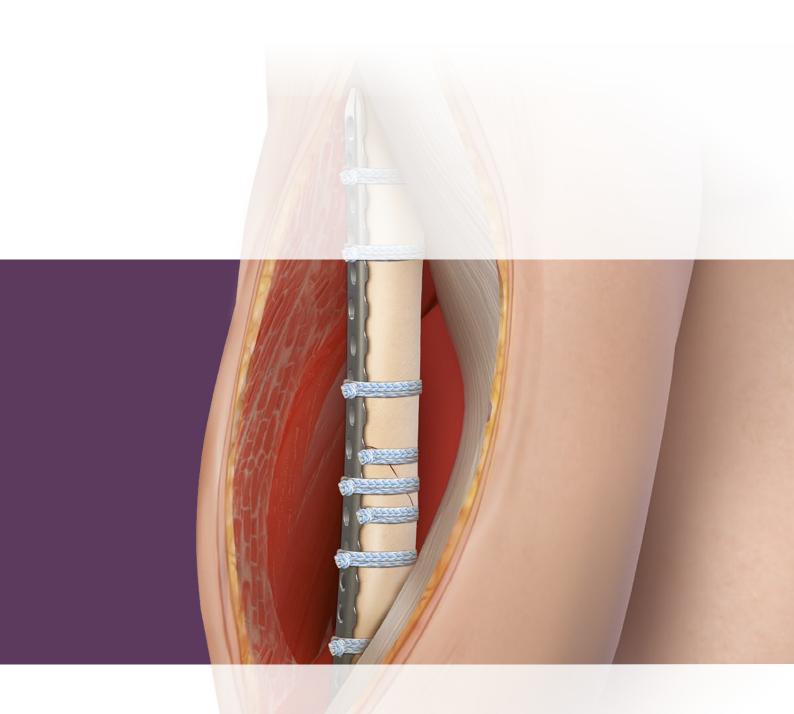
FiberTape® Cerclage System Management of Periprosthetic Femur Fractures Surgical Technique





FiberTape® Cerclage System

The FiberTape Cerclage System is a nonmetallic alternative to metal cables and wires traditionally used for fracture management during trauma and reconstruction procedures. Its high-strength, all-suture design and biomechanical properties make FiberTape cerclage an ideal adjunct for stabilization and fixation of periprosthetic femur fractures.

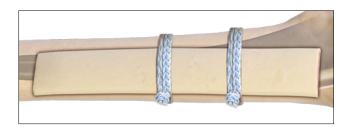
Low-Profile Design

FiberTape cerclage lays flat above or under plating, allowing hardware to be placed flush against bone.



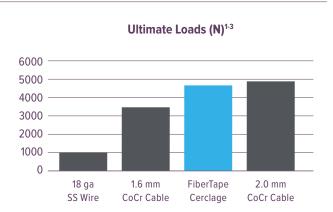
Broad Footprint Compression

FiberTape cerclage may be used to fixate strut grafts, and its unique tape design helps minimize bone cut-through.



Trusted Biomechanical Performance and Strength

FiberTape cerclage's strength stands up to metal cables and wires and is proven to withstand high loads that may be experienced when used as a femoral cerclage. 1, 2, 3



Advantages of Suture-Based Cerclage

- 100% radiolucent no radiographic interference from cerclage
- No sharp ends or broken wires that could potentially harm surgeons or patients
- No concerns of metal mismatch with adjacent implants
- No migration of metallic debris or risk of metallosis

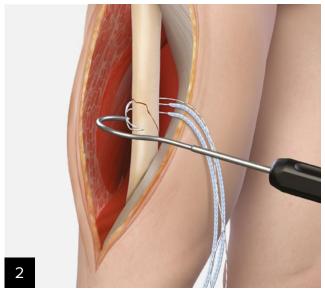
Surgical Technique

This surgical technique guide describes using FiberTape® cerclage to support open reduction and internal fixation of periprosthetic femur fractures and the steps for inserting and tensioning the cerclage. FiberTape cerclage can be used with additional fixation methods (eg, plates, nails, strut grafts, or protheses) as necessary for proper fracture management.

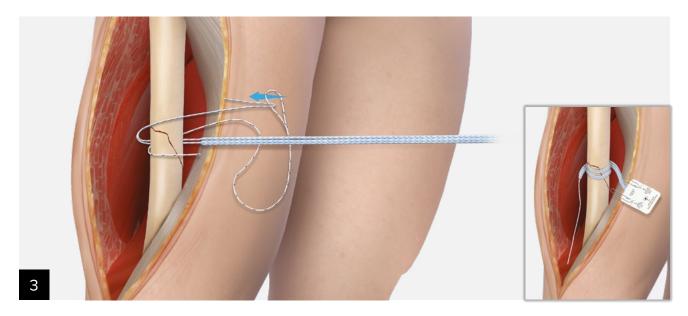




Use the passing hook to pass the cerclage suture and place the hook around the bone. Load the FiberTape cerclage suture tail into the eyelet of the passing hook along with the tail end of a TigerLink $^{\scriptscriptstyle{\text{M}}}$ suture.

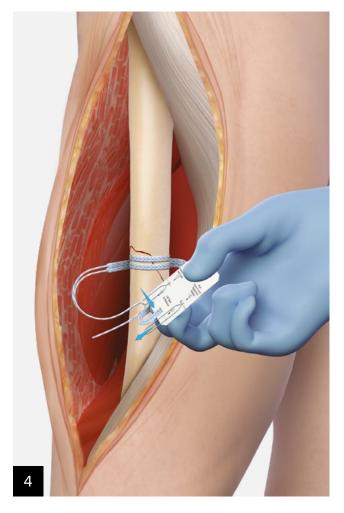


Pull the hook back around the bone and unload the sutures from the eyelet.

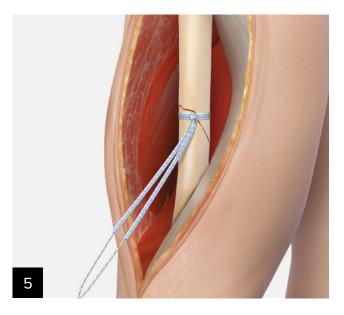


Load the tail of the FiberTape® cerclage suture into the loop end of the TigerLink™ suture. Pull the tail of the TigerLink suture to shuttle the FiberTape cerclage around the bone, completing the second pass of the FiberTape cerclage suture.

Note: To remove slack from the suture wrapped around the bone, pull on the tail of the FiberTape cerclage to advance the loading card closer to the bone.



Once the FiberTape cerclage has been passed around the bone, use the loading card to shuttle the suture tail through the pretied knot. Load the tail of the cerclage suture through the suture shuttle loop (#1 on the card). Hold the card at the bullseye (#2 on the card) and pull on the opposing loop (#3 on the card) to shuttle the cerclage suture through the pretied knot. Once the flat tape portion of the suture engages the knot, remove the suture from the card and discard it.



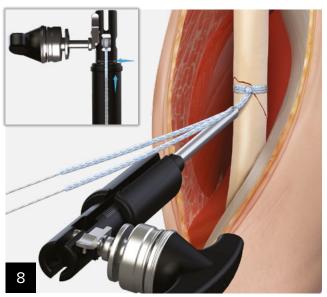
Slide the knot down to the bone and tighten by hand to remove the gross slack from the cerclage loops. Position the knot so that it does not interfere with the placement of other implants (eg, plates and/or strut grafts) that may be used.



Cut the swedged part of the suture to separate the two limbs of the FiberTape cerclage.



Insert one limb through the bottom hole at the distal end of the tensioner and the other limb through the slot. Load both tails together through the slot near the handle.



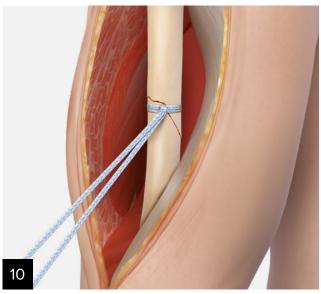
Place the tensioner against the knot and begin to tension the cerclage by turning the handle. Tension until slack is removed from the suture loops and the desired amount of tension is achieved. Avoid bottoming out the spring in the tensioner and damaging the knot by going past the "80" mark on the tensioner.



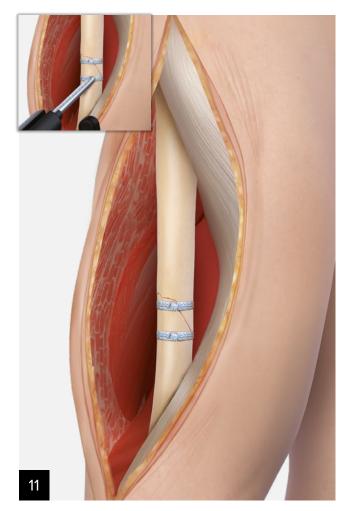
Press and hold the release button near the handle and pull back on the tensioner.

Note: The tensioner handle will spin when the release button is pressed.

Remove the suture limbs from the tensioner.



Tie one half hitch to secure the knot and aid in retaining the cerclage's tension. If necessary, place additional FiberTape® cerclage constructs following the same steps as the first cerclage.

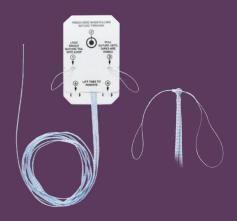


After initial tensioning and applying the first halfhitches, each cerclage can be retensioned. Reload the suture limbs into the tensioner and perform a final tensioning. Tie 2 alternating half hitches to complete the cerclage construct and cut the remaining suture limbs.

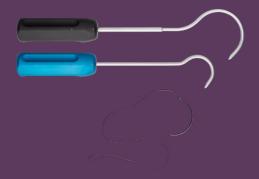
Note: Once the 2 alternating half-hitches are tied, the cerclage construct can no longer be tensioned.



After the FiberTape® cerclage is used to reduce and fixate the fracture, a fracture plate can be placed directly over the cerclage. If necessary, FiberTape cerclage may also be used to support the fixation of the plate in areas where screws cannot be placed or where additional compression is needed to aid in fracture healing.



The 2 mm FiberTape cerclage suture comes configured in a card with a pretied knot and shuttle suture for reproducible and easy deployment.



Depending on the anatomy and surgeon preference, a choice of passing hooks or a disposable needle can be used to pass the FiberTape cerclage suture around the bone.



eliminates the need for large, cumbersome instruments.

Ordering Information

Implants

Product Description	Item Number
FiberTape® Cerclage Suture	AR- 7267
TigerTape™ Cerclage Suture	AR- 7267T

Instruments

Product Description	Item Number
Cerclage Tensioner Set	AR- 7800S
Includes tensioner, tensioner handle, passing hook (medium), passing hook (large), and FiberTape cerclage instrument tray	
Tensioner	AR- 7800
Tensioner Handle	AR- 7801
Passing Hook, medium	AR- 7806
Passing Hook, large	AR- 7807
FiberTape Cerclage System Instrument Tray	AR- 7800C

Disposables

Product Description	Item Number
Passing Needle	AR- 7816
#2 TigerLink™ Suture w/ Closed Loop, 26 in (white/black)	AR- 7235T
#2 FiberLink™ Suture w/ Closed Loop, 26 in (blue)	AR- 7235

References

- 1. Arthrex, Inc. Data on file (APT 3197). Naples, FL; 2017.
- 2. Arthrex, Inc. Data on File (APT 04426). Naples, FL; 2019.
- 3. Arthrex, Inc. Data on file (APT 4577). Naples FL; 2020.



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.

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