



Fig. E1-A
The INTERTAN nail was short or long.



Fig. E1-B
The sliding hip screw comes in different lengths, and is used with or without a trochanteric stabilizing plate.

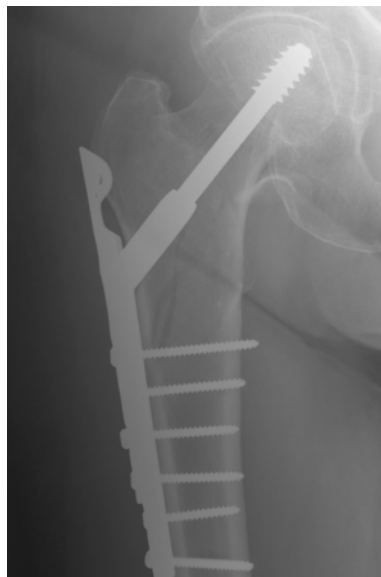


Fig. E1-C
The trochanteric stabilizing plate was either an integrated part of the sliding hip screw or a separate plate added onto the sliding hip screw.

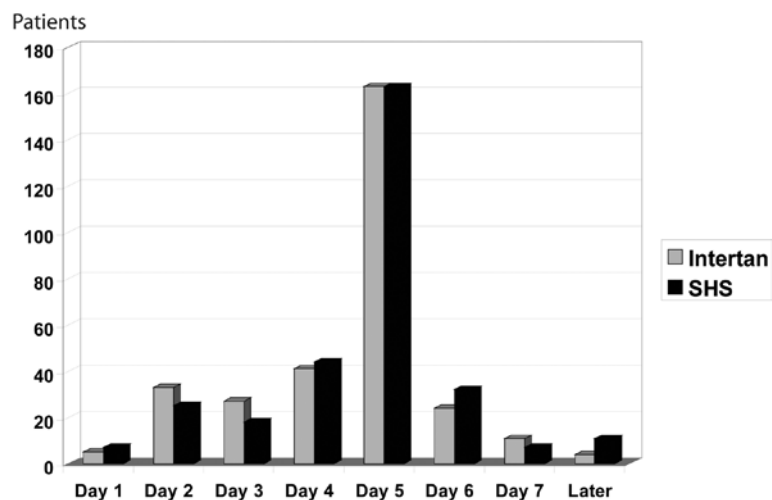


Fig. E2
Time distribution of the evaluations for early postoperative pain and performance of the timed Up & Go test. Sixty-nine patients were not evaluated either with the timed Up and Go test or with the VAS pain scores. SHS = sliding-hip-screw group.

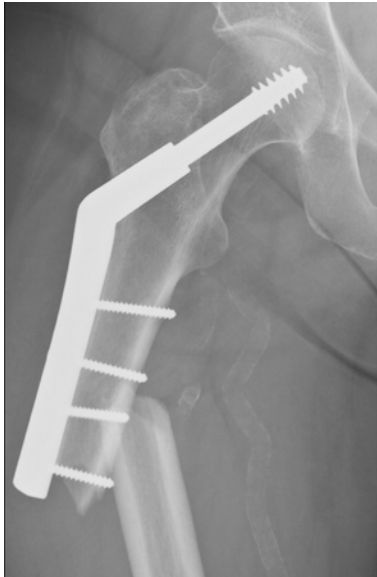


Fig. E3-A



Fig. E3-B

Figs. E3-A and E3-B Postoperative femoral fractures included one femoral fracture in the sliding-hip-screw group and five fractures in the INTERTAN group (four associated with short nails and one associated with a long nail). **Fig. E3-A** A sliding hip screw with a periprosthetic fracture at the level of the distal screw. **Fig. E3-B** A short INTERTAN nail with a periprosthetic fracture at the tip of the nail.



Fig. E4-A



Fig. E4-B

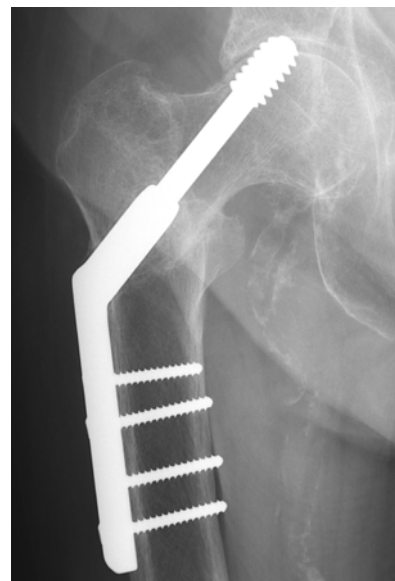


Fig. E4-C

Figs. E4-A, E4-B, and E4-C There were thirteen cases of cutout/cut-through in the INTERTAN group and eleven cases of cutout in the sliding-hip-screw group. **Fig. E4-A** A short INTERTAN nail with cutout in the femoral head. **Fig. E4-B** A short INTERTAN nail with cutout in the femoral head and migration of the proximal lag screw into the acetabulum. **Fig. E4-C** A sliding hip screw with a cutout in the femoral head.

TABLE E-1 Operative and Postoperative Data in the Two Treatment Groups*

	INTERTAN* (N = 341)	Sliding Hip Screw* (N = 343)	P Value†
Op. data			
Preop. delay (n = 666)			0.65‡
<24 hr	181 (54.0%)	167 (50.5%)	
24-48 hr	109 (32.5%)	116 (35.0%)	
>48 hr	45 (13.4%)	48 (14.5%)	
Anesthesia (n = 667)			0.82‡
Spinal	304 (90.7%)	303 (91.3%)	
General	31 (9.3%)	29 (8.7%)	
Surgeon's experience (n = 664)			0.02‡
Resident <2 yr	70 (21.4%)	101 (30.0%)	
Resident >2 yr	183 (56.0%)	184 (54.6%)	
Resident assisted by consultant	34 (10.4%)	20 (5.9%)	
Consultant	40 (12.2%)	32 (9.5%)	
Duration of surgery (n = 661) (min)			
All fractures	54.7 (n = 331)	55.6 (n = 330)	0.69§
AO/OTA type A1	46.1 (n = 145)	44.0 (n = 133)	0.39§
AO/OTA type A2	57.1 (n = 112)	54.4 (n = 118)	0.44§
AO/OTA type A3 and subtrochanteric	67.8 (n = 74)	76.5 (n = 79)	0.10§
Long nail or sliding hip screw w/trochanteric stabilizing plate#			
AO/OTA type A1	8/149 (5%)	9/141 (6%)	
AO/OTA type A2	38/113 (34%)	39/122 (32%)	
AO/OTA type A3	44/70 (63%)	51/69 (74%)	
Subtrochanteric	7/7 (100%)	6/13 (46%)	
Total**	97/339 (29%)	105/345 (30%)	
Postop. data			
Transfusion (n = 663)	143 (43.1%)	171 (51.7%)	0.02‡
Mean est. external blood loss (n = 650) (mL)	183	263	<0.001§
Mean hemoglobin value (g/dL)			
Preop. (n = 660)	12.1	12.0	0.81§
Lowest postop. (n = 650)	9.2	9.1	0.26§
Mean length of postop. hospital stay (n = 684) (days)	8.5	8.4	0.85§
Residence after discharge (n = 650)			0.81‡
Home	39 (11.9%)	47 (14.6%)	
Nursing home	190 (57.9%)	168 (52.2%)	
Rehab.	47 (14.3%)	47 (14.6%)	
Other	52 (15.9%)	60 (18.6%)	

*The values are given as the number of patients with the percentage in parentheses unless otherwise indicated. †Significant p values are in bold. ‡Pearson chi-square test. §Independent samples t test. #The use of different implants was based on the fracture classification and degree of osteoporosis. All hospitals received a guide describing when to use long nails or an additional trochanteric stabilizing plate, but this decision was finally left to the surgeon. **The actual implants used were not identical with the randomization code for twelve of the 684 patients (Fig. 1). Therefore, the numbers are slightly different compared with other (intention-to-treat) analyses.

TABLE E-2 Radiographic Findings

	INTERTAN*	Sliding Hip Screw*	P Value†
Postop. fracture reduction‡			0.25§
Good	147 (44%)	164 (48%)	
Acceptable	141 (43%)	143 (42%)	
Poor	44 (13%)	32 (9%)	
Total	332 (100%)	339 (100%)	
Shortening at 12 mo			0.007§
None	88 (49%)	111 (61%)	
<10 mm	71 (39%)	47 (26%)	
10-20 mm	11 (6%)	19 (11%)	
>20 mm	10 (6%)	4 (2%)	
Total	180 (100%)	181 (100%)	
Medialization at 12 mo			0.002§
<5 mm	153 (85%)	127 (71%)	
5-10 mm	18 (10%)	23 (13%)	
10 mm	9 (5%)	28 (16%)	
Total	180 (100%)	178 (100%)	
Radiographic fracture-healing at 12 mo			0.80§
Yes	154 (86%)	158 (87%)	
No	13 (7%)	14 (8%)	
Uncertain	13 (7%)	10 (6%)	
Mean postop. tip-apex distance (TAD)# (n = 655) (mm)	18	21	<0.001**
Mean femoral neck-shaft angle (deg)			
Postop. (n = 678)	131	138	<0.001**
12 mo (n = 361)	126	132	<0.001**

*The values are given as the number of patients with the percentage in parentheses unless otherwise indicated. †Significant p values are in bold. ‡The postoperative reduction was considered “good” with no more than 4 mm of displacement of any fracture fragment and normal or slight valgus alignment on the anteroposterior radiograph, and <20° of angulation on the lateral radiograph. Fractures that had either good alignment or no more than 4 mm of displacement, but not both, were rated as “acceptable.” Fractures that fulfilled neither criterion were categorized as “poor.” §Pearson chi-square test. #TAD = the sum of the distance from the (superior) lag screw to the apex of the femoral head on the frontal and lateral view, adjusted for magnification. **Independent samples t test.