

**Subject:** BioBrace for Achilles Midsubstance Repair  
**Date:** Monday, July 15, 2024 at 8:56:33 AM Central Daylight Time  
**From:** Gianna Raimondi <giannaraimondi@conmed.com>  
**Attachments:** image001.png, image002.jpg, image003.png, image004.png, image005.png, image006.png, image007.png, Chronic Achilles Tendon Rupture Case Report.pdf

Foot & Ankle Team-

Another indication for BioBrace that does not require any anchor solution is **Achilles Midsubstance Repairs.**

*Achilles Midsubstance “Non-Insertional” Tendinosis:* pathology is located 2-6cm above the insertion point (from where the tendon meets the heel bone). An area of thickened and degenerated tendon that needs to be resected.

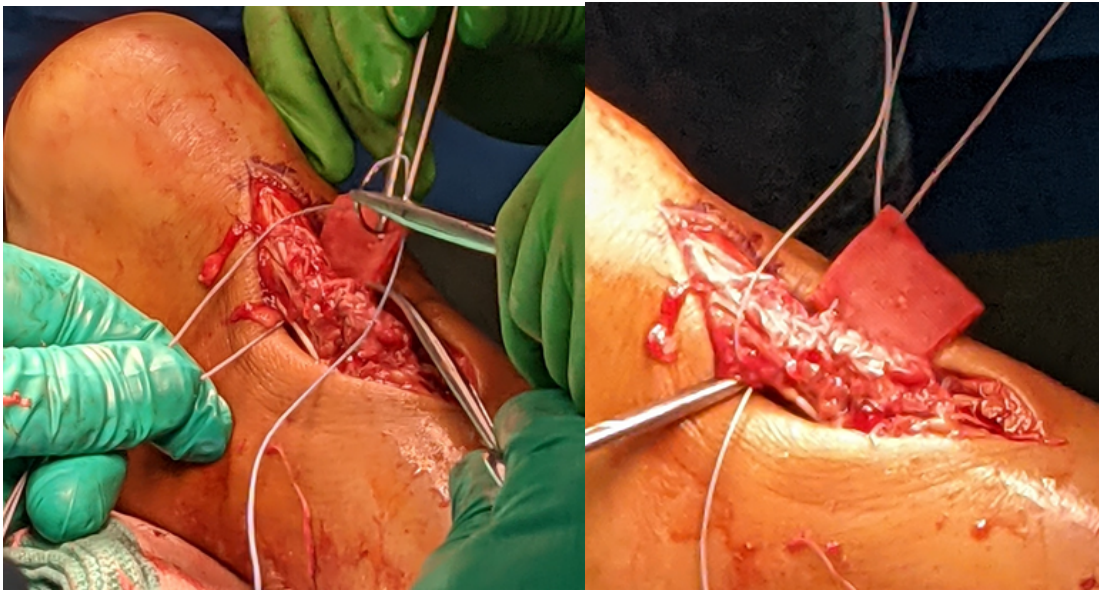
The goal of an Achilles Midsubstance repair is to heal in physiologic position, restore continuity of the tendon, and restore muscle function. BioBrace is indicated in cases where there is degeneration of tissue or when the rupture occurs in a previously tendinotic Achilles. The repair can be tenuous or weak and augmentation may be needed.

**General overview of Achilles Midsubstance and helpful resources:**

- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5367540/> (Pathology Overview)
- [Achilles Tendon Repair Utilizing a Biocomposite Scaffold Augmentation | VuMedi](#) (Surgical Video – Repair of Achilles Midsubstance with BioBrace)
- <https://www.youtube.com/watch?v=pAA7vEwZs2w&list=PLbO2fKIYE7Umw2ZquJnP252FXLeKq30vj> (Competitor Video – “Box-Weaving” Technique for Achilles Rupture)
- **\*Attached** – Dr. Redler’s Achilles Midsubstance case report using BioBrace:
  - Midsubstance chronic cavitation tear with significant tendon retraction and infiltration of dense fibrous tissue into the gap.
  - BioBrace demonstrated new tissue regeneration in place of the damaged tissue and restored continuity of the Achilles.



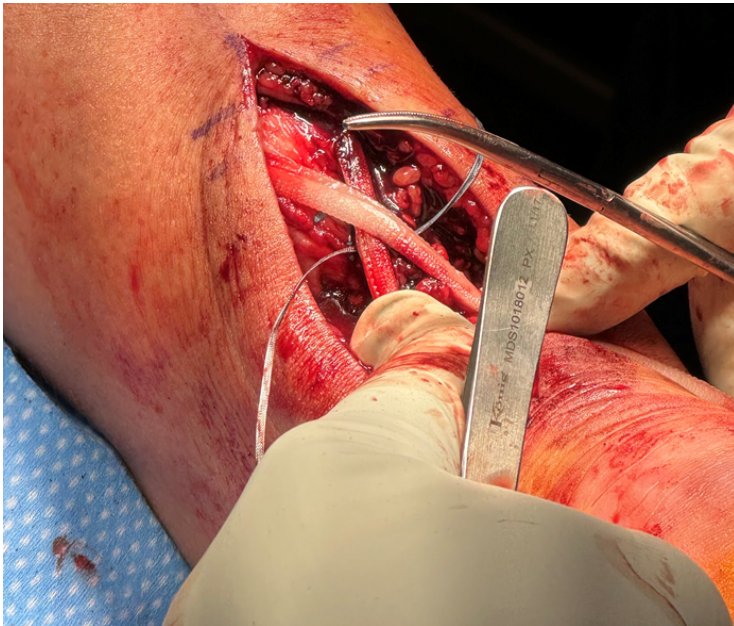
**BioBrace (23X30) Used for Achilles Midsubstance Repair:**



- the damaged portion of the tendon is excised and the BioBrace can be used with the remaining portion to regenerate new tendon in the area that needed to be taken out.
- Adding BioBrace to in this case allows the surgeons to add strength and bulk back to a damaged and diseased tendon.

**BioBrace (5X250) "Box-Weave" Technique:**





- *Study: Berlet et al* – compared load to failure of Achilles with and without a collagen ribbon
  - Augmented group had 4X higher load to failure and resisted gapping of the rupture.
- Technique:
  - Primary repair of the Achilles – reapproximate the ruptured ends.
  - 1cm trans-Achilles tunnels are created ~2cm proximal and distal to the primary repair.
  - Pass BioBrace through the proximal tunnel from medial to lateral using a hemostat.
  - BioBrace ends are brought distally and passed through the distal tunnel
  - Distal ends are drawn back proximally and secured/sutured to medial and lateral borders of the tendon.

As a reminder, the two materials that make up BioBrace (collagen sponge & PLLA) work independently to promote the healing response and provide strength to the repair. This allows surgeons to utilize the BioBrace for many different indications, whether they are looking for the rapid regeneration of new tendon/ligament or the load-sharing capabilities to strengthen the repair.

**We can do both!**

Please reach out to me for further clarification or questions you may have.

***\*Distributors... please forward this to the rest of your team.***

Keep up the great work!!

**Gianna Raimondi**

West Associate Market Development Manager – BioBrace



630.881.5872 (mobile)

[giannaraimondi@conmed.com](mailto:giannaraimondi@conmed.com)

[www.conmed.com/footandankle](http://www.conmed.com/footandankle)

