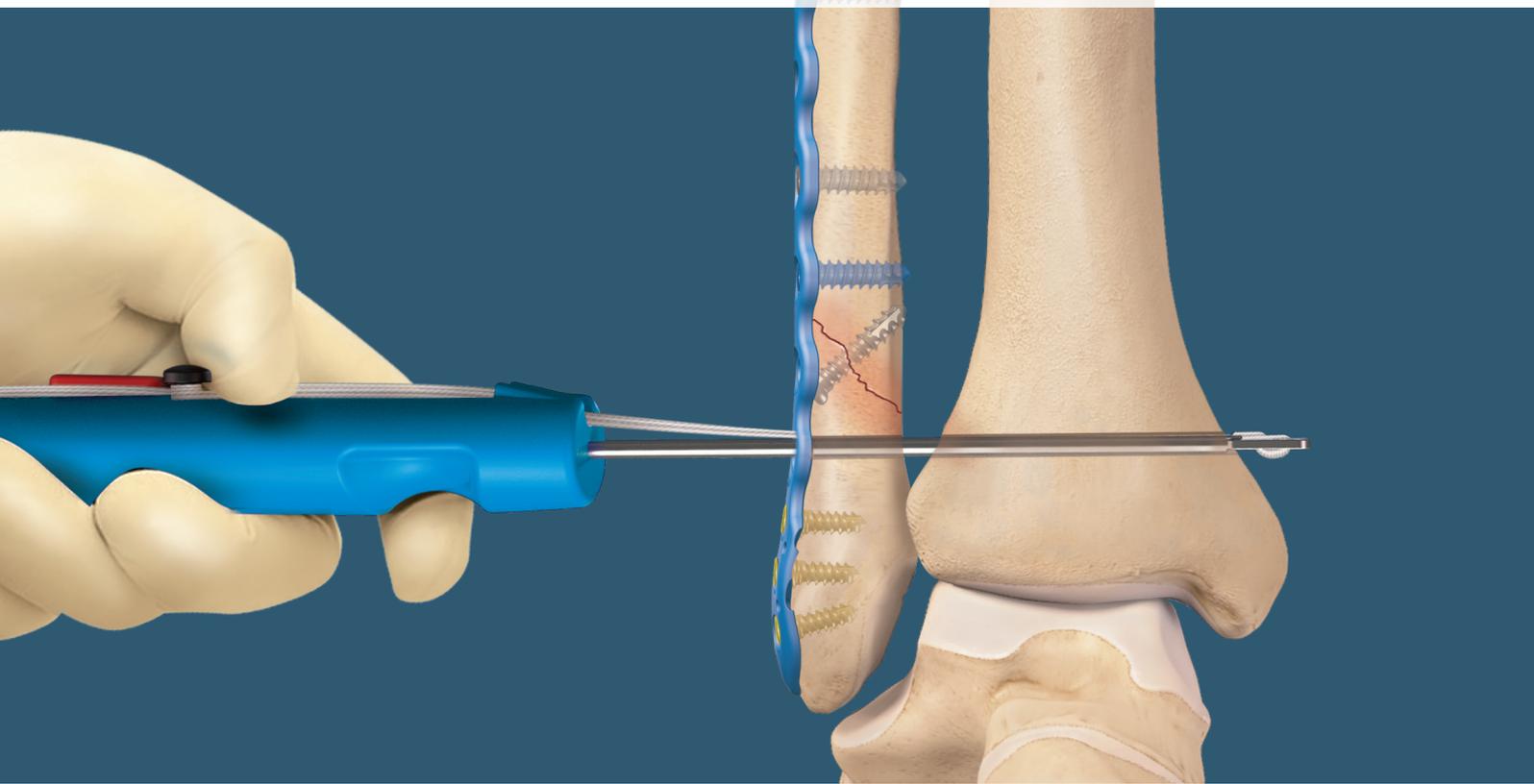
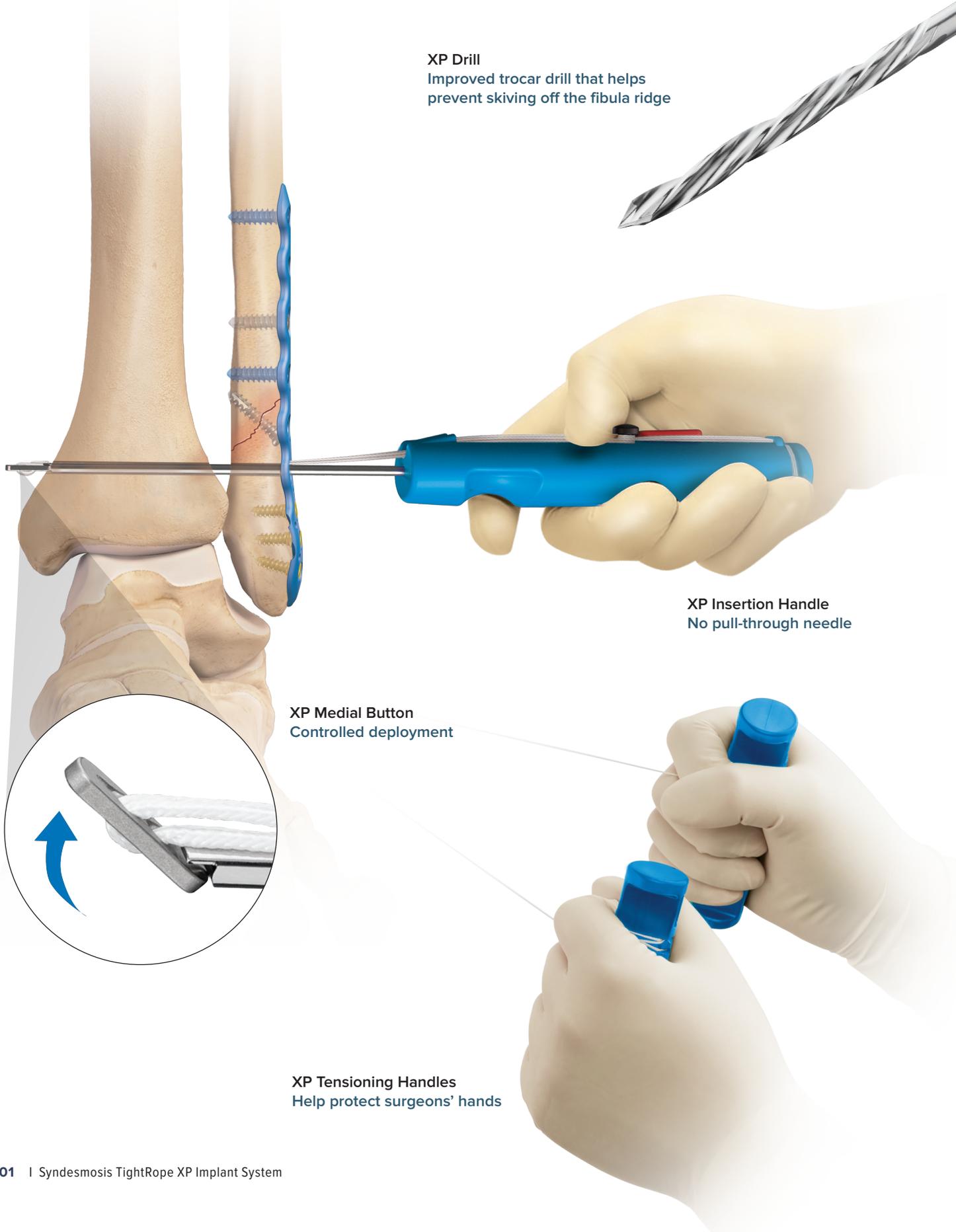


Syndesmosis TightRope[®] XP Implant System

Surgical Technique



Arthrex[®] 



XP Drill
Improved trocar drill that helps prevent skiving off the fibula ridge

XP Insertion Handle
No pull-through needle

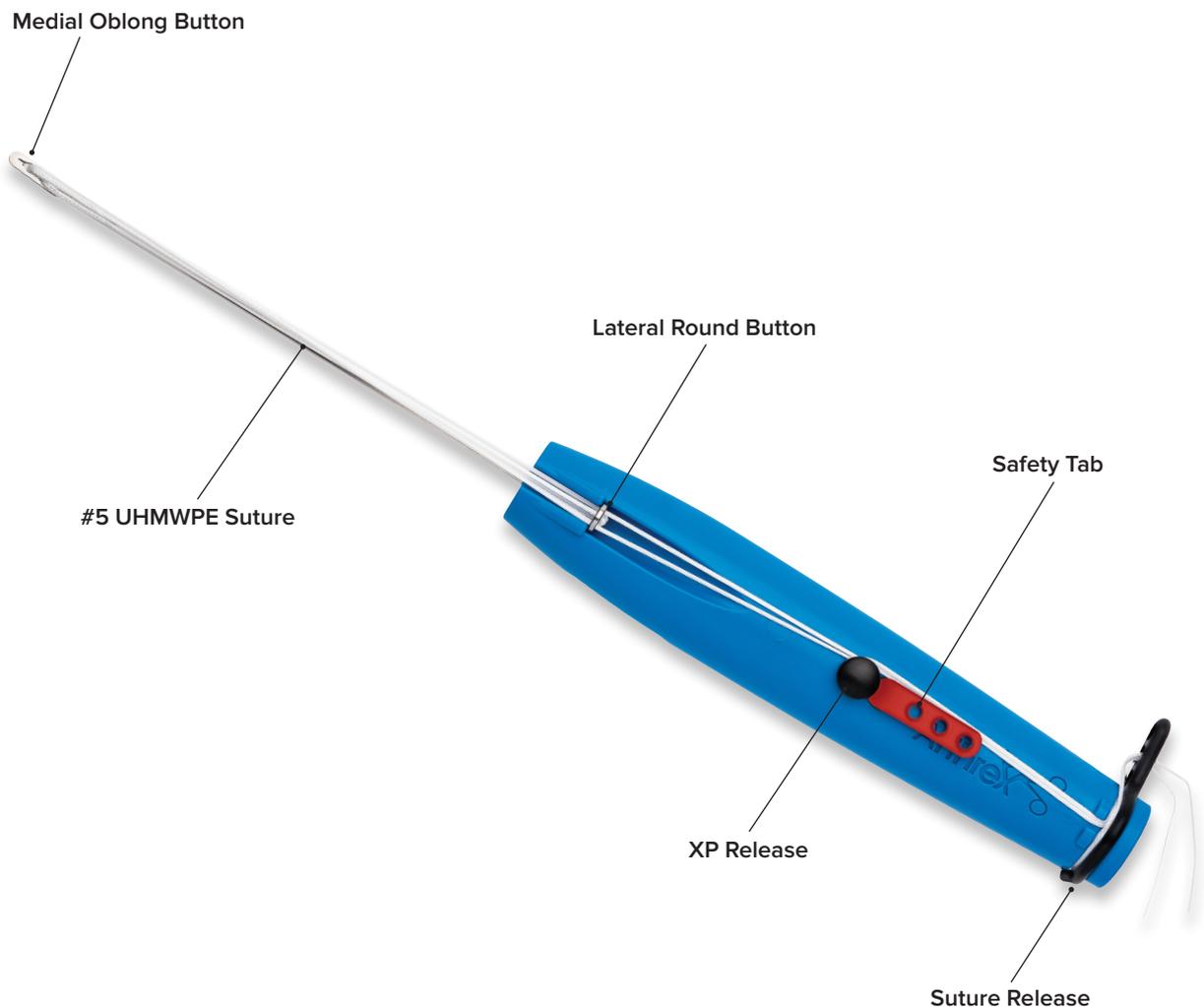
XP Medial Button
Controlled deployment

XP Tensioning Handles
Help protect surgeons' hands

Syndesmosis TightRope® XP Implant System

The Syndesmosis TightRope XP implant system features a unique delivery mechanism that allows the user to insert a Syndesmosis TightRope implant without pulling a needle through the medial skin. The TightRope XP implant system gives the user control to flip the medial oblong button below the skin for less soft-tissue interposition.

Ergonomic Syndesmosis TightRope XP implant tensioning handles have also been added to the system. These handles are designed to tension the Syndesmosis TightRope implant without hurting the surgeon's fingers. The Syndesmosis TightRope XP implant system also features a new trocar style drill bit that reduces skiving off the fibula when drilling in the transmalleolar plane 30° anterior to the coronal plane.



Syndesmosis TightRope® XP Implant System

Indications

The Syndesmosis TightRope device is intended to provide fixation during the healing process following a syndesmotic trauma, such as fixation of syndesmosis (syndesmosis disruptions) in connection with Weber B and C ankle fractures.

Ankle Fractures

Unstable and/or displaced fractures in the lower two-thirds of the fibula can be anatomically fixed to ensure correct fibular length and rotation. High fibula fractures (Maisonneuve injury) can be fixed with fibular shaft ORIF and concomitant syndesmosis stabilization, depending on the injury pattern. This can be done using 1 or 2 TightRope implants according to the severity of the syndesmosis disruption and surgeon preference.

Syndesmosis Reduction

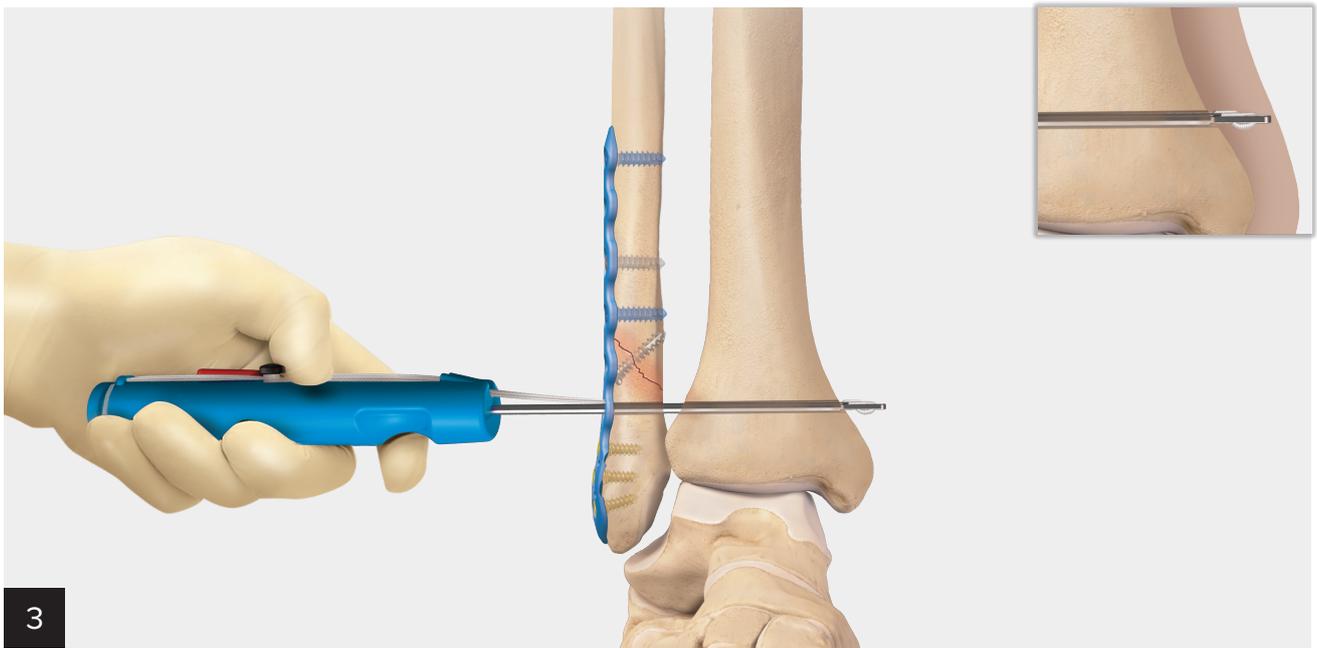
The syndesmosis should be formally reduced prior to fixation and confirmed using fluoroscopy, direct visualization during open reduction, or both based on surgeon preference and severity of injury.



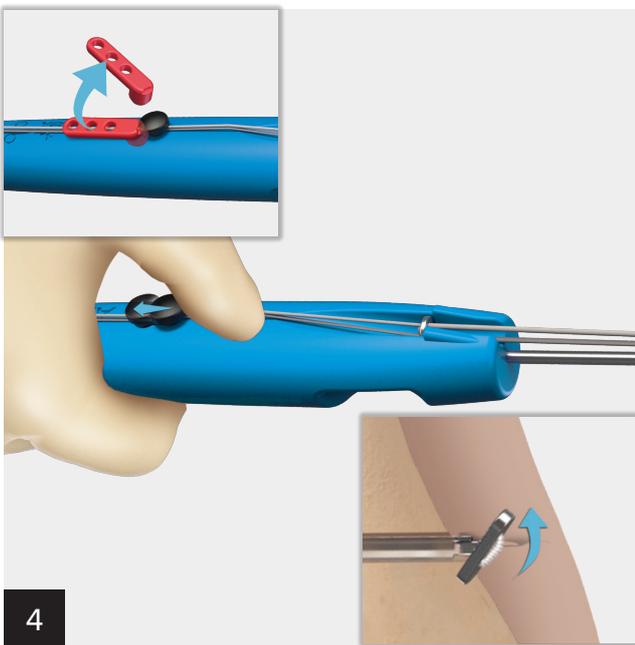
Stabilize all fractures prior to Syndesmosis TightRope XP implant system insertion. Drill all 4 cortices approximately 1.5 cm above the ankle joint, in the transmalleolar plane (~30° anterior to the coronal plane), using the 3.7 mm drill bit.



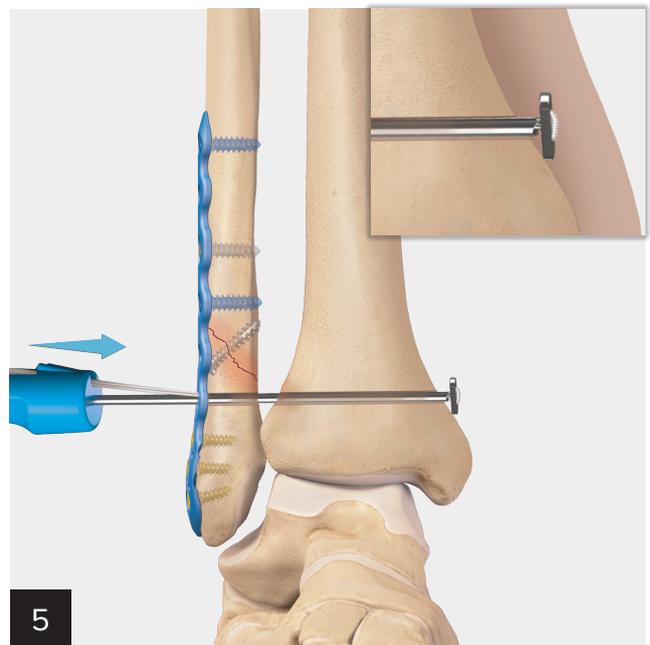
Optional: A guidewire and cannulated 3.7 mm drill bit can also be used to confirm accurate positioning.



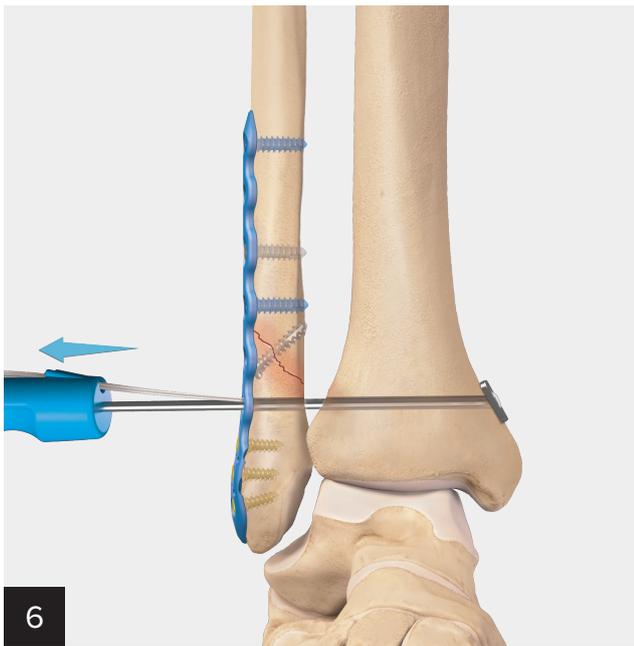
Check under fluoroscopy to ensure the medial button exits the medial tibia cortex. Advance the Syndesmosis TightRope XP implant system through the fibula and tibia bone tunnel. Position the black button on the blue handle inserter cephalad or caudad. This will ensure that the oblong button will be positioned in line with the axis of the tibia after deployment.



Remove the red safety tab. Deploy the medial button on the Syndesmosis TightRope XP handle by engaging the black button away from the TightRope construct.



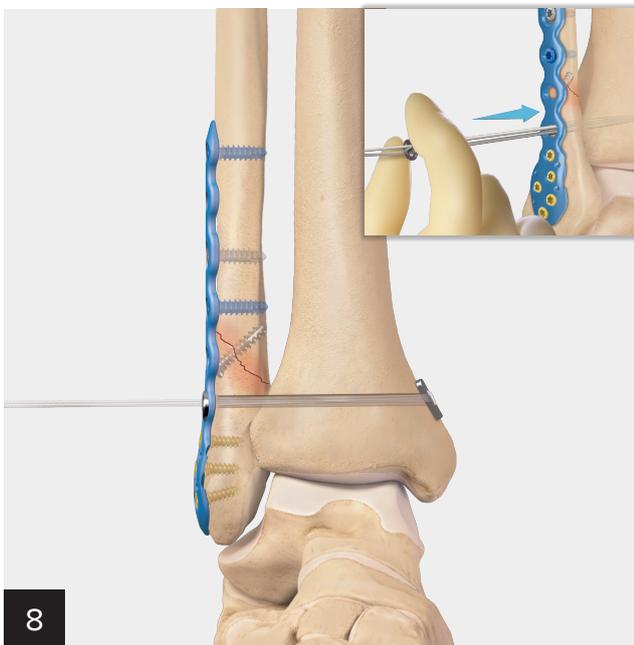
Important: After deploying the medial button, push the Syndesmosis TightRope XP implant medially. Visualize a T shape on fluoroscopy.



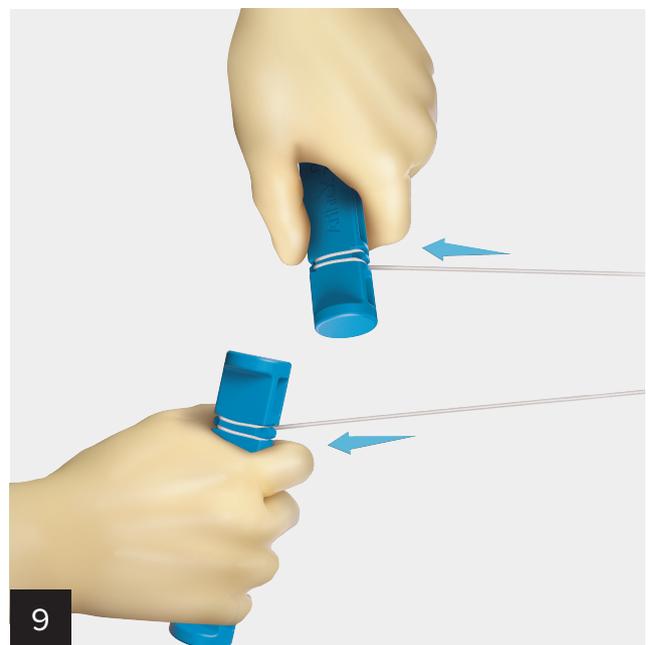
Pull back on the Syndesmosis TightRope XP handle and confirm on fluoroscopy that the oblong button is flipped and seated flush against the medial cortex of the tibia.



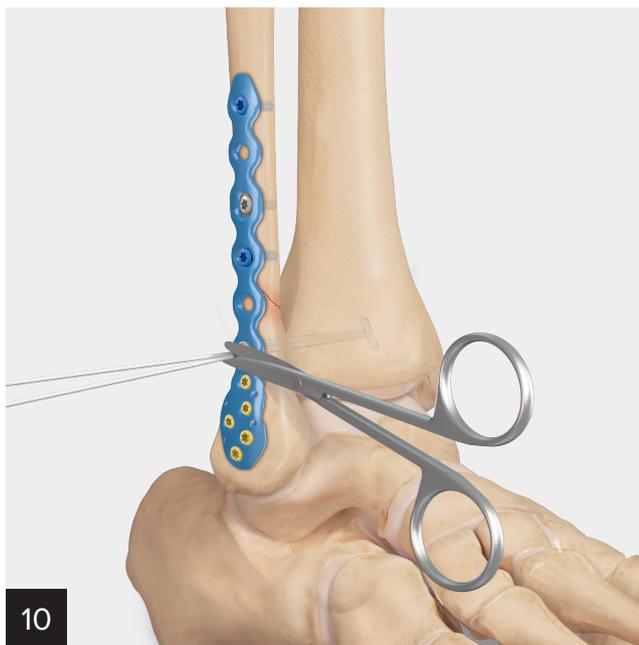
Unwrap the trailing sutures from the TightRope XP driver to release the round button. Remove the TightRope XP inserter from the bone tunnel.



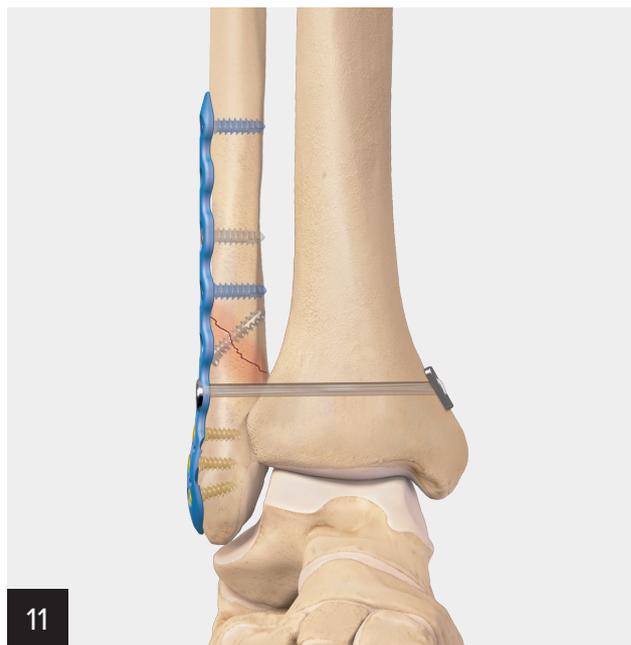
Grasp the center sutures of the round button before tensioning. Slide the round button down to the plate or bone.



Wrap each suture tail 2 to 3 times around the XP tensioning handles. Pull the sutures straight back, one at a time, in the direction of the TightRope suture, toward the surgeon. The lateral button will sit flush.



10 Cut the white suture tails flush with the round button. Ensure the sutures on the TightRope button are not damaged while cutting the suture tails.



11 Final fixation.

Postoperative Management

Following wound closure, immobilize the ankle in neutral dorsiflexion using a short-leg, postoperative splint. Depending on fracture fixation stability and severity of syndesmosis disruption, partial weightbearing may be permitted in a cast or walker boot after 2 to 6 weeks based on surgeon preference. Once full bone healing has been confirmed, patients may be released to weight-bearing activities around 6 weeks and may be transitioned to a functional brace as tolerated.

Ordering Information

Syndesmosis TightRope® XP Implant System, Stainless Steel (AR-8925SS)

Product Description

Drill Guide
XP Drill Bit, solid, 3.7 mm
Drill Bit, cannulated, 3.7 mm
XP Suture Tensioning Handles, qty. 2
Syndesmosis TightRope XP Inserter
Guidewire w/ Trocar Tip, 0.049 in
Guidewire Sleeve

Syndesmosis TightRope XP Implant System, Titanium (AR-8925T)

Product Description

Drill Guide
XP Drill Bit, solid, 3.7 mm
Drill Bit, cannulated, 3.7 mm
XP Suture Tensioning Handles, qty. 2
Syndesmosis TightRope XP Inserter
Guidewire w/ Trocar Tip, 0.049 in
Guidewire Sleeve



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.

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

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