



Fig. E-1A



Fig. E-1B

Figs. E-1A and E-1B Three-dimensional reconstructed CT images made to check the length of the tunnels (arrows). Shown are the femur (**Fig. E-1A**) and tibia (**Fig. E-1B**). The images were rotated and cut along the axis of the tunnels with use of the OnDemand3D program (Cybermed).

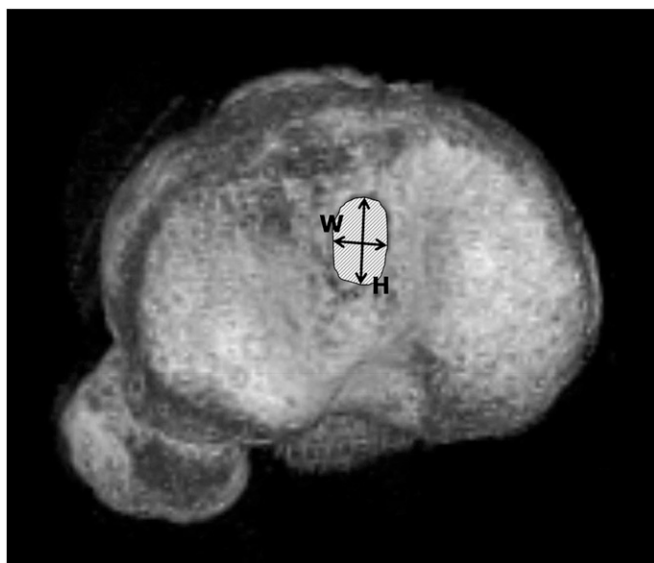


Fig. E-2

Three-dimensional reconstructed CT image manipulated with use of the OnDemand3D program (Cybermed) to show the true axial view of the tibia from the top. The long axis-short axis ratio of the tibial tunnel aperture is defined as the ratio of H to W, where H = the length of the long axis, and W = the length of the short axis. The shaded section indicates the tibial tunnel aperture area.

TABLE E-1 Demographic Data of Subjects			
	Modified Transtibial Technique	Anteromedial Transportal Technique	P Value
No. of knees	52	52	
Patient age* (yr)	17-51 (29.4)	16-56 (29.1)	0.912†
Male/female (no. of patients)	45/7	44/8	0.780‡
Right/left (no. of knees)	24/28	29/23	0.327‡
Height§ (cm)	171.3 ± 6.5	172.9 ± 6.2	0.567†
Weight§ (kg)	72.4 ± 10.2	73.3 ± 12.4	0.863†
Body mass index§ (kg/m ²)	24.7 ± 3.1	24.5 ± 3.5	0.579†
Duration of follow-up* (mo)	24-61 (32.1)	24-60 (32.4)	0.820†
Combined injury (none/medial meniscus/lateral meniscus/both) (no. of knees)	26/15/4/7	27/12/3/10	0.795‡
Combined surgery (none/meniscectomy/meniscal repair) (no. of knees)	26/16/10	27/12/13	0.612‡

*The values are given as the range, with the mean in parentheses. †Mann-Whitney U test. ‡Pearson chi-square test. §The values are given as the mean and the standard deviation.

TABLE E-2 Comparison of Complications Between Groups			
	Modified Transtibial Technique	Anteromedial Transportal Technique	P Value*
No. of knees	52	52	0.963
Patella fracture†	2 (4)	1 (2)	
Transient loss of motion†	3 (6)	4 (8)	
Cyclops lesion†	1 (2)	1 (2)	
Donor-site tenderness†	4 (8)	5 (10)	
No complications†	42 (81)	41 (79)	

*Pearson chi-square test. †The values are given as the number of knees, with the percentage in parentheses.

TABLE E-3 Cadaver Study Results of the Anatomic Positions of the Femoral and Tibial ACL Footprints Reported in the Literature*

Study	No. of Knees Studied	Femur						Tibia					
		Superior-Inferior			Anterior-Posterior			Anterior-Posterior			Medial-Lateral		
		AMB	PLB	Mean	AMB	PLB	Mean	AMB	PLB	Mean	AMB	PLB	Mean
Bernard et al. ²²	10			24.8			28.5						
Musahl et al. ³³	8			26.6			26.3			45.4			
Colombet et al. ³⁴	7	26.4	32.3	29.4	25.3	47.6	36.5	36	52	44			
Takahashi et al. ³⁵	32	31.9	39.8	35.9	26.9	53.2	40.1	28.6	32.1	30.4	44.2	52.4	48.3
Zantop et al. ³⁶	20	18.5	29.3	23.9	22.3	53.6	38.0	30	44	37			
Tsukada et al. ³⁷	36	25.9	34.8	30.4	17.8	42.1	30.0	37.6	50.1	43.9	46.5	51.2	48.9
Guo et al. ³⁸	16			43.1			38.3						
Forsythe et al. ²⁴	8	21.7	35.1	28.4	33.2	55.3	44.3	25	46.4	35.7	50.5	52.4	51.5

*As assessed with use of the quadrant method; values given as percentages. AMB = anteromedial bundle, and PLB = posterolateral bundle.