



Fig. E-1A



Fig. E-1B

Fig. E-1A Anteroposterior radiograph made at the time of injury demonstrating a distal femoral transverse fracture. **Fig. E-1B** Anteroposterior radiograph made one month after plate fixation demonstrating an anatomic lateral distal femoral angle (aLDFA) of 83°.



Fig. E-1C

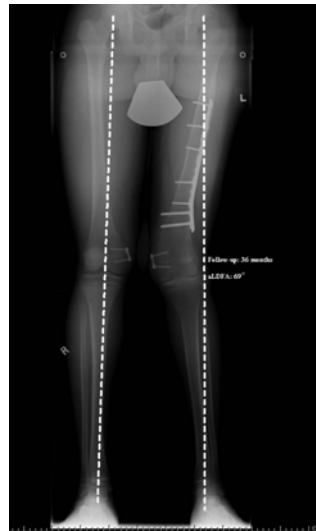


Fig. E-1D

Fig. E-1C Anteroposterior radiograph of the distal end of the femur, made thirty months postoperatively, showing an aLDFA of 73° (a 10° increase in valgus). **Fig. E-1D** At thirty-six months after plate fixation, a hip-to-ankle anteroposterior radiograph shows an aLDFA of 69° (a 14° increase in valgus).

TABLE E-1 Demographic Data and Injury Information

Characteristic	Finding
Sex (no. [%])	
Male	71 (83.5)
Female	14 (16.5)
Mean age at index surgery (range) (yr)	10.1 (6.1-15.4)
Affected side (no. [%])	
Right	41 (48.2)
Left	44 (51.8)
Mechanism of injury* (no. [%])	
Athletic and recreational activity	34 (40.0)
Pedestrian accident	8 (9.4)
Motor-vehicle accident	7 (8.2)
Other (fall from a height, etc.)	34 (40.0)
Mean hospital length of stay (range) (d)	5.4 (1-79)

*Data on mechanism of injury were not available for two patients.

TABLE E-2 Distribution of Patients as a Function of Follow-up from Time of Index Surgery and Retention of Hardware

Clinical follow-up after index surgery	Retention of Hardware (no. [%] of patients)	
	Extended Time (≥ 9 Mo)*	Removed Early (< 9 Mo)
≥ 9 mo	41 (48)	9 (11)
< 9 mo	18 (21)†	17 (20)†

*Patients are listed as having retention of hardware for an extended time if they had the hardware removed after nine months from the time of the index surgery or if they never had the hardware removed over the period of this study. †Patients who could not be included when assessing the relationship between extended hardware retention and distal femoral valgus deformity because of an insufficient duration of follow-up.

TABLE E-3 Fracture Characteristics

Characteristic	Finding (no. [%] of patients)
Diaphyseal fracture location	
Proximal	19 (22)
Midshaft	38 (45)
Distal	28 (33)
Fracture pattern	
Oblique or spiral	39 (46)
Transverse	24 (28)
Comminuted	22 (26)
Open fracture	
Yes	0 (0)
No	85 (100)

TABLE E-4 Implant Characteristics

Characteristic	
Plate type (<i>no. [%] of implants</i>)	
Locking compression plate	59 (69)
Dynamic compression plate	23 (27)
Less invasive stabilization system	3 (4)
Plate bent (<i>no. [%] of implants</i>)	
Yes	67 (79)
No	18 (21)
Bending location (<i>no. [%] of implants</i>)	
Proximal	17 (20)
Distal	45 (53)
Both	5 (6)
Mean distance from plate to distal femoral physis (range) (<i>mm</i>)	35 (-5 to 191)