



**PRECISE**<sup>®</sup>  
BIOSCIENCE

# Achilles Tendinopathy

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## Clinical History

44-year-old, female diagnosed with significant Achilles Tendinopathy. The patient did have a previous calcaneal exostectomy with detachment and then re-attachment of the Achilles tendon. However, she then developed pain and swelling over the Achilles tendon for many months duration. The patient was unable to perform daily activities due to the pain. The patient failed conservative modalities including rest, ice, calf muscle stretching, NSAID's and physical therapy.

## XCELLERATE<sup>®</sup>

### Technology Platform

XCELLERATE<sup>™</sup> is opaque and thicker than other grafts. The Lyophilized graft is flexible and easy to handle. What you can't see is the benefit of our proprietary Lyophilization processing focused on preserving the quality of the matrix. The growth factor-rich matrix with an outer basement membrane immediately serves as a natural barrier and supports re-epithelialization.

### Procedure

- A longitudinal incision is made midline over the Achilles tendon. Care is taken to limit retraction on the skin. The incision is deepened down through the skin and subcutaneous tissue and down through the paratenon to reveal the Achilles tendinopathy (FIG 1). Next, a midline longitudinal incision within the Achilles tendon is performed which allows resection of the tendinopathy (FIG 2). A third of the XCELLERATE 4.0 x 7.0 cm is placed within the split Achilles tendon after debridement. The split Achilles tendon is then repaired side to side.
- Next, the remaining XCELLERATE is placed over the repaired Achilles tendon to reduce scarring/adhesions and facilitate healing of the Achilles tendon (FIG 3). No suture is required as the XCELLERATE will incorporate on the Achilles tendon with a small amount of saline or blood. The incision is then closed in layers (FIG 4).
- The patient is placed into a flat cam boot and can weight bear immediately. Sutures are removed at 2 weeks.



**Figure 1**  
MRI Right Ankle: Significant thickening of the mid to distal Achilles tendon is consistent with tendinopathy. There are suture anchors in the posterior calcaneus consistent with previous surgery.



**Figure 2**  
Midline Achilles incision after debridement of tendinopathy within the Achilles tendon.



**Figure 3**  
Application of XCELLERATE within the Achilles tendon and wrapped around the Achilles tendon.



**Figure 4**  
Intraoperative closure of Achilles tendon midline incision.



## Outcome

- The patient is transitioned out of the cam boot at one month and physical therapy is then initiated.
- The revisional midline Achilles tendon incision healed nicely (FIG 5).
- The patient did continue with physical therapy and steadily resumed activities.
- The patient has resumed all her activities without discomfort and is very pleased with the final outcome.



**Figure 5**  
Well healed incision  
6 weeks post op.