Spring Ligament Repair With the Internal Brace 2.0 Ligament Augmentation Procedure

Product Technique and Highlights

Features and Benefits

- InternalBrace ligament augmentation 2.0—optimized instrumentation with more size and material options
- Talus offset guide—reproducible anatomic placement
- Radiopaque marker and laser line window on SwiveLock® anchor driver
- Minimally invasive—drill, tap, and implant through the guides
- Biologically advantageous—collagen-coated FiberTape® suture and JumpStart® antimicrobial dressing
- Accelerated rehabilitation for ankle instability¹
- Biomechanically superior to standard repair²



Ordering Information

Internal Brace System Mini

Product Description	Item Number
PEEK SwiveLock Anchor w/ Collagen-Coated	AR- 1787PJ-CP
FiberTape Suture, 3.5 mm	
PEEK SwiveLock Anchor, 3.5 mm	
Drill, 2.7 mm	
Drill, cannulated, 2.7 mm	
Drill, 3.4 mm	
Drill Guide w/ Metal Insert for Talus	
Drill Guide w/ Metal Insert	
Bone Tap	
Guidewire w/ Trocar Tip	
Guidewire Sleeve	
Suture Passing Wire	
Free Needle	
JumpStart Single-Layer Dressing, 2 in \times 5 in	

Internal Brace System Plus

Product Description	Item Number
BioComposite SwiveLock Anchor w/ Collagen-Coated	AR- 1789J-CP
FiberTape Suture, 4.75 mm	
BioComposite SwiveLock Anchor, 4.75 mm	
Drill, 3.4 mm	
Drill, cannulated, 3.4 mm	
Drill, 4.0 mm	
Drill Guide w/ Metal Insert for Talus	
Drill Guide w/ Metal Insert	
Bone Tap	
Guidewire w/ Trocar Tip	
Guidewire Sleeve	
Suture Passing Wire	
Free Needle	
JumpStart Single-Layer Dressing, 2 in × 5 in	

Internal Brace System Standard Bio Composite

Product Description	Item Number
BioComposite SwiveLock Anchors w/ Collagen-Coated	AR- 1788J-CP
FiberTape Suture, 4.75 mm/3.5 mm	
Drill, 2.7 mm	
Drill, cannulated, 2.7 mm	
Drill, 3.4 mm	
Drill, cannulated, 3.4 mm	
Drill Guide w/ Metal Insert for Talus	
Drill Guide w/ Metal Insert	
Bone Tap	
Guidewire w/ Trocar Tip	
Guidewire Sleeve	
Suture Passing Wire	
Free Needle	
JumpStart Single-Layer Dressing, 2 in × 5 in	

InternalBrace System Standard PEEK*

Product Description	Item Number
PEEK SwiveLock Anchor w/ Collagen-Coated	AR- 1788PJ-CP
FiberTape Suture, 4.75 mm	
PEEK SwiveLock Anchor, 3.5 mm	
JumpStart Single-Layer Dressing, 2 in × 5 in	

^{*}Includes instrumentation from AR-1788J-CP

References

- Coetzee JC, Ellington JK, Ronan JA, Stone RM. Functional results of open Brostrom ankle ligament repair augmented with a suture tape. Foot Ankle Int. 2018;39(3):304-310. doi:10.1177/1071100717742363
- Viens NA, Wijdicks CA, Campbell KJ, Laprade RF, Clanton TO. Anterior talofibular ligament ruptures, part 1: biomechanical comparison of augmented Broström repair techniques with the intact anterior talofibular ligament. Am J Sports Med. 2014;42(2):405-411. doi:10.1177/0363546513510141

Surgical Technique Overview



Insert a 1.35 mm K-wire into the sustentaculum tali angled 15° plantarly and slightly posterior to avoid the subtalar joint. Verify position prior to overdrilling with a 2.7 mm cannulated drill.



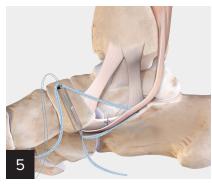
Use the 3.5 mm tap (black handle) and tap to laser line.



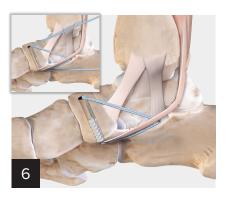
Insert a 3.5 mm SwiveLock® anchor (black handle) loaded with FiberTape® suture. Hold the paddle and turn the handle clockwise until the laser line appears in the middle of the window to show 2 mm countersinking.



If performing in association with an FDL transfer, the navicular should be reamed to the appropriate size. This is commonly 5.0 mm or 5.5 mm. If performing an isolated spring ligament augmentation, drill with the 3.4 mm drill and tap the navicular with the 4.75 mm tap.



Take one limb of the FiberTape suture and pass it dorsal to plantar and the other limb plantar to dorsal (in conjunction with the FDL, if you are transferring). This is referred to as a "hammock effect" to make the force of the FiberTape suture equal in strength on the navicular. Ensure concentric reduction of the talonavicular joint on coronal and sagittal imaging.



Hold one limb of the FiberTape suture under tension from dorsal to plantar and the second limb of the FiberTape suture (in conjunction with FDL if you are transferring) under tension from plantar to dorsal while inserting the 4.75 mm SwiveLock (green handle) anchor. This anchor is being used as an interference screw.

Note: It is suggested to remove the eyelet of the 4.75 mm SwiveLock anchor.

The InternalBrace surgical technique is intended only to augment the primary repair/reconstruction by expanding the area of tissue approximation during the healing period and is not intended as a replacement for the native ligament. The InternalBrace technique is for use during soft tissue-to-bone fixation procedures and is not cleared for bone-to-bone fixation.

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.com