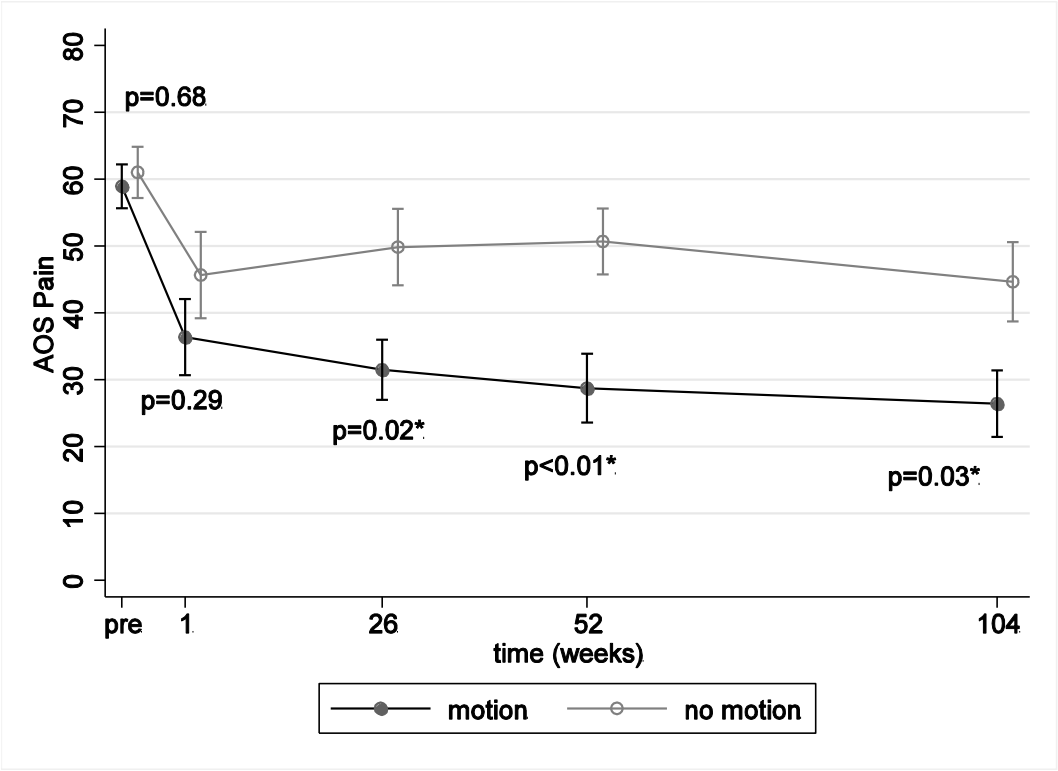

Fig. E-1
Line graph showing the mean estimates for the Ankle Osteoarthritis Scale (AOS) pain scores versus time. The p values are for testing for a group difference at the particular time point; the values for the fixed (no motion) group have been moved slightly to the right to make the plot more readable. *P < 0.05.

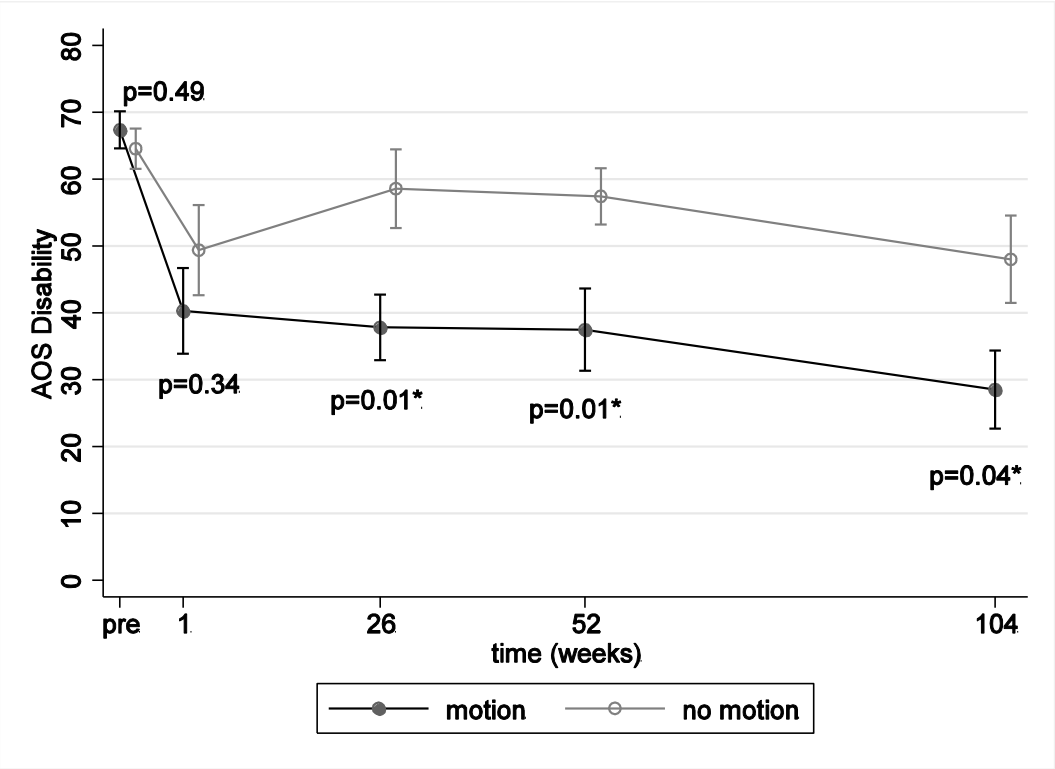

Fig. E-2
Line graph showing the mean estimates for the Ankle Osteoarthritis Scale (AOS) disability scores versus time. The p values are for testing for a group difference at the particular time point; the values for the fixed (no motion) group have been moved slightly to the right to make the plot more readable. *P < 0.05.

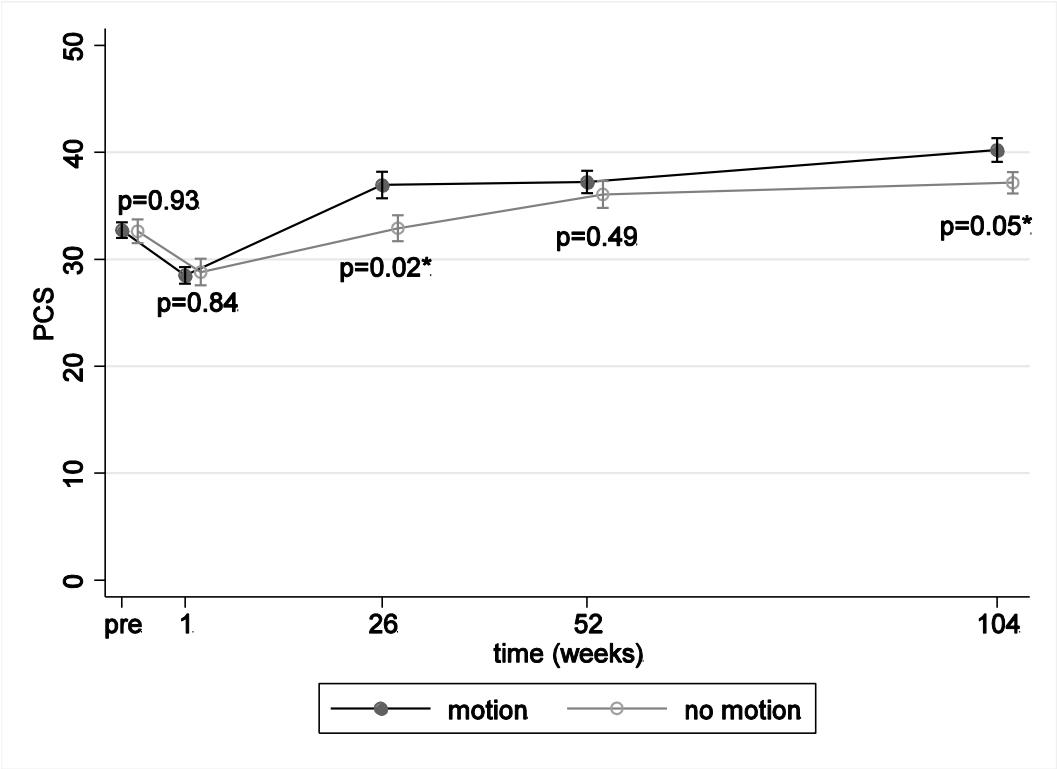

Fig. E-3
Line graph showing the mean estimates for the Physical Component Summary (PCS) outcome scores of the SF-36 versus time. The p values are for testing for a group difference at the particular time point; the values for the fixed (no motion) group have been moved slightly to the right to make the plot more readable. *P < 0.05.

TABLE E-1 Inclusion and Exclusion Criteria for the Prospective Randomized Controlled Trial*

Inclusion Criteria	Exclusion Criteria
• Symptomatic isolated, unilateral Kellgren-Lawrence grade-3 or Kellgren-Lawrence grade-4 ankle osteoarthritis	• History, physical findings, and/or imaging studies suggesting inflammatory arthritis, crystal deposition disease, diabetes, systemic illness, fibromyalgia, peripheral neuropathy, reflex sympathetic dystrophy, or previous infection of the ankle or adjacent bones
• Skeletally mature and ≤60 years old (children included if growth plates were closed)	• Neuroarthropathic ankle
• Failure of nonoperative treatment >1 year including 3 months of continuous treatment with nonsteroidal anti-inflammatory agents and 3 months of unloading treatment (i.e., unloading brace, crutches, cane, or walker)	• Presence of other symptomatic joints of ipsilateral lower extremity
• Capacity to maintain extremity non-weight-bearing with use of walking aids	• Contralateral ankle arthritis (Kellgren-Lawrence grade 2, 3, or 4)
	• Ankle or hindfoot malalignment:
	• On a standing anteroposterior radiograph, a tibial-talar angle of <83° or >94°†
	• On a standing lateral radiograph, a distal tibial angle <77° or >86°†
	• On a standing hindfoot alignment view, an apparent calcaneal moment arm >15 mm‡
	• Living >300 miles away
	• Current history of ethanol or drug abuse

*All subjects were selected from among the patients who presented with painful end-stage ankle osteoarthritis to a U.S. tertiary medical center. †Cheng YM, Chang JK, Hsu CY, Huang SD, Lin SY. Lower tibial osteotomy for osteoarthritis of the ankle. Gaoxiong Yi Xue Ke Xue Za Zhi. 1994;10(8):430-7. ‡Saltzman CL, el-Khoury GY. The hindfoot alignment view. Foot Ankle Int. 1995;16(9):572-6.