

# Medial Collateral Ligament Replacement

## To Aid in the Correction of Hallux Abducto Valgus

### ABSTRACT:

Hallux abductovalgus is one of the most prominent pathologies encountered in podiatry. Many techniques, procedures, and fixation variances have been discussed at length thru history. Approaches have been discussed with proven success, but difficulty in achieving ideal, prolonged correction of the intermetatarsal, hallux abduction, and proximal articular set angles remains with procedure limitations based on the values of these angles. Overall, 18 patients and 19 procedures were studied with an average follow up of 16.58 weeks. The average intermetatarsal and hallux abduction angles encountered pre-operatively were 16.16° and 22°, respectively, with a decrease observed post-operatively to 9.26° and 9.53°, respectively. Subjective analysis also analyzed and revealed an overall improvement in aesthetics, pain level, and function by patient's standards. While hallux abductovalgus remains prominent within the general population, a new technique for correction of the intermetatarsal and hallux abduction angles has led to a successful resolution with low recurrence of the pathology and is a viable option for surgeons moving forward within the podiatric field.

### OBJECTIVE:

Correct Hallux abductovalgus in a population not confined by any discriminating factors  
Prevent relapse  
Improve quality of life and patient subjective findings (I.e. Pain)  
Prevent an osteotomy

### METHODS:

A new unrestricted approach is introduced here for correction of hallux abductovalgus via a traditional osteotomy with the use of suture anchors. Adequate and long-term correction of the intermetatarsal and hallux abduction angles were achieved via a long dorsal armed V-shaped osteotomy and use of Stryker 3.0 mm wedge anchors due to their dependability and stability. Two anchors were placed with one applied into the base of the proximal phalanx, while directing the anchor distal to the joint, with the second anchor placed proximally and centrally to the V-shaped osteotomy. The fashioned suture material produced a marked medial translocation of the hallux with decrease in the hallux abduction angle.

### PERSONAL EXPERIENCES:

Gained perspective on the doctor-patient relationship  
Gained invaluable research skills  
I now have insight on the inner workings of private practice  
I can take all of these skills onto my future endeavors  
Future phases of the project:  
For the future of this project, we hope that this procedure becomes common practice among foot and ankle surgeons around the country. For the certain future however, we plan to observe more case studies and gather more data.

### REFERENCES:

Prevalence of hallux valgus in the general population: a systematic review and meta-analysis  
Sheree Nix,<sup>1</sup> Michelle Smith,<sup>1</sup> and Bill Vicenzino<sup>1</sup>

Recurrence of Hallux Valgus: A Review  
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Oldest Mummified Case of Hallux Valgus from Ancient Egypt  
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### PRE PROCEDURE



### POST PROCEDURE

