Technique Guide

BIOTEK®
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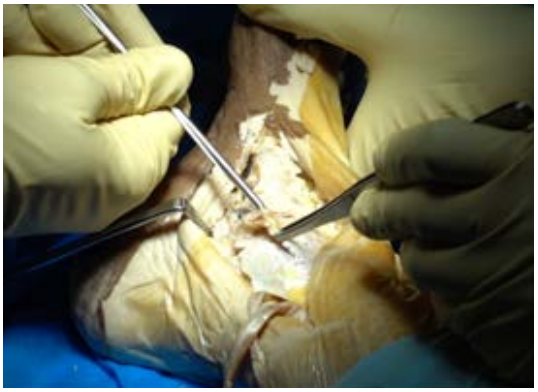
Deltoid Ligament Repair

Tibiocalcaneal and Tibiotalar Ligament Augmentation

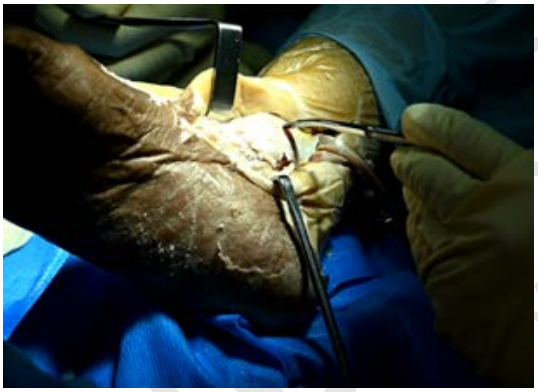


Step 1

An exposure of medial malleolus is carried out via straight medial incision. A full thickness incision into the Deltoid is taken and two flaps are created. One flap is reflected up onto the medial malleolus and 2nd flap is reflected on the anterior colliculus where MINI-VIM® Ligament Anchor, Titanium with needle, Dia. 2.8mm anchor is inserted using a Drill Bit dia. 2.2mm.

Step 2

MINI-VIM® Ligament Anchor, Titanium with needle, Dia. 2.8mm is anchor is inserted on the posterior colliculus as well, using the same procedure.

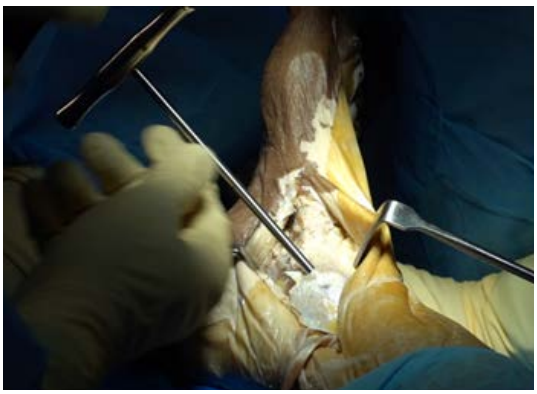


Step 3

The anchor threads are then passed from the medial malleolus onto the opposite side of the deltoid flap and passing it back to be sutured with the opposite ends. While suturing, the limb should be in inversion position to save the time. Deltoid is sutured where the lower flap goes with the suture anchors and gets attached to the medial malleolus and the upper flap overlaps the lower flap.

Step 4

Place a guiding wire onto the medial malleolus through a slotted sleeve. Over the guiding wire, insert a 3.5mm cannulated drill bit to drill a hole through the slotted sleeve. The tap for the VIMFIX-LR® anchor is used to prepare a hole for the 4.75mm VIMFIX®-LRP knotless ligament anchor.



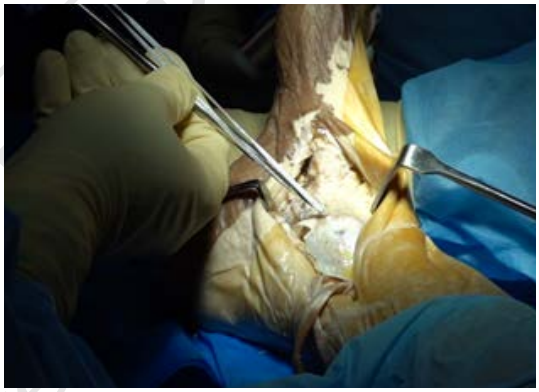
Step 5

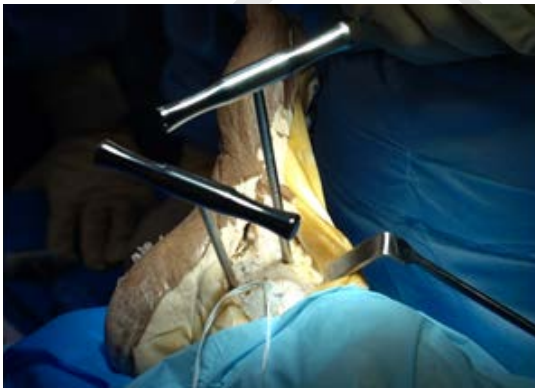
Load BioFiber® Tape, size two, into the eyelet of 4.75mm VIMFIX®-LRP knotless ligament anchor.

Step 6

Place the tip of the 4.75mm VIMFIX®-LRP knotless ligament anchor loaded with BioFiber® Tape into the hole. Insert the anchor into the hole using a hammer until the driver's laser mark is flushed inside the bone. Now, turn the anchor's dial-in clockwise direction so that the anchor body goes inside the bone. Turn the dial until the anchor body is fully seated inside the bone. Then unwind the retention suture from the back of the anchor inserter and remove it. Remove inserter by just pulling it.

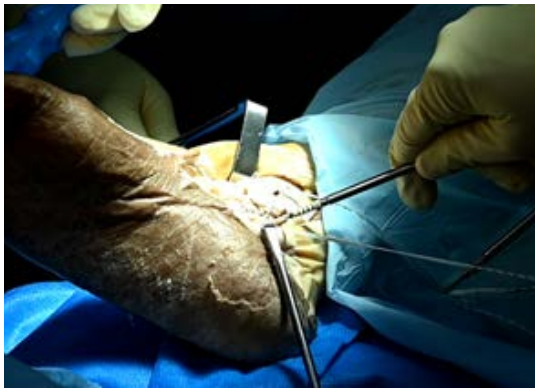
Tip: The retention suture can be used to fixate any additional tissue around the anchor by adding a mayo needle and working the suture through any additional tissue and making knots to secure the tissue to the anchor.





Step 7

Out of the two arms of the BioFiber® Tape from medial malleolus, superior arm will be inserted into Talus to reconstruct the deep deltoid ligament and the inferior arm will be inserted in the sustentaculum tali will reconstruct the superficial deltoid ligament. Place a guiding wire onto the medial malleolus through a slotted sleeve. Over the guiding wire, insert a 3.5mm cannulated drill bit to drill a hole through the slotted sleeve. The tap for the VIMFIX-LR® anchor is used to prepare a hole for the 4.75mm VIMFIX®-LRP knotless ligament anchor on the Talus as well as on the Sustentaculum Tali. An image check must be carried out at this juncture before drilling with the 3.5mm cannulated drill bit.



Step 8

Load one BioFiber® Tape tail from the 4.75mm VIM-FIX®-LRP knotless ligament anchor into the eyelets of 4.75mm VIMFIX®-LRP knotless ligament anchor and tap the anchor after placing it on sustentaculum tali.

Step 9

While adjusting the BioFiber® Tape tension, insert the second 4.75mm VIMFIX®-LRP knotless ligament anchor into the drill hole at Talus. Tap in the anchor using a hammer until the laser mark on the inserter flush with the bone. Remove inserter by just pulling it.The entry in the Talus is just anterior to the medial malleolus. The foot is held in slight inversion position while inserting the anchor.

Step 10

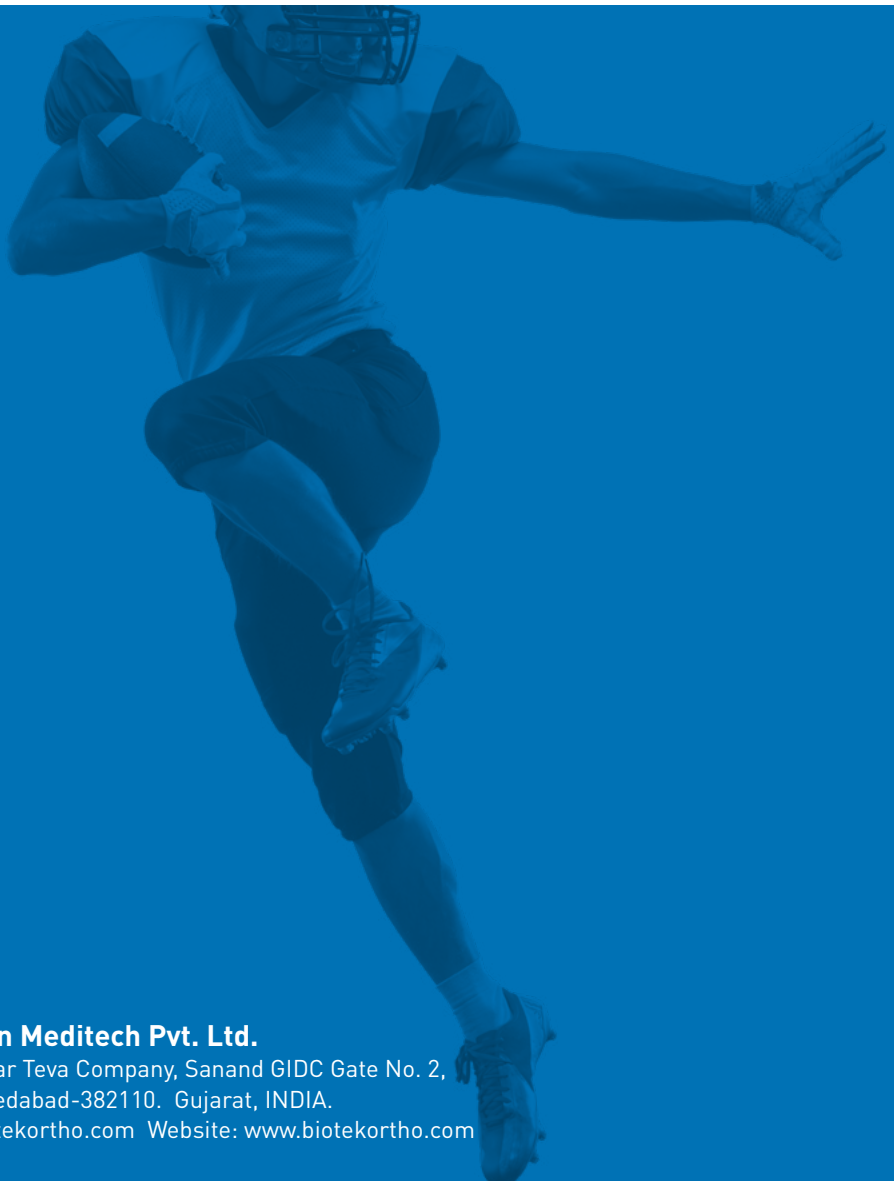
Cut the remaining tails of the BioFiber® Tape and assess the range-of-motion and stability.

Ordering Information

Catalog No.	Product Description
BAS-9040.28F	MINI-VIM® Ligament Anchor, Titanium loaded with 1 pc Fiber with needle, Dia. 2.8mm
BAS-9142.475F	VIMFIX®-LRP Ligament Anchor, PEEK knotless, Dia. 4.75mm
BF-2ST	BioFiber® Fiber Tape Size 2White-Blue, Len. 39"
	OR
10090	BioFiber® Fiber Tape, Size 2 with MO-6 needle, White-Blue, Len. 39"
10091	BioFiber® Fiber Tape Size 2 with MO-6 needle, White-Black, Len. 39"

Related Instrumentation

Catalog No.	Product Description
BAS-9026	Drill bit, Dia. 2.2mm for MINI-VIM® Ligament Anchor BAS-9001.28F & BAS-9040.28F
10005	Drill bit, Dia. 3.5mm,Len. 100mm for VIMFIX®-LRP Ligament Anchor, knotless BAS-9142.475F
10006	Slotted Sleeve for Foot & Ankle Drill bits-10004 ,10005,10066,10067
10038	Tap for VIMFIX-PK® Dia. 4.5mm & 5.5mm and VIMFIX-LR® Dia. 4.75mm & 5.5mm



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