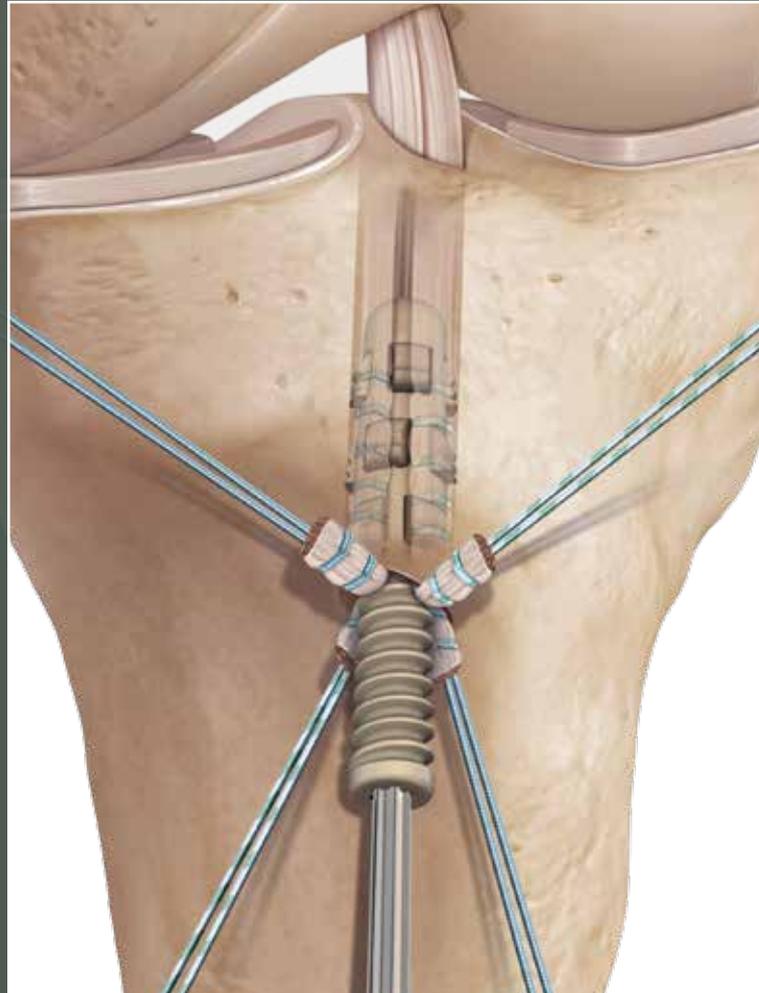




ACL Tibial Fixation using GraftBolt®
Sheath and Screw

Surgical Technique



GraftBolt ACL Tibial Fixation

Introduction

There is always a balance of strong fixation and ease of insertion in any graft fixation device. With the GraftBolt's tapered sleeve design and deployable tabs (*that only engage the graft when the screw is inserted*), Arthrex® offers a solid transtibial fixation solution with a simple, reproducible surgical technique.



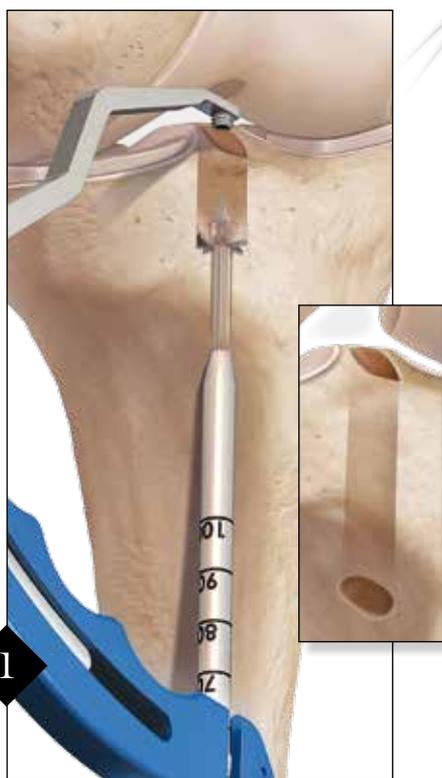
Graft Selection and Preparation

The GraftBolt® implant can be used with four-strand soft tissue grafts including semitendinosus/gracilis and two-strand grafts including split Achilles tendon, tibialis anterior, etc. This technique describes fixation of a semitendinosus/gracilis four-strand graft.

The graft should be whipstitched 20 mm on each end of both the semitendinosus and gracilis bundles. It is helpful to stitch one bundle of the graft with a FiberWire® and one with a TigerWire® to differentiate them while tensioning. Measure the diameter of the graft using the Graft Sizing Block (AR-1886).

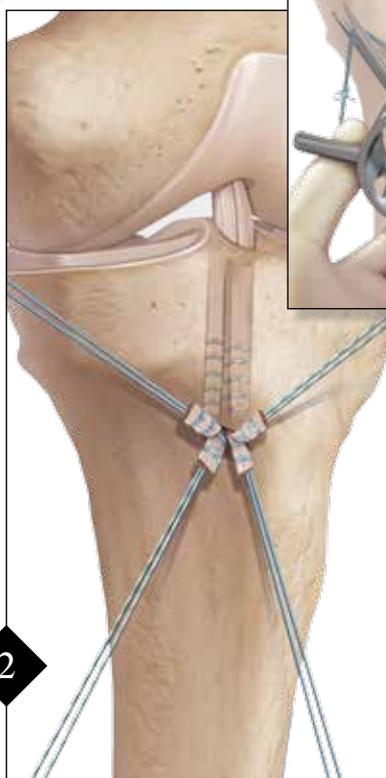
Femoral Fixation

The femoral fixation of the graft can be accomplished with a method of the surgeon's preference, including ACL TightRope®, TransFix®, or BioComposite Screw.



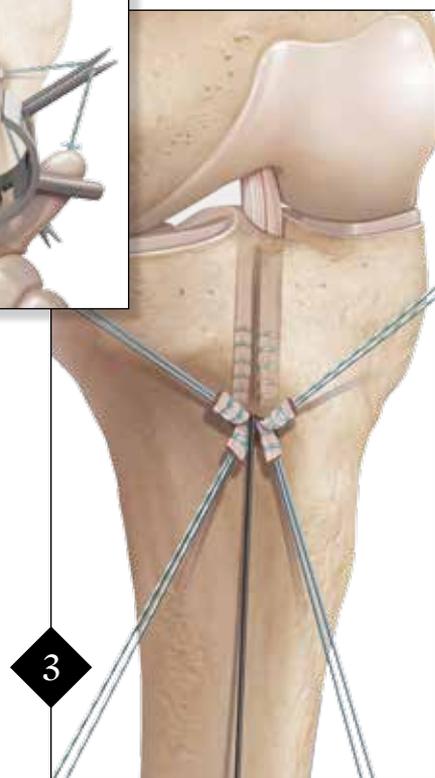
Tibial Tunnel Preparation

The tibial tunnel is drilled in the traditional manner to a diameter equal to the diameter of the graft. A RetroDrill® is recommended to perform this step. Pass the graft through the tibial tunnel and fix the graft to the femur. Once femoral fixation is achieved, attention is turned to preparation of the tibia.



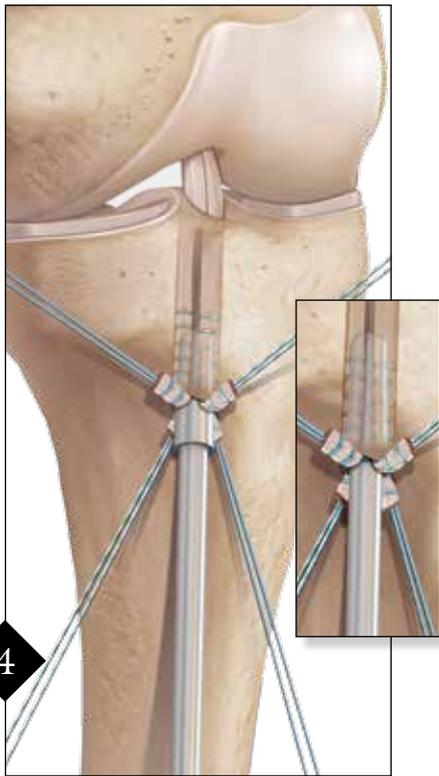
Graft Tensioning

The graft strands should be quadrated and placed in the Graft Spreader to pull recommended tension on the graft.



Tunnel Dilation

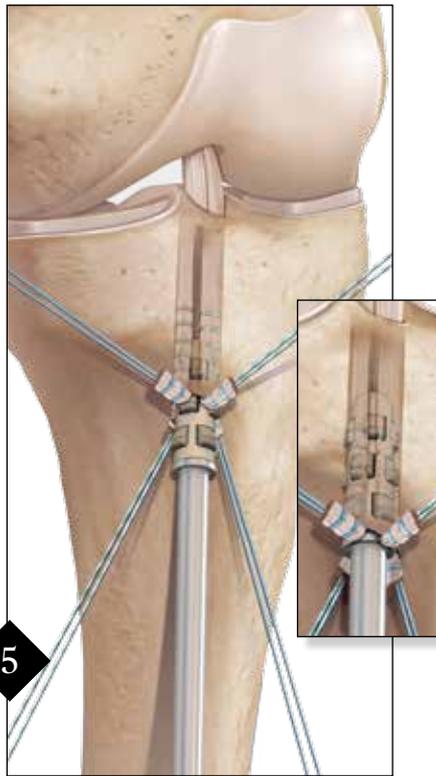
With the graft in tension, and the knee at 30° of flexion, insert a 1.1 mm Nitinol guide wire in the center of the strands.



4

Tunnel Dilatation

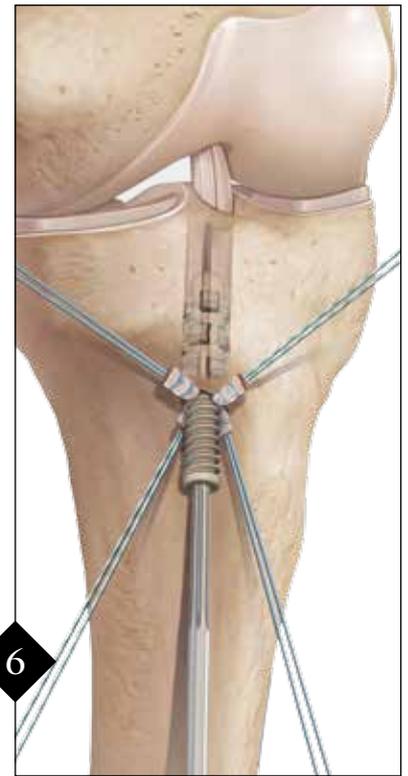
Starting with the 6 mm GraftBolt Dilator, dilate up to a diameter where a tight fit is achieved. The final dilator should fully seat in the tunnel and will act as a provisional implant, as it matches the minor diameter of its respective GraftBolt implant.



5

Sheath Insertion

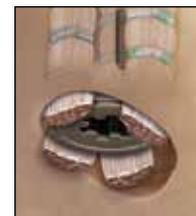
A GraftBolt implant matching the final Tapered Dilator is chosen. With the graft under tension, insert the sheath into the tunnel over the 1.1 mm Nitinol guide wire. The sheath is impacted until fully seated into the tunnel, flush with the cortex.



6

Screw Insertion

Maintain the 1.1 mm Nitinol guide wire in the tunnel and insert the screw into the sheath until the screw is fully seated. Once the screw is fully inserted into the sheath, the tapered interference fit of the screw in the sheath will lock it in place. *(Note: Continuing to advance the screw once it is fully seated in the sheath will not provide any additional fixation and may cause the screw to back out.)* Trim the excess graft flush to the tunnel opening.



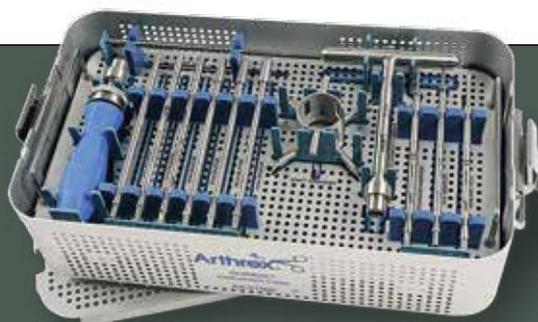
ORDERING INFORMATION

Implants:

GraftBolt w/Screw, 7 mm	AR-5100-07
GraftBolt w/Screw, 8 mm	AR-5100-08
GraftBolt w/Screw, 9 mm	AR-5100-09
GraftBolt w/Screw, 10 mm	AR-5100-10

GraftBolt Instrument Set (AR-5100S) includes:

T-Handle	AR-1416T
GraftBolt Insertor, 10 mm	AR-5101
GraftBolt Extraction Tool	AR-5102
GraftBolt Insertor, 7 mm	AR-5103
GraftBolt Insertor, 8-9 mm	AR-5104
GraftBolt Dilator, 6 mm	AR-5106
GraftBolt Dilator, 7 mm	AR-5107
GraftBolt Dilator, 8 mm	AR-5108
GraftBolt Dilator, 9 mm	AR-5109
GraftBolt Dilator, 10 mm	AR-5110
Graft Spreader	AR-1842
Ratcheting Screwdriver Handle	AR-1999
Hexalobe Driver Shaft	AR-1996CD-1
GraftBolt Instrument Set Case	AR-5100C



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.

Arthrex®

www.arthrex.com

... up-to-date technology
just a click away

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