Evaluation of Hallux Interphalangeal Joint Arthroplasty in Comparison to Non-operative Treatment for Recalcitrant Hallux Ulcerations: A Retrospective Review

Eric Lew DPM¹, Nicole Nicolosi DPM², Patrick McKee DPM, FACFAS²
¹Residents, Podiatric Medicine and Surgery, Kaiser Permanente/Cleveland Clinic; ²Staff, Orthopaedic and Rheumatologic Institute, Cleveland Clinic, Cleveland, OH

Abstract

A study by Armstrong et al. in 2003 concluded that a first proximal phalangeal base arthroplasty is a reasonable option in patients with chronic plantar hallux ulcerations. This study evaluated the efficacy of hallux interphalangeal (HIPJ) arthroplasty for chronic plantar hallux ulcerations.

Methods

A retrospective review was conducted of HIPJ arthroplasty with non-operative treatment of recalcitrant hallux ulcerations from January 2008 to May 2013 at the Cleveland Clinic, Cleveland, OH. A total of 158 patients were reviewed for HIPJ arthroplasty: 13 cases were lost to follow-up, 3 had incomplete documentation, and 1 had an amputation. The remaining 132 cases were included in the study.

Results

A total of 132 cases were included in the study. The mean age of the patients was 59.5 years, and the male-to-female ratio was 1.2:1. The mean time to ulcer healing was 9.0 weeks, and the mean follow-up time was 14.7 months. There was one ulcer recurrence in the HIPJ arthroplasty group, and no ulcers recurred in the control group.

Conclusion

HIPJ arthroplasty is an effective treatment for chronic plantar hallux ulcerations. Further study is needed to confirm these findings and to compare the outcomes with other surgical and non-surgical treatments.

References

1. Armstrong DG, Lavery LA. Diabetic foot ulcers-