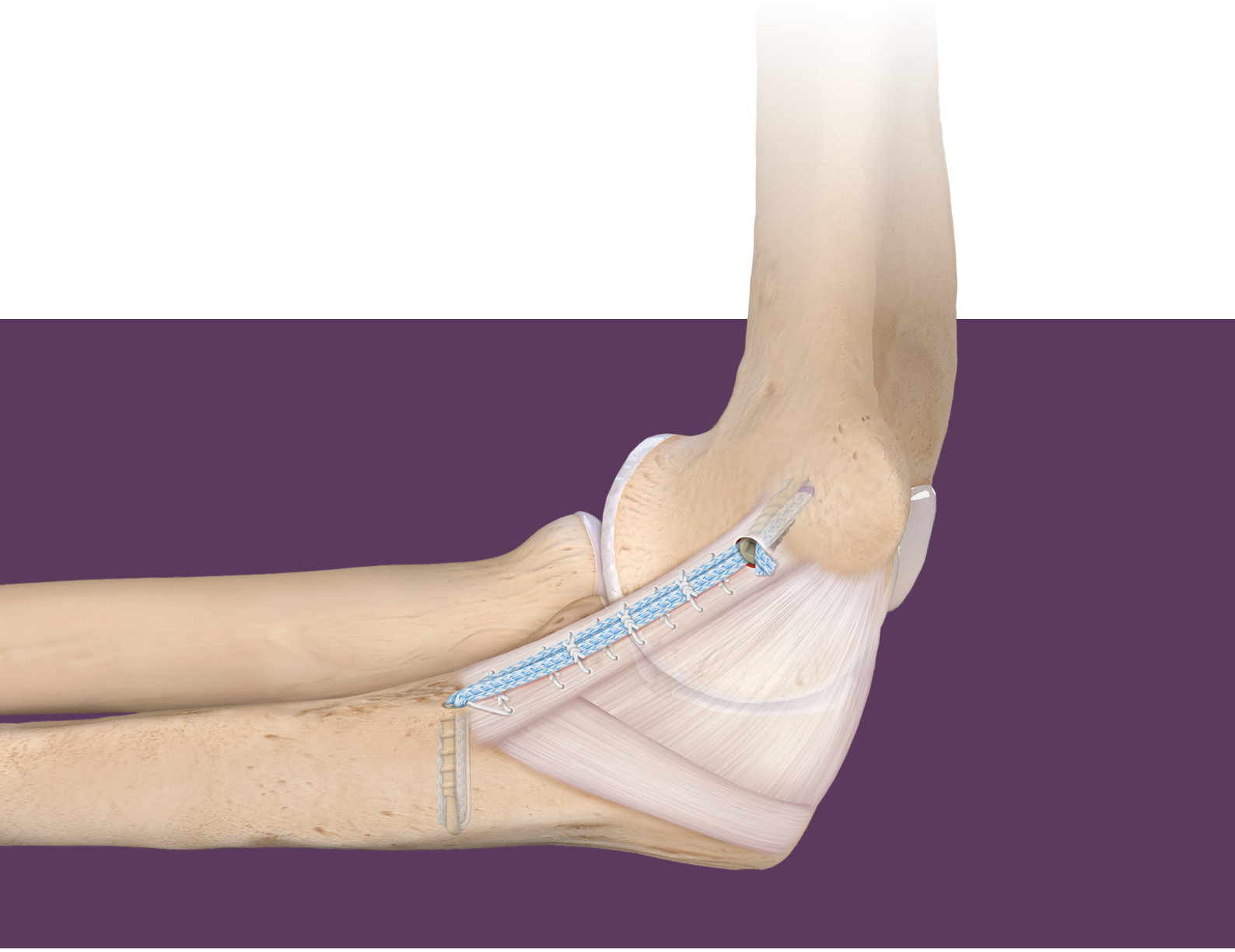
Elbow UCL Repair With the UCL *Internal*Brace™ System

Surgical Technique



Arthrex®

UCL *Internal*Brace™ System

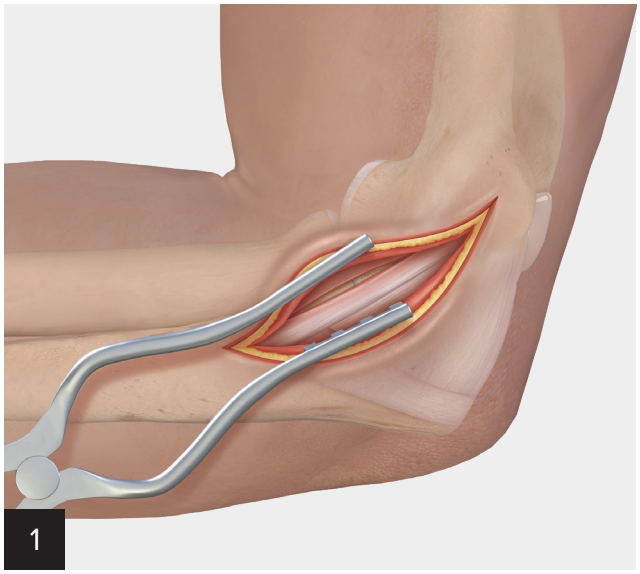
Medial ulnar collateral ligament (UCL) repair of the elbow is for patients who sustain a complete or partial avulsion from the proximal or distal UCL attachment without evidence of poor tissue quality, which could indicate a need for UCL reconstruction.

Dugas et al introduced a novel UCL repair technique with the *Internal*Brace™ system to help minimize soft-tissue dissection and preserve more bone, which may allow for an earlier return to activity.[1,2]

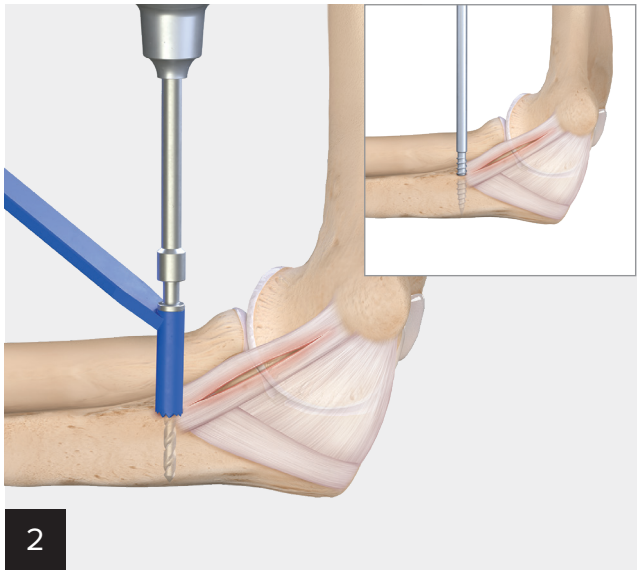
The UCL *Internal*Brace system includes two 3.5 mm PEEK SwiveLock® anchors, collagen-coated FiberTape® suture, #0 FiberWire® suture, a free tapered needle, a 2.7 mm drill, a drill guide, and 3.8 mm and 4.2 mm taps.

The *Internal*Brace 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 *Internal*Brace technique is for use during soft tissue-to-bone fixation procedures and is not cleared for bone-to-bone fixation.

This technique illustrates a distal avulsion. For a proximal avulsion, place the first anchor at the UCL attachment on the medial epicondyle.

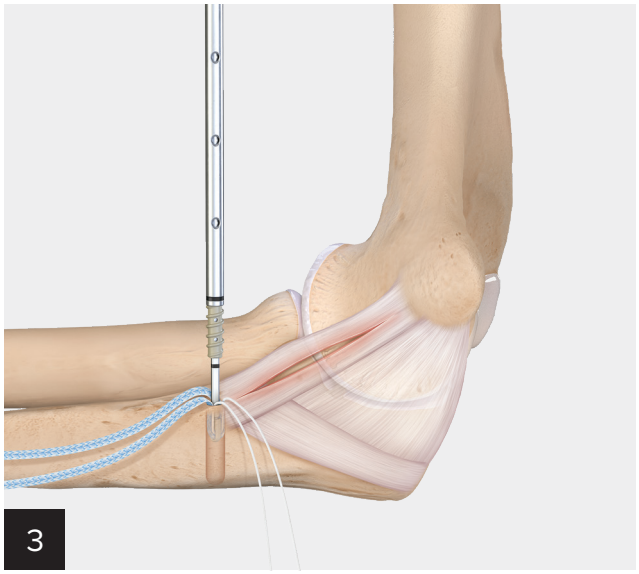


Make a curved linear incision centered just posterior to the medial epicondyle and down to the muscle fascia. Expose and protect the medial antebrachial cutaneous and ulnar nerves during dissection and retraction. Using a muscle-elevating or -splitting approach, expose the ulnar collateral ligament.

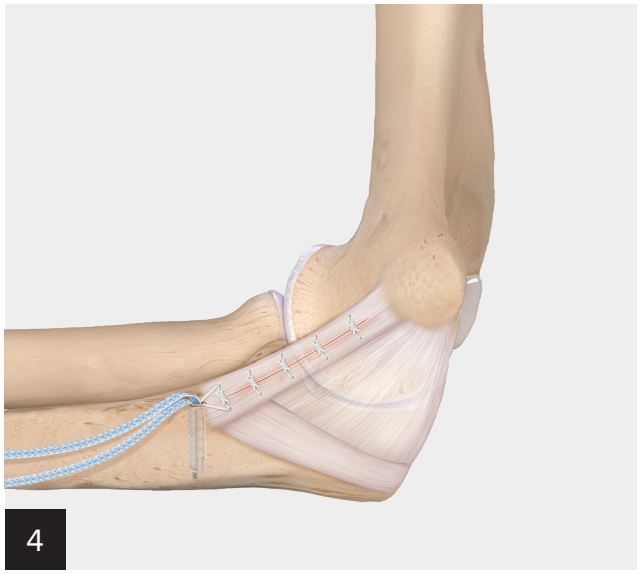


Place the drill guide on the sublime tubercle. Drill a socket using the 2.7 mm drill.

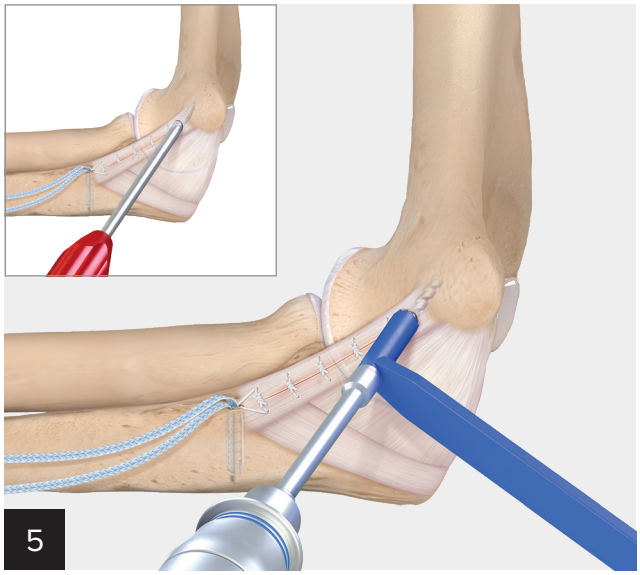
Tap the socket using the gray-handled tap.



Load a 3.5 mm PEEK SwiveLock® anchor with collagen-coated FiberTape® suture and a #0 FiberWire® suture repair stitch. Insert the anchor into the socket until the anchor body makes contact with bone. Hold the thumb pad and rotate the driver handle clockwise until the anchor is flush with the bone.

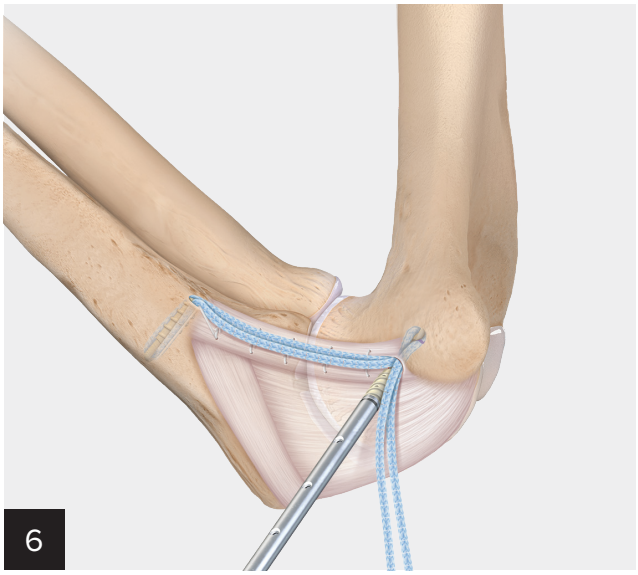


Repair the native ligament back to the sublime tubercle using the #0 suture. Cut the sutures and repair any incised portion of the ligament with side-to-side stitches using the #0 suture.

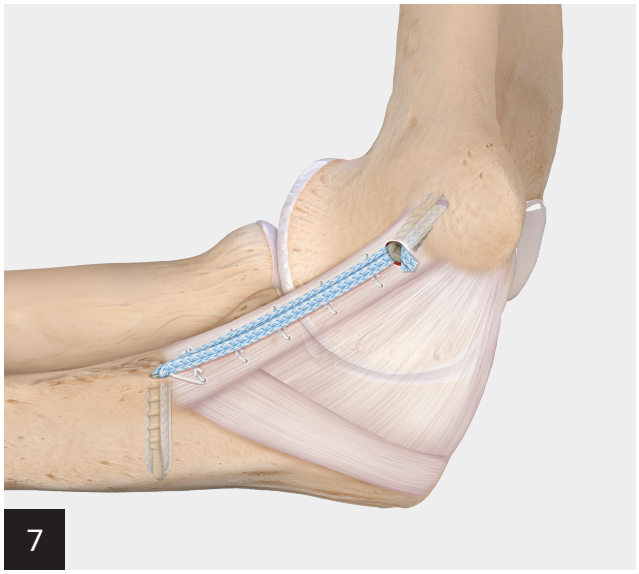


Place the drill guide on the proximal origin of the UCL at the medial epicondyle. Drill a socket using the 2.7 mm drill.

Tap the socket with the red-handled tap.



Load the FiberTape® tails from the distal anchor into a 3.5 mm PEEK SwiveLock® anchor. Place the arm in 35°–45° of flexion. Insert the anchor into the socket until the anchor body makes contact with bone. **Take the elbow through full range of motion to check for adequate tensioning.** Hold the thumb pad and rotate the driver handle clockwise until the anchor is flush with the bone.



Use the remaining #0 FiberWire® suture to sew the FiberTape suture to the underlying ligament to complete the repair.

Ordering Information

UCL *Internal*Brace™ System (AR-7715)

Product Description
Two PEEK SwiveLock® Suture Anchors, 3.5 mm × 15.8 mm
Collagen-Coated FiberTape® Suture, 2 mm, 30 in (76.2 cm), 8 in
#0 FiberWire® Suture
Free Tapered Needle
2.7 mm Drill
Drill Guide
3.8 mm Tap
4.2 mm Tap

References

1. Dugas JR, Walters BL, Beason DP, Fleisg GS, Chronister JE. Biomechanical comparison of ulnar collateral ligament repair with internal bracing versus modified Jobe reconstruction. *Am J Sports Med.* 2016;44(3):735-741. doi:10.1177/0363546515620390
2. Dugas JR, Looze CA, Capogna B, et al. Ulnar collateral ligament repair with collagen-dipped FiberTape augmentation in overhead-throwing athletes [published correction appears in *Am J Sports Med.* 2019;47(7):NP40]. *Am J Sports Med.* 2019;47(5):1096-1102. doi:10.1177/0363546519833684

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