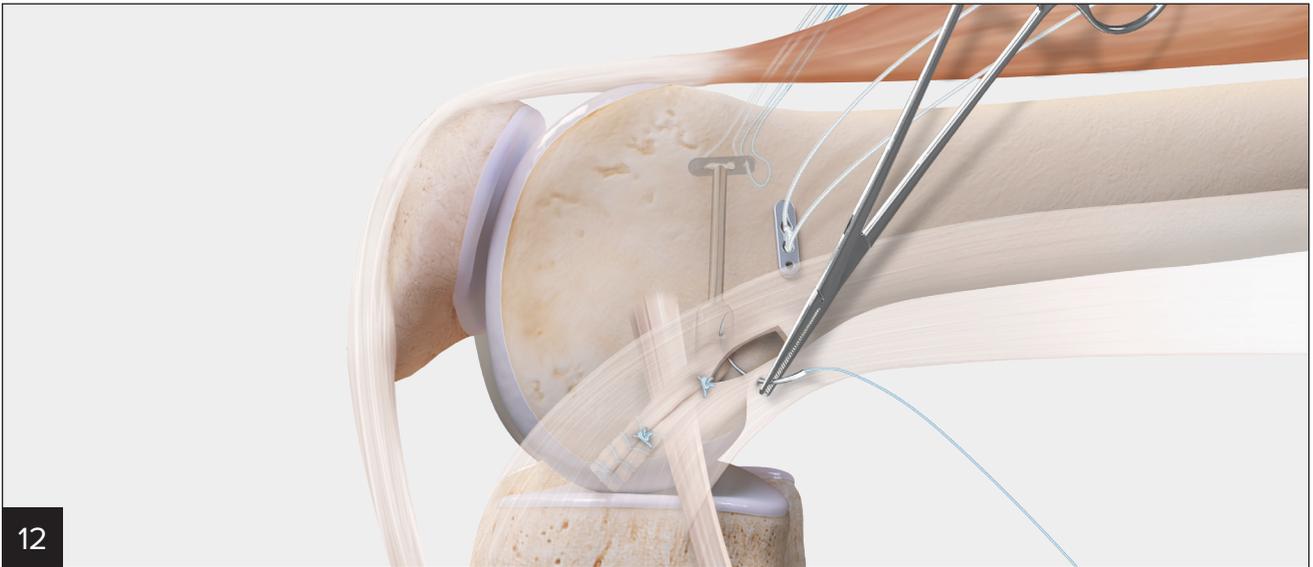


Place the knee in 30° of flexion and neutral rotation. **Note: External rotation of the tibia could result in overconstraining the knee.**

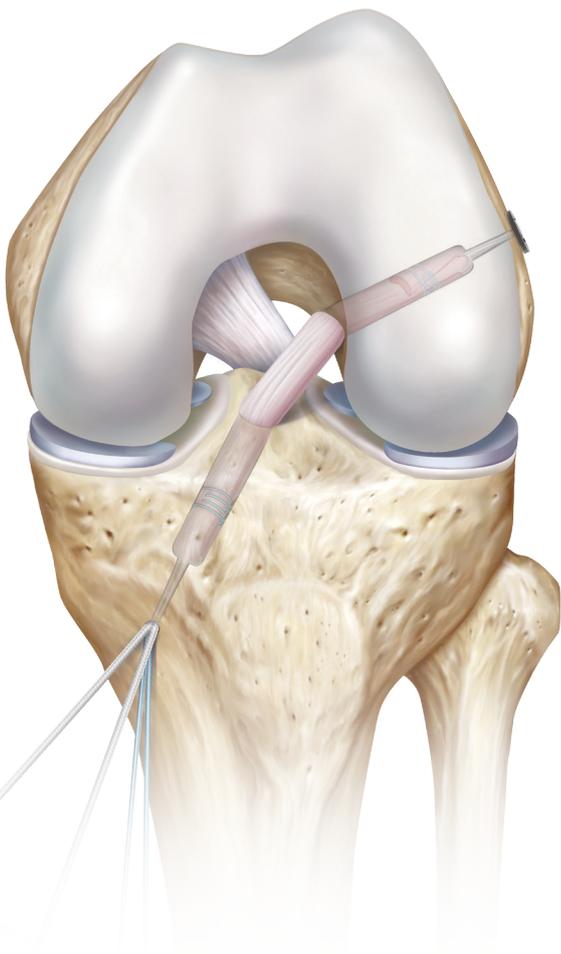
Complete the extra-articular augmentation by delivering the ITB autograft into the socket. Pull the shortening strands on the TightRope RT implant to tension the graft. Check internal rotation after tensioning to make sure there is no constraint. Remove the lead #5 blue passing suture from the TightRope RT button implant.



Fold the excess ITB autograft over the LCL and suture it to itself with #2 FiberWire suture.



Repair the ITB defect with #2 FiberWire® and TigerWire® sutures.



GraftLink® Technique All-Inside ACL Reconstruction

Return to the ACLR and complete the tibial side fixation as per surgeon preference with respect to graft type and fixation type. Refer to the appropriate surgical technique for tibial ACL fixation.

Ordering Information

Product Description	Item Number
ACL TightRope® RT Implant	AR-1588RT
#2 FiberLoop® Suture w/ Straight Needle, 20 in (blue)	AR-7234
#2 FiberWire® Suture w/ Straight Needle (blue)	AR-7246
#2 FiberWire Suture w/ Tapered Needles, 38 in (blue, white, and black)	AR-7208

Products may not be available in all markets because product availability is subject to the regulatory approvals and medical practices in individual markets. Please contact Arthrex if you have questions about the availability of products in your area.

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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. 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.

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