



Fig. E-1

The Endoklinik classification of femoral bone stock loss. Grade 1 = Radiolucent lines limited to the proximal half of the cement mantle in combination with clinical signs of loosening. Grade 2 = Complete radiolucent lines around the cement mantle with endosteal erosion around the proximal part of the cement mantle resulting in widening of the medullary cavity. Grade 3 = Widening of the medullary cavity around the loose implant due to endosteal erosion and expansion of the femur. Grade 4 = Gross destruction of the proximal third of the femur with involvement of the middle third, precluding the insertion of even a long-stemmed prosthesis.

TABLE E-1. Published Reports on Femoral Bone Impaction Grafting with a Mean or a Minimal Follow-up of Five or More Years

	Type of prostheses	No. of hips (No. of pts)	Follow-up	Survival with femoral fracture as end point	Subsidence 5 mm or more	Survival with aseptic loosening as end point
Mikhail et al., 1999 ¹³	Polished, tapered	43 (40 pts)	5-7 years	95% at 5-7 years	19% more than 5 mm	100% at 5-7 years
van Biezen et al., 2000 ¹⁴	Polished, tapered	21 (21 pts)	3-7 years	90% at 5 years	33% 5 mm or more	100% at 5 years
Kligman et al., 2002 ¹⁵	Polished, tapered	50 (50 pts)	3-7 years	N.A.	22% more than 5	95% at 5.1 years
Ullmark et al., 2002 ¹⁶	Non-polished, not tapered	57 (56 pts)	4-7 years	93% at 5.3 years	0% more than 5 mm	96% at 5.3 years
Halliday et al., 2003 ¹⁷	Polished, tapered	226 (207 pts)	5-13 years	96% at 11 years	14% more than 5 mm	99% at 11 years
Cabanela et al., 2003 ¹⁸	Polished, tapered	57 (54 pts)	3-9 years	89% at 6.3 years	4% between 4 and 6 mm	100% at 6.3 years
This study	Polished, tapered	33 (33 pts)	8-13 years	91% at 9 years	15% more than 5 mm	100% at 9 years