

Clinical Summary

Knee Medial Collateral Ligament Augmentation with Bioinductive Scaffold: Surgical Technique and Indications

Authors: Matthew R. LeVasseur, M.D., Colin L. Uyeki, B.A., Patrick Garvin, D.O., Sean McMillan, D.O., and Robert A. Arciero, M.D

Journal: Arthroscopy Techniques



Aim:

To describe the surgical technique and indications for using the BioBrace® scaffold in knee MCL ligament repairs and reconstructions.

Indications for MCL Repair/Reconstruction

- **Multiligamentous Knee Injury:** Involving MCL, ACL, and PCL.
- **ACL and MCL Injury in Elite Athletes:** With valgus laxity indicating a complete medial-sided injury.
- **Chronic, Isolated MCL Injury:** With persistent grade III laxity after failed nonoperative management.
- BioBrace could also be used to provoke a robust healing response and offer additional strength to reconstructions of chronic MCL injuries.
- **High - grade MCL injuries** are indicated for surgery following continued valgus instability after 6 to 8 weeks of nonoperative treatment.
- BioBrace could be incorporated for healing of midsubstance MCL tears.

Surgical Techniques



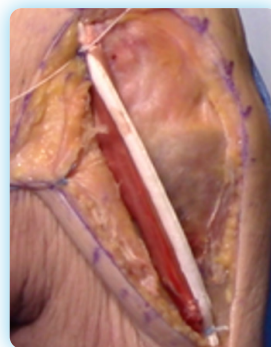
Open MCL Repair

femoral & tibial double loaded anchors. One stitch for repair, 1 stitch for BioBrace®



Mini-Open MCL Repair

Shuttled from proximal to distal incision and sewn into place



Open MCL Reconstruction

Hamstring allograft and BioBrace® secured using suture anchors

Clinical Summary

Knee Medial Collateral Ligament Augmentation with Bioinductive Scaffold: Surgical Technique and Indications

Authors: Matthew R. LeVasseur, M.D., Colin L. Uyeki, B.A., Patrick Garvin, D.O., Sean McMillan, D.O., and Robert A. Arciero, M.D

Journal: Arthroscopy Techniques



Postoperative Rehabilitation:

- **Initial Phase:** Range of motion restricted to 20°-90° for first 2 weeks.
- **Weight Bearing:** Partial for first 4 weeks, then full weight bearing in brace.
- **Brace Discontinuation:** At 6-8 weeks postoperatively.

Key Takeaways

- **Enhanced Healing:** BioBrace® scaffold promotes soft-tissue regeneration, improving recovery outcomes.
- **Mechanical Support:** Provides necessary structural support during the healing process.
- **Versatile Application:** Suitable for both acute and chronic MCL injuries, offering flexibility in treatment options.
- **Early Mobilization:** Allows for early range of motion and weight bearing, facilitating quicker rehabilitation.

LeVasseur, M. R., Uyeki, C. L., Garvin, P., McMillan, S., & Arciero, R. A. (2022). Knee Medial Collateral Ligament Augmentation With Bioinductive Scaffold: Surgical Technique and Indications. *Arthroscopy techniques*, 11(4), e583–e589. <https://doi.org/10.1016/j.eats.2021.12.011>