

TABLE E-1 Comparisons of Stance-Phase Parameters Between the Groups

Parameters	Group I*	Group II*	P Value†
Ankle sagittal kinematics‡ (deg)			
Peak dorsiflexion			
Preoperative	33.72 ± 7.44	33.66 ± 5.90§	0.9114
Postoperative	28.21 ± 4.73	25.82 ± 4.20§	0.3344
Peak plantar flexion			
Preoperative	11.47 ± 9.57§	4.85 ± 8.84§	0.1685
Postoperative	-0.62 ± 3.08§	-0.86 ± 3.65§	0.9797
Knee sagittal kinematics and moment			
Knee flexion angle at peak knee extension (deg)			
Preoperative	9.51 ± 4.45	16.60 ± 8.28	0.0227
Postoperative	7.27 ± 3.70	15.64 ± 6.05	0.0215
Peak extension moment (Nm/kg)			
Preoperative	0.24 ± 0.21	0.75 ± 0.55	0.0186
Postoperative	0.49 ± 0.19	0.38 ± 0.37	0.5013
Hip coronal kinematics and moment			
Peak abduction (deg)			
Preoperative	3.62 ± 2.40	10.29 ± 12.49	0.0381
Postoperative	2.53 ± 3.08	9.75 ± 15.10	0.0298
Peak abduction moment (Nm/kg)			
Preoperative	0.55 ± 0.40	0.08 ± 0.14§	0.0137
Postoperative	0.56 ± 0.25	0.29 ± 0.31§	0.0613
Pelvic tilt, obliquity, and rotation (deg)			
Peak anterior tilt			
Preoperative	18.73 ± 5.47	19.50 ± 12.65	0.9988
Postoperative	18.08 ± 4.51	22.81 ± 10.02	0.2552
Peak obliquity at initial contact			
Preoperative	0.08 ± 2.13	5.30 ± 3.23	0.0164
Postoperative	0.79 ± 2.17	6.48 ± 3.04	0.0124
Peak internal rotation			
Preoperative	6.37 ± 3.23	16.29 ± 10.09	0.0045
Postoperative	6.17 ± 4.48	14.26 ± 6.50	0.0188

*The values are given as the mean and the standard deviation. †The p values pertain to the comparison between Group I and Group II. The p value was the minimum value of $P_{\text{unadj}} \times k$ or 1, where k was the number of comparisons (k = 2 for parameters in the ankle, knee, and hip; k = 3 for parameters in the pelvis). ‡Ankle dorsiflexion was expressed as a positive value, and ankle plantar flexion was expressed as a negative value. §P < 0.05 for the comparison between the preoperative and postoperative values.

TABLE E-2 Comparisons of Peak Pressure Under Each Area of the Foot Between the Groups

	Peak Pressure* (N/cm^2)		P Value†
	Group I	Group II	
Preoperative			
Hallux	2.24 ± 6.60	0.00 ± 0.00	0.6351
First metatarsal head	3.37 ± 6.50	2.03 ± 3.66	0.8267
Second metatarsal head	3.95 ± 7.45	5.00 ± 4.62	0.9254
Third and fourth metatarsal heads	2.79 ± 6.15	0.01 ± 0.03	0.5405
Fifth metatarsal head	1.51 ± 3.67	0.02 ± 0.04	0.5500
Midfoot	1.05 ± 1.37	0.04 ± 0.06	0.8695
Calcaneus	51.41 ± 23.78	50.95 ± 6.75	0.7386
Postoperative			
Hallux	9.49 ± 9.05	0.89 ± 1.80	0.0973
First metatarsal head	13.78 ± 6.41	7.99 ± 11.87	0.3618
Second metatarsal head	15.59 ± 5.37	8.02 ± 8.16	0.4034
Third and fourth metatarsal heads	10.29 ± 5.32	2.76 ± 3.65	0.1840
Fifth metatarsal head	5.39 ± 4.13	0.74 ± 1.12	0.1581
Midfoot	3.34 ± 4.50	1.90 ± 2.95	0.7793
Calcaneus	38.36 ± 11.41	46.02 ± 21.84	0.6027

*The values are given as the mean and the standard deviation. †The p values pertain to the comparison between Group I and Group II. The p value was the minimum value of $P_{\text{unadj}} \times 7$ or 1, where P_{unadj} was the unadjusted value and 7 was the number of comparisons.

TABLE E-3 Comparisons of Relative Vertical Impulse on Each Area of the Foot Between the Groups

	Relative Vertical Impulse* (%)		P Value†
	Group I	Group II	
Preoperative			
Hallux	2.9 ± 3.8	0.0 ± 0.0	0.7783
First metatarsal head	4.7 ± 5.3	2.7 ± 5.2	0.9336
Second metatarsal head	5.1 ± 5.3	7.6 ± 7.1	0.1036
Third and fourth metatarsal heads	3.8 ± 4.9	0.0 ± 0.0	0.3023
Fifth metatarsal head	1.9 ± 2.4	0.0 ± 0.0	0.5582
Midfoot	0.7 ± 0.7	0.0 ± 0.0	0.7047
Calcaneus	80.9 ± 19.8	89.7 ± 11.6	0.9542
Postoperative			
Hallux	7.1 ± 6.1	1.0 ± 2.3	0.0675
First metatarsal head	13.8 ± 6.9	10.8 ± 10.4	0.0537
Second metatarsal head	14.7 ± 6.7	9.5 ± 8.0	0.0067
Third and fourth metatarsal heads	9.1 ± 4.1	1.7 ± 2.3	0.0001
Fifth metatarsal head	5.0 ± 3.4	0.3 ± 0.9	0.0070
Midfoot	3.2 ± 4.3	1.9 ± 7.3	0.4465
Calcaneus	44.8 ± 11.1	74.7 ± 15.2	0.0001

*The values are given as the mean and the standard deviation. †The p values pertain to the comparison between Group I and Group II. The p value was the minimum value of $P_{\text{unadj}} \times 7$ or 1, where P_{unadj} was the unadjusted value and 7 was the number of comparisons.