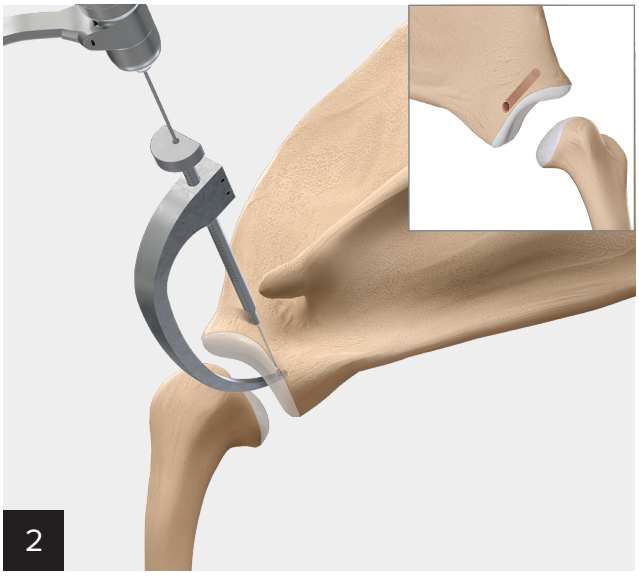
TightRope® Shoulder Stabilization

Surgical Technique

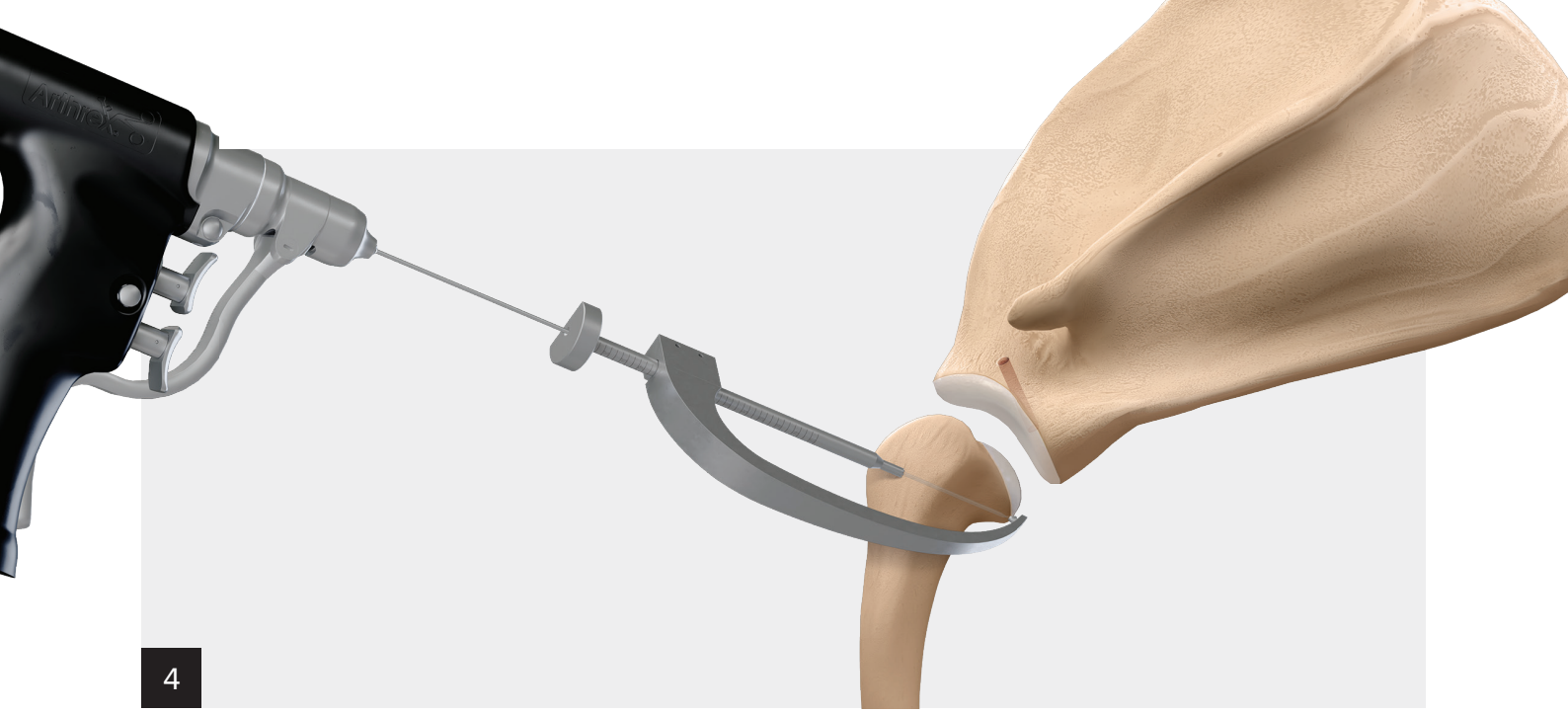
Arthrex® Vet Systems

After the shoulder joint has been exposed, the craniolateral aspect of the scapular neck is cleared of soft tissue and the suprascapular nerve identified and protected. An aiming guide is placed from the craniolateral aspect of the scapular neck with the foot seated medially approximately mid-scapula within the joint capsule approximately 4 mm to 5 mm from the joint surface.



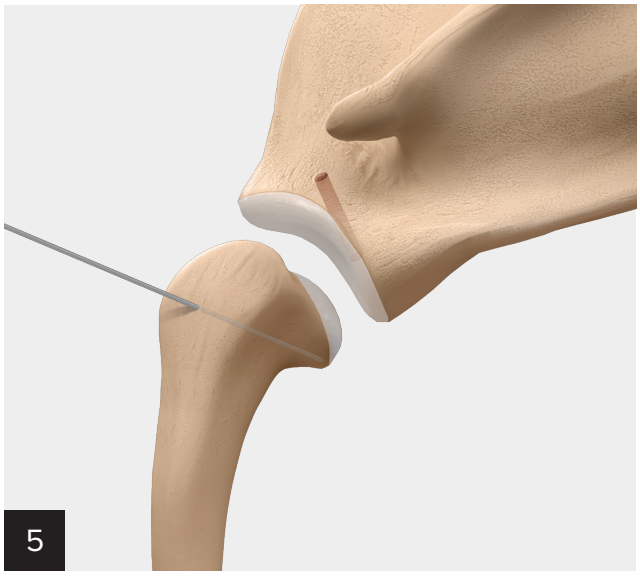
A single 0.049 K-wire was placed through the shoulder aiming guide.

A cannulated 3.5 drill bit is used to drill a trans scapular neck bone tunnel. Use drill guide and cannulated 3.5 mm drill bit to drill a trans scapular neck bone tunnel over the 0.049 K-wire.



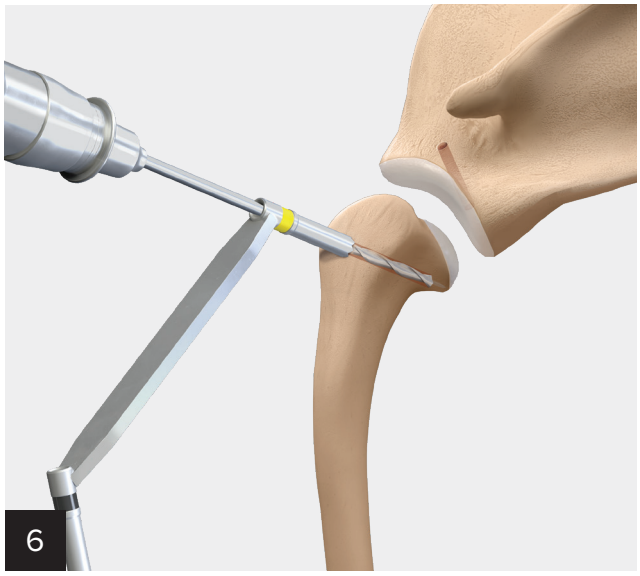
4

A region of craniolateral humerus is identified proximal to the infraspinatus tendon. The humeral guide is placed from this region with the foot being placed intra-capsular in the cranial ⅓ of the humeral head (region of the supraspinatus).



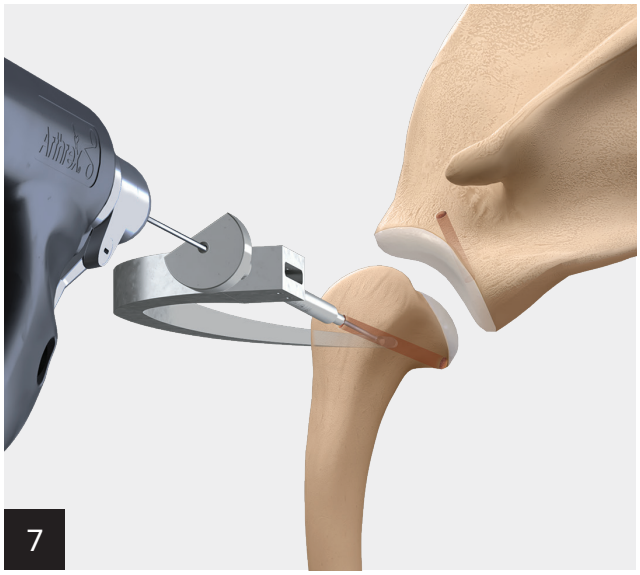
5

Confirm direction and orientation ofthe first K-wire location with K-wire tip existing within the medial aspect of the shoulder joint.

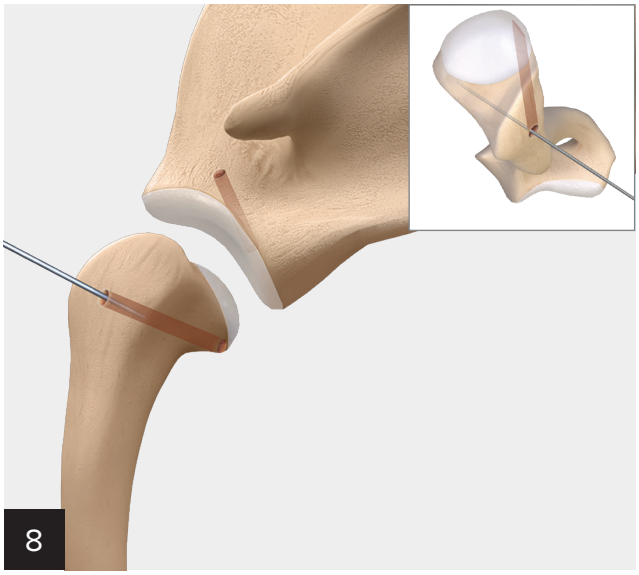


6

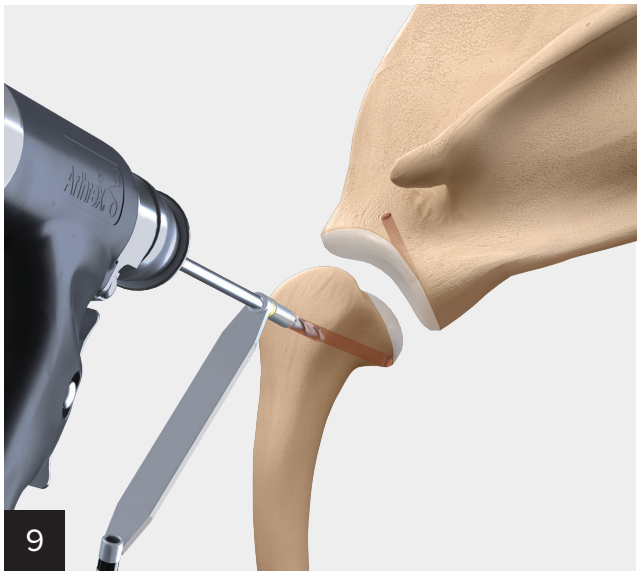
Use the drill guide and cannulated 3.5 mm drill bit over the 0.049 K-wire to create the first humeral head bone tunnel.



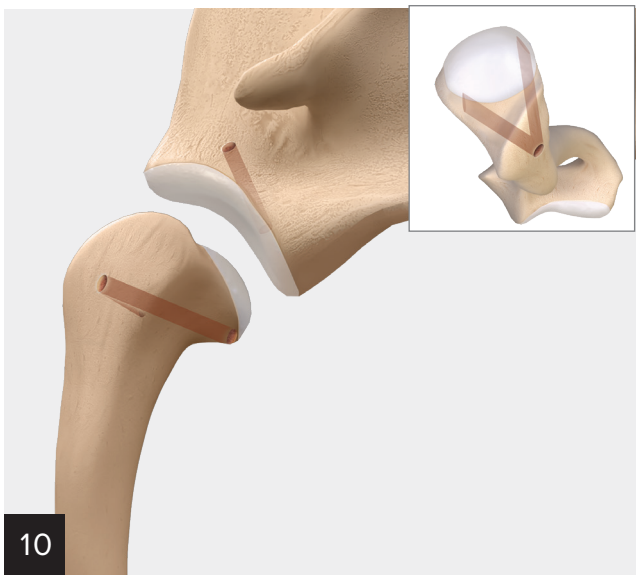
Place the base of the humeral guide within 0 mm to 4 mm of the second bone tunnel location on the craniolateral aspect of the humerus.



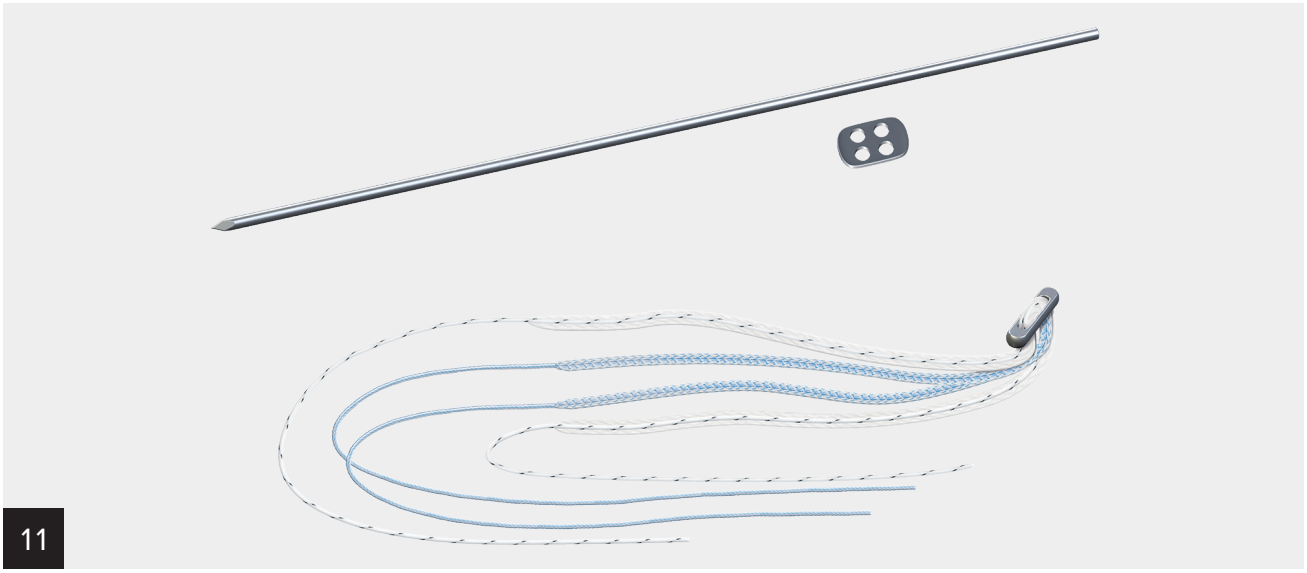
Confirm direction and orientation of the second K-wire location with the K-wire tip existing within the medial aspect of the shoulder joint.



Use the drill guide and cannulated 3.5 mm drill bit over the 0.049 K-wire to create the second bone tunnel location on the craniolateral aspect of the humerus.

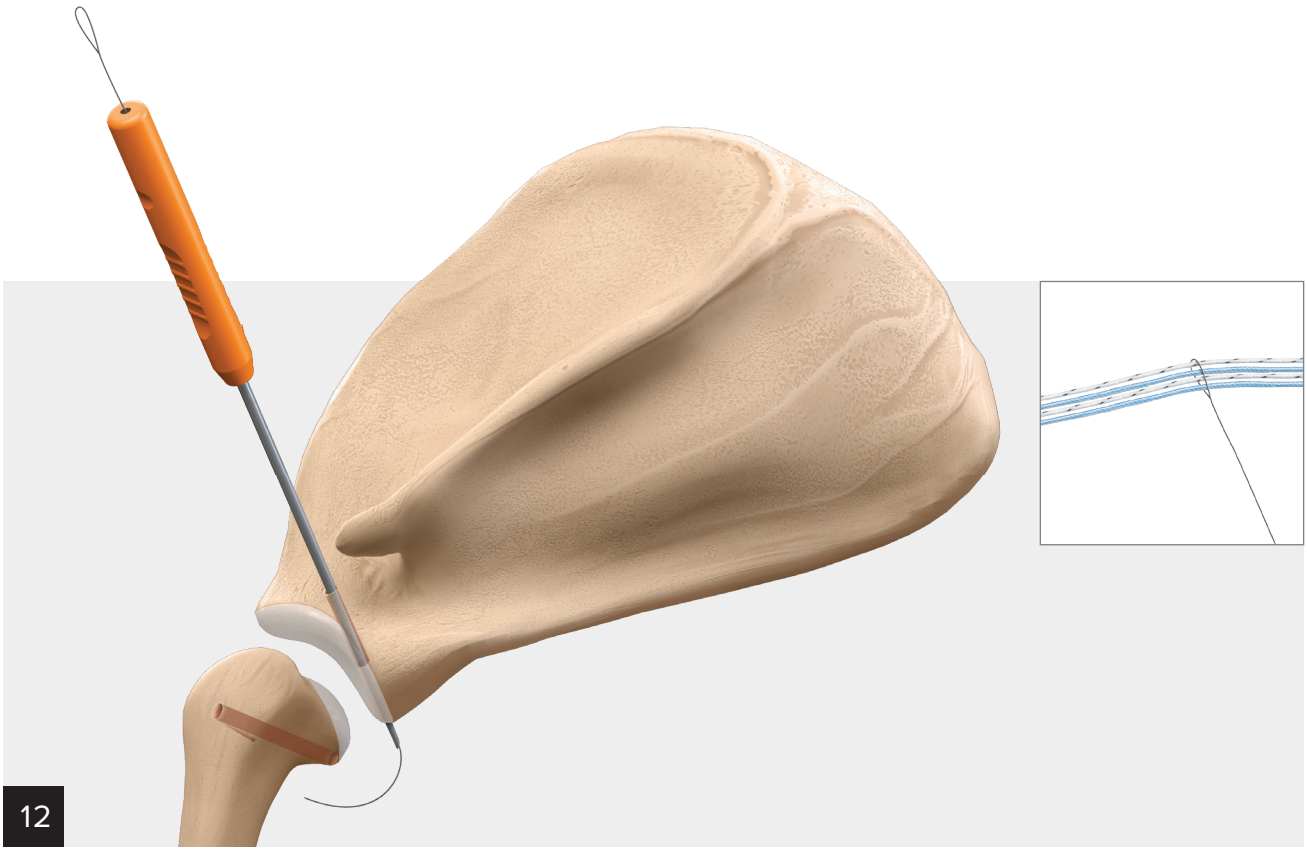


Create two divergent bone tunnels through single lateral bone tunnel exiting medially intracapsular



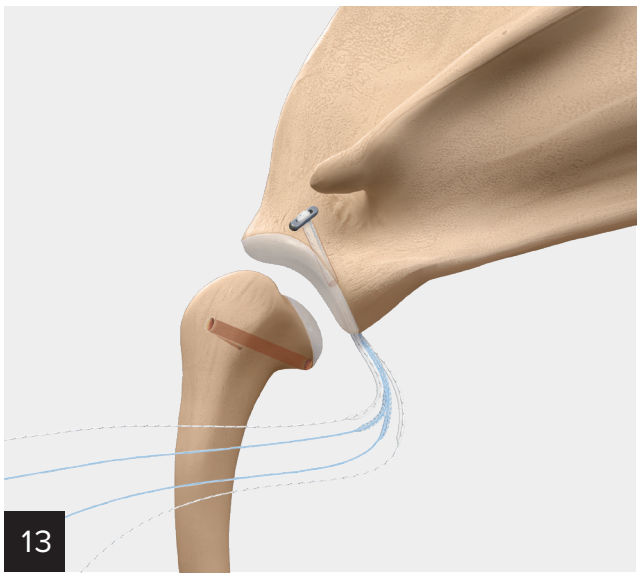
11

Remove the needle and four-hole button from the implant.



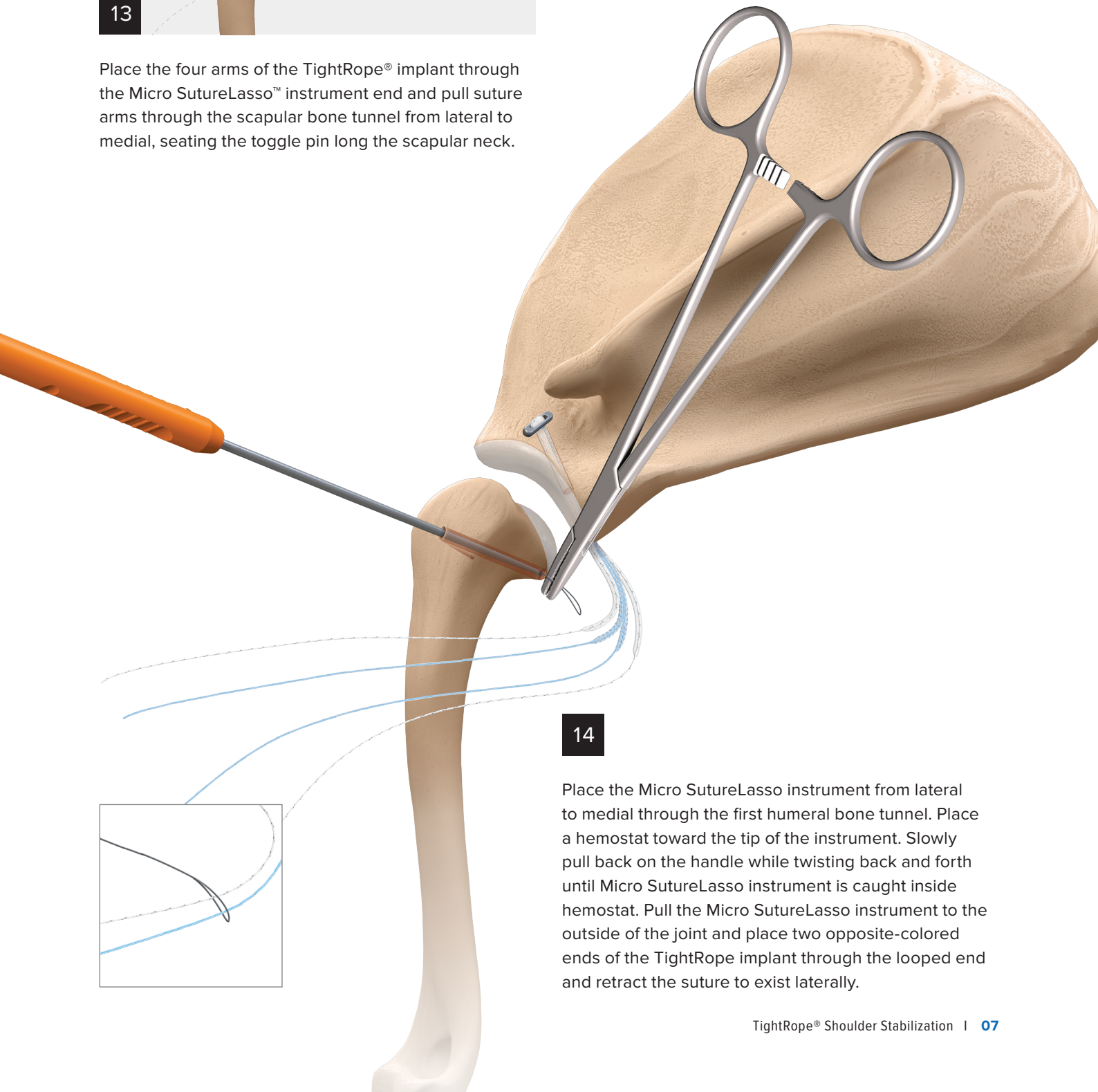
12

Place a Micro SutureLasso™ instrument through the scapular bone tunnel with the loop end exposed laterally.



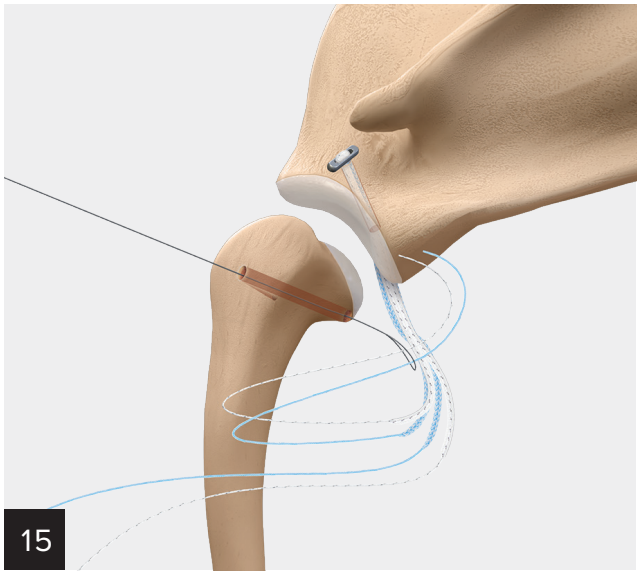
13

Place the four arms of the TightRope® implant through the Micro SutureLasso™ instrument end and pull suture arms through the scapular bone tunnel from lateral to medial, seating the toggle pin long the scapular neck.

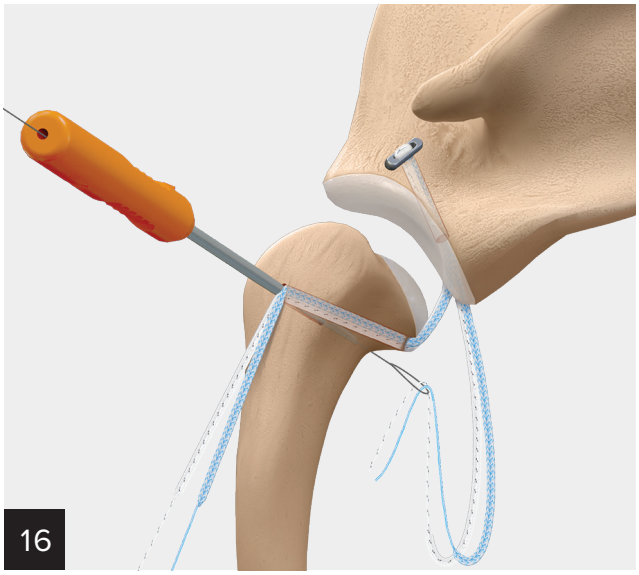


14

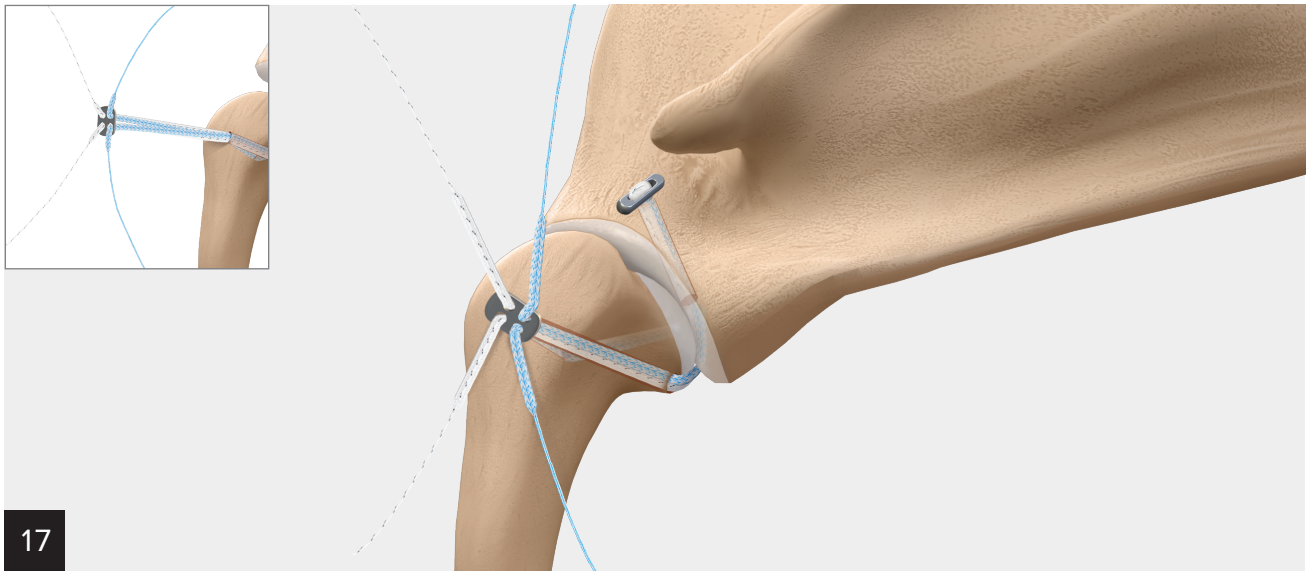
Place the Micro SutureLasso instrument from lateral to medial through the first humeral bone tunnel. Place a hemostat toward the tip of the instrument. Slowly pull back on the handle while twisting back and forth until Micro SutureLasso instrument is caught inside hemostat. Pull the Micro SutureLasso instrument to the outside of the joint and place two opposite-colored ends of the TightRope implant through the looped end and retract the suture to exist laterally.



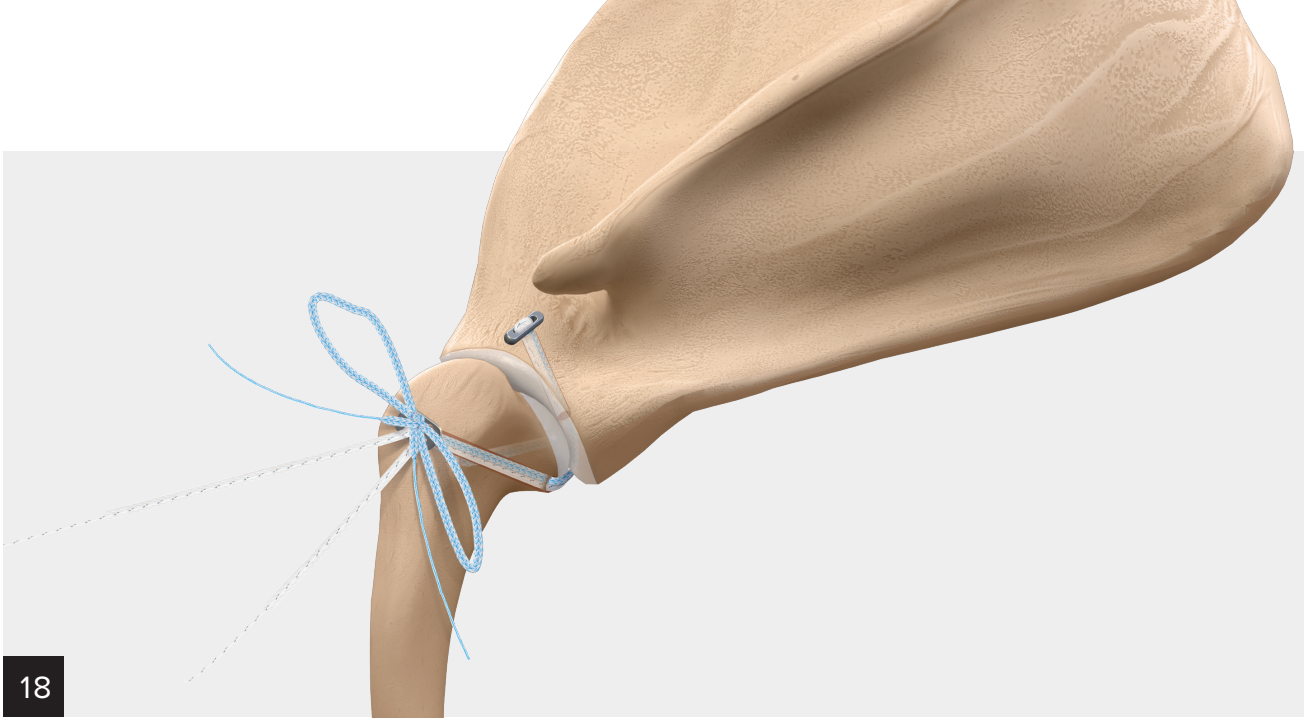
Once the Micro SutureLasso™ instrument is grasped, the end is retracted outside of the joint and both a single white and blue suture arm are place through the loop, which is then retracted through the bone tunnel.



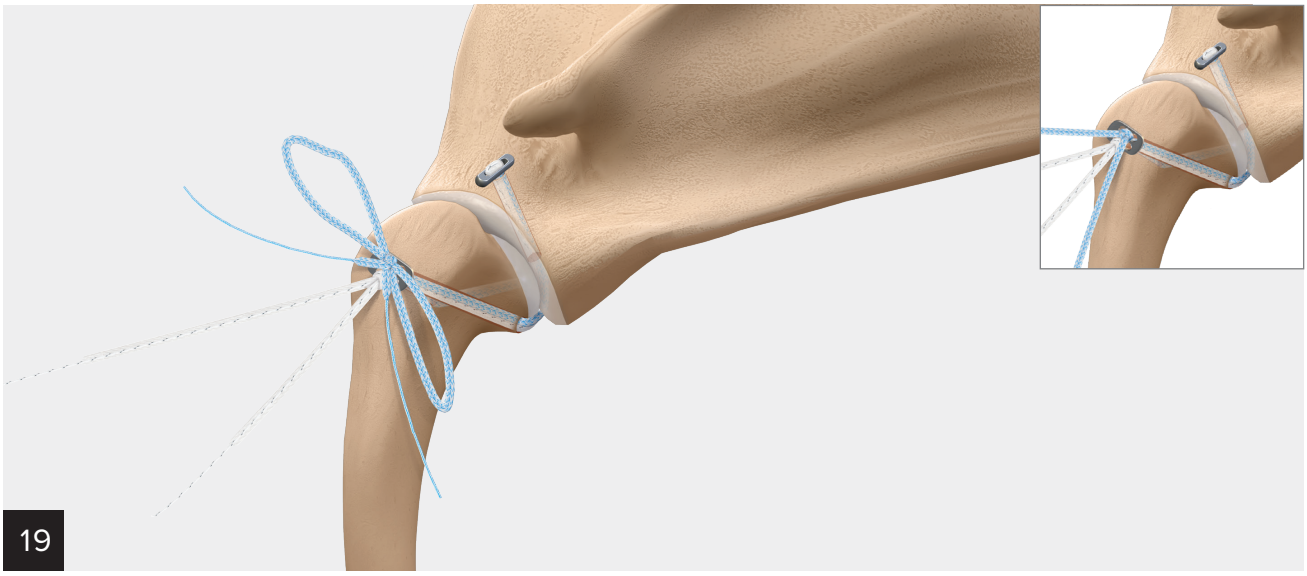
Place the Micro SutureLasso instrument from lateral to medial through the second humeral bone tunnel. Place two opposite-colored ends of the TightRope® implant through the looped end and retract the suture to exit laterally.



After the four arms of the TightRope implant have been retracted through the humeral bone tunnels, exiting through the lateral bone tunnel, the four arms of the TightRope implant are place through a four-hole suture button.



One arm of the TightRope® implant is hand tensioned to provide medial stability to the joint and tied with a bow-tie knot.



After proper medial stability and range of motion is achieved from tying the first suture, the second suture arm is hand tensioned and tied in a square knot with a minimum of four throws. The first suture is then released and tied in a similar fashion.

20

Both suture arms are cut short and final shoulder range of motion assessed.

Ordering Information

Instruments

Product Description	Item Number
Shoulder Aiming Guide	(Prototype Phase)
Drill Guide, 3.5 mm/4.0 mm	VAR-**8935G**
FiberWire® Scissor	VAR-**11796**
Suture Tensioner w/ Tensiometer (optional)	VAR-**1529**

Disposables

Product Description	Item Number
Cannulated Drill Bit, 2.7 mm	VAR-**8911DC**
Cannulated Drill Bit, 3.5 mm	VAR-**8920DC**
TightRope® Implant	VAR-**2800**
Mini TightRope Implant	VAR-**2801**
Guidewire, TightRope Implant	VAR-**8920P**
Micro SutureLasso™ Instrument, straight	AR-**8703**

arthrex.com