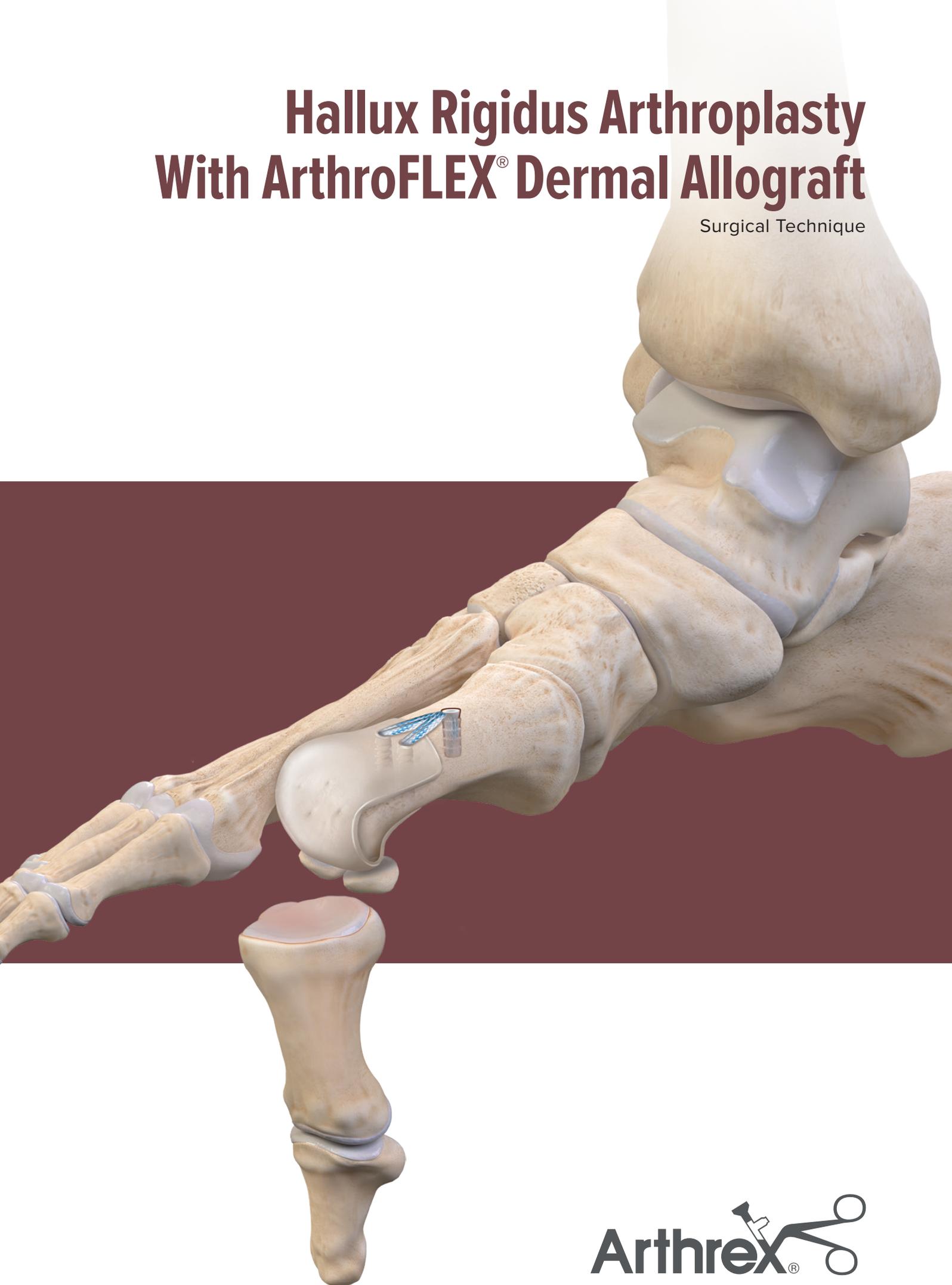


Hallux Rigidus Arthroplasty With ArthroFLEX® Dermal Allograft

Surgical Technique



Arthrex® 

Introduction

Osteoarthritis of the 1st metatarsophalangeal (MTP) joint is the most common arthritic condition in the foot, affecting 1 in 40 people over the age of 50. Progression of great toe arthritis is associated with pain and loss of motion. ArthroFLEX® dermal allograft is a protective bioimplant that allows patients to retain the ability to move the MTP joint without the need for fusion.

Surgical Technique

This technique is described by Eric W. Tan, MD (Los Angeles, CA)



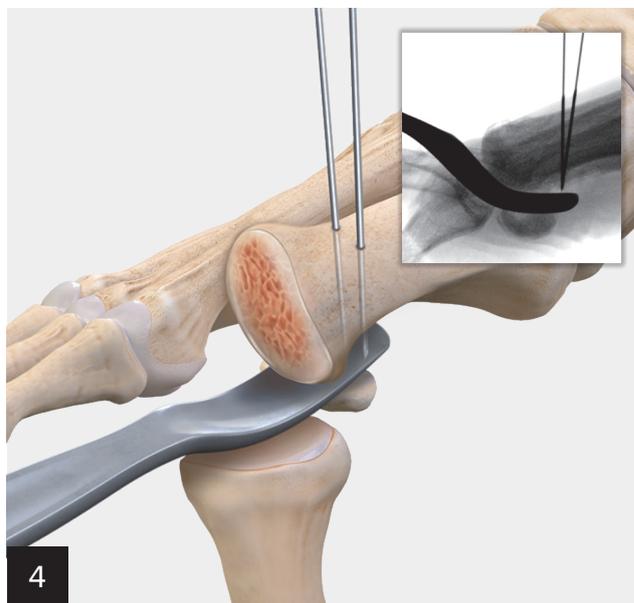
Perform a dorsal longitudinal capsulotomy followed by soft-tissue dissection to expose the metatarsal head and base of the proximal phalanx. Carry out subperiosteal dissection of the soft tissues in a medial, lateral and plantar direction.



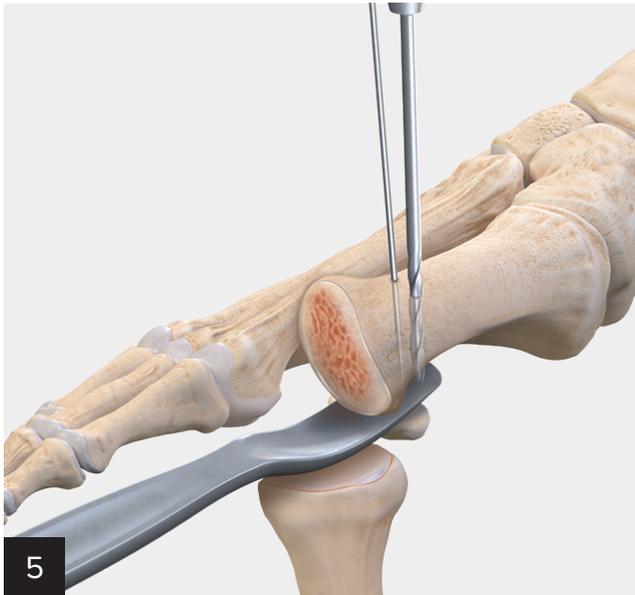
Choose a metatarsal reamer that covers the entire metatarsal head. Center the reamer over the metatarsal head by hand and then advance a guidewire 2 cm into the metatarsal shaft. Advance the reamer until all of the metatarsal cartilage and sclerotic bone is removed (about 2-3 mm in depth).



Insert a McGlamry elevator under the metatarsal head to create space and provide an area for passing suture and the ArthroFLEX® graft.



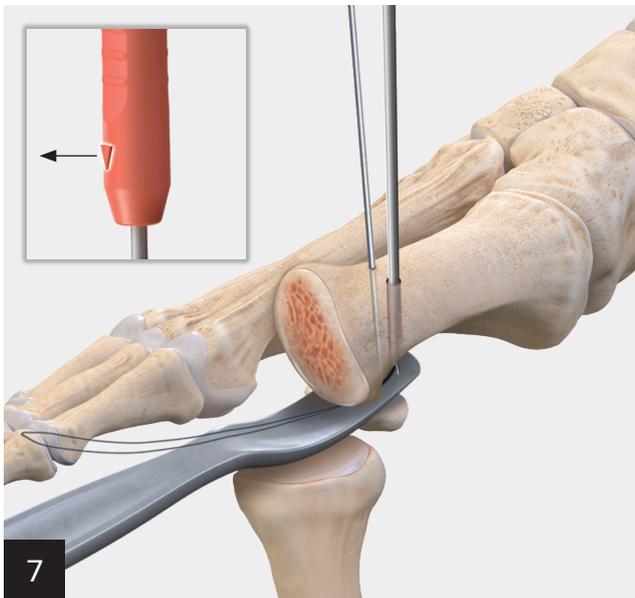
Using the guidewires from the Forefoot *Internal/Brace*™ implant system, aim 1.0 to 1.5 cm proximal to the metatarsal head and advance in a dorsal to plantar direction proximal to the sesamoids. Ensure the guidewire contacts the McGlamry elevator.



Advance the 2.5 mm drill bit over the guidewire until it contacts the McGlamry elevator. Remove the drill bit, but leave the guidewire in place to allow for easy finding of the bone tunnel.



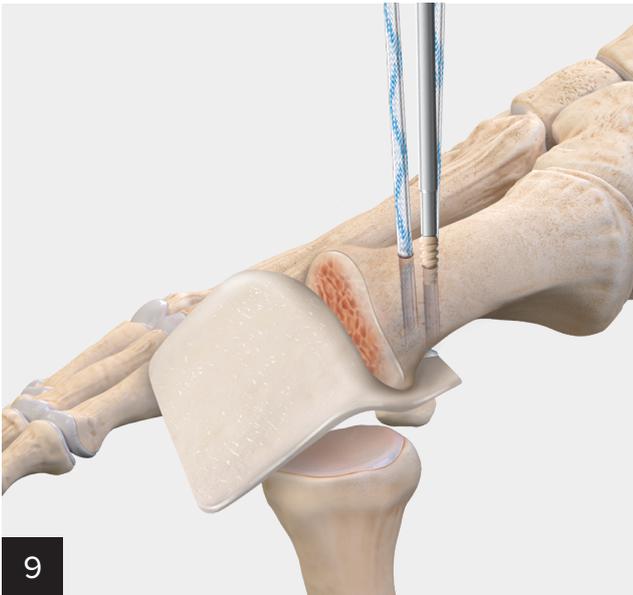
Using SutureTape and a free curved needle, place a luggage tag stitch on the plantar end of the ArthroFLEX® graft. Ensure the shiny side of the graft will be positioned against the bone to provide cushioning and a protective covering.



Advance the straight SutureLasso™ suture passer through one drilled hole until it contacts the McGlamry elevator. Insert the wire loop through the SutureLasso suture passer and use the McGlamry elevator to advance the wire forward.

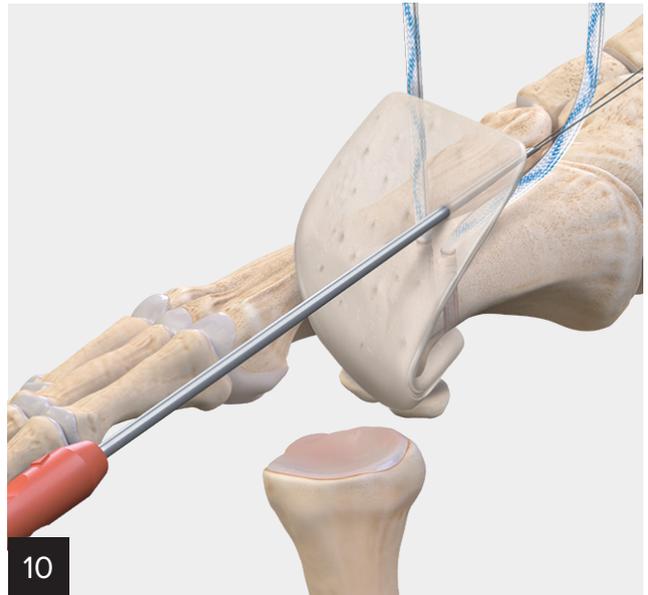


Pass the pairs of SutureTape tails through their respective tunnels using the wire loop.



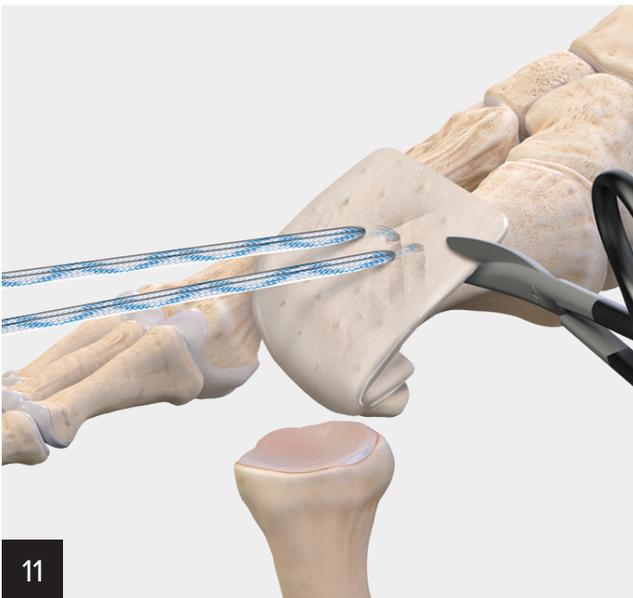
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Shuttle the ArthroFLEX® dermal allograft under the metatarsal head by tensioning the SutureTape in a superior direction. Secure the SutureTape in place by advancing the 3 × 8 Tenodesis screws from the Forefoot *Internal/Brace*™ Implant System.



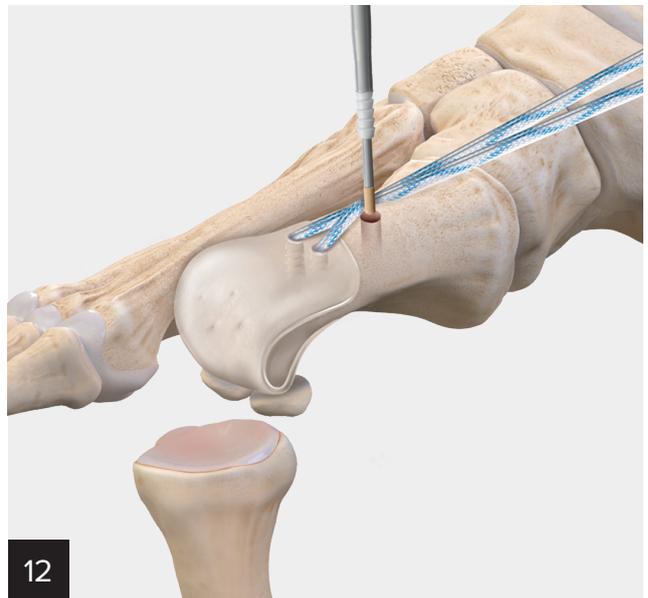
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Drape the distal portion of the graft over the metatarsal head and tension proximally. SutureTape tails should be passed through the ArthroFLEX graft just distal to their exit from the bone to ensure maintenance of appropriate graft tension.



11

Trim the excess graft approximately 1 cm proximal to the suture.



12

Using a 2.9 mm BioComposite PushLock® Disposables Kit, drill a hole in the midline of the metatarsal 1.0 to 1.5 cm proximal to the suture tunnels. Pass all suture tails through the eyelet of the 2.9 mm BioComposite PushLock anchor and approximate tension before advancing the anchor into the bone tunnel.



13

Remove the anchor driver and cut the excess suture tails. Trim or suture any excess graft on the medial and lateral sides. Ensure adequate dorsiflexion of the toe and consider phalangeal osteotomy, if indicated.

Ordering Information

Forefoot *InternalBrace*™ Implant System
AR-1530P-CP includes:

Product Description	Item Number
Kit Includes:	AR-1530P-CP
PEEK Tenodesis Screw, 3 mm × 8 mm, qty. 2	
LabralTape™ Suture, 1.5 mm, white/black, 36 in	
#2 FiberTape® Suture, blue	
#0 TigerWire® Suture w/ Needle, white/green	
4-0 FiberLoop® Suture w/ Needle, blue, 12 in	
Micro SutureLasso™ Suture Passer w/ Wire, straight	
Oblong Button, 2.6 mm	
Guidewires, 43 in × 4.75 in	
Drills, cannulated, 2.5 mm and 3.0 mm	
Suture Retrieval Funnels, qty. 2	
Suture Passing Wire, 8 in	

Product Description	Item Number
SutureTape, 1.3 mm with Tapered Needle (white/blue)	AR-7500
2.9 mm BioComposite Pushlock® Disposables Kit	AR-8923DSC
2.9 mm BioComposite Pushlock Anchor	AR-8923BC
Forefoot Fusion Module Instrument Set	AR-8944ST
ArthroFLEX® Dermal Allograft, 4 cm × 7 cm × 2.0 mm	AFLEX201
ArthroFLEX Dermal Allograft, 4 cm × 5 cm × 3.0 mm	AFLEX300
ArthroFLEX Dermal Allograft, 4 cm × 7 cm × 3.0 mm	AFLEX301

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For information on availability, please contact Arthrex Customer Service or your local Arthrex representative.



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