

TABLE E-1 Association of Osteolysis with the Six End Points

End Point	Femoral Osteolysis		Acetabular Osteolysis
	Zones I and VII	Zones II-VI	
Revision for any reason	P = 0.006	P = 0.26	P < 0.0001
Revision due to aseptic loosening	P = 0.001	P = 0.12	P < 0.0001
Revision due to aseptic femoral loosening	P = 0.046	P = 0.11	P = 0.001
Femoral loosening	P = 0.091	P = 0.0002	P = 0.026
Revision due to aseptic acetabular loosening	P = 0.003	P = 0.07	P < 0.0001
Acetabular loosening	P = 0.003	P = 0.67	P < 0.0001

TABLE E-2 Correlates with Wear

	Linear Wear	Volumetric Wear
Age at surgery	P < 0.0001	P < 0.0001
Height	P = 0.0015	P = 0.0015
Weight	P = 0.001	P = 0.0027
Gender (greater wear in males)	P < 0.0001	P < 0.0001
Diagnosis (osteoarthritis vs non-osteoarthritis)	P = 0.988	P = 0.955
Revision for any reason	P < 0.0001	P < 0.0001
Revision due to aseptic loosening	P < 0.0001	P < 0.0001
Revision due to aseptic femoral loosening	P = 0.022	P = 0.014
Femoral loosening	P = 0.061	P = 0.076
Revision due to aseptic acetabular loosening	P < 0.0001	P < 0.0001
Acetabular loosening	P < 0.0001	P < 0.0001

Figs. E1 through E5

Survivorship analyses for the matte-finish Iowa total hip arthroplasty at nineteen to twenty years, with use of various end points.

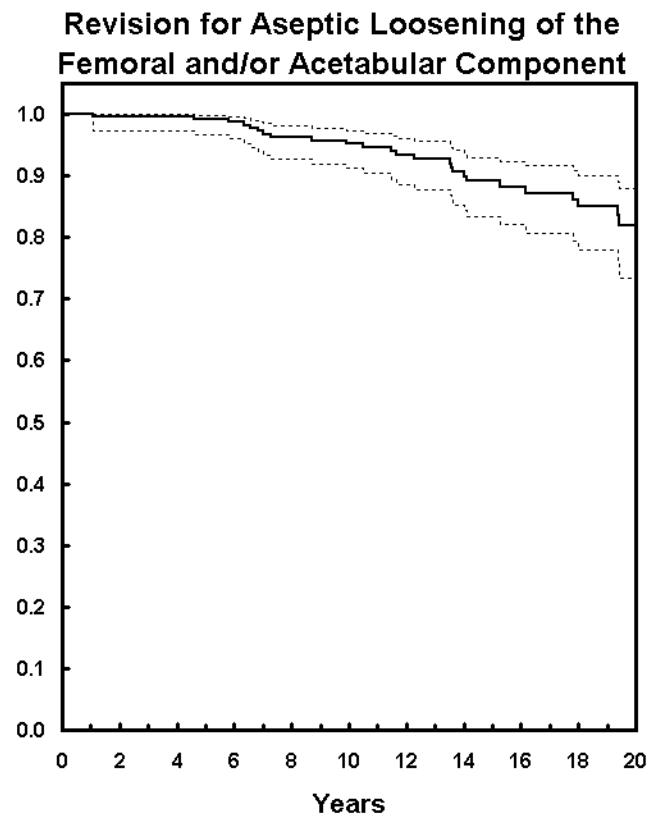


Fig. E-1

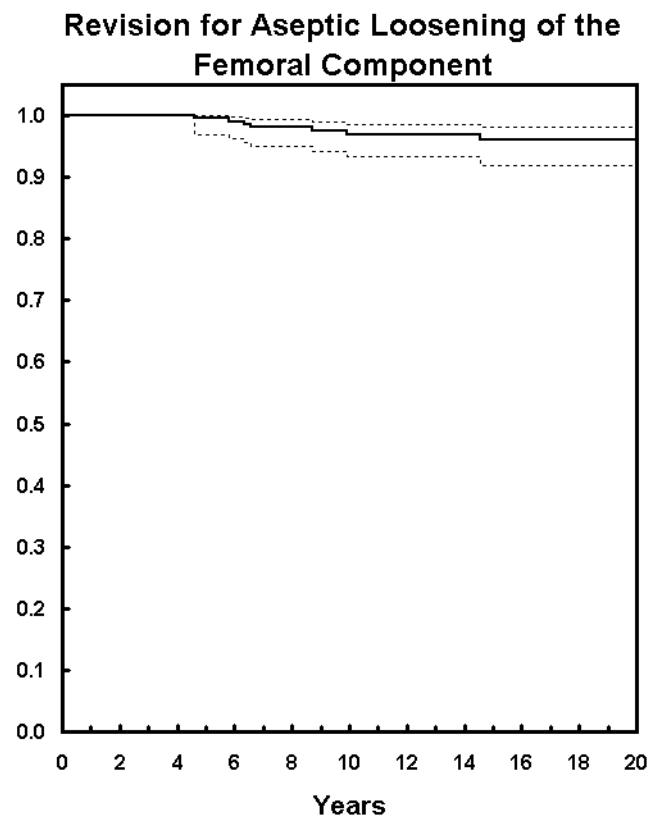


Fig. E-2

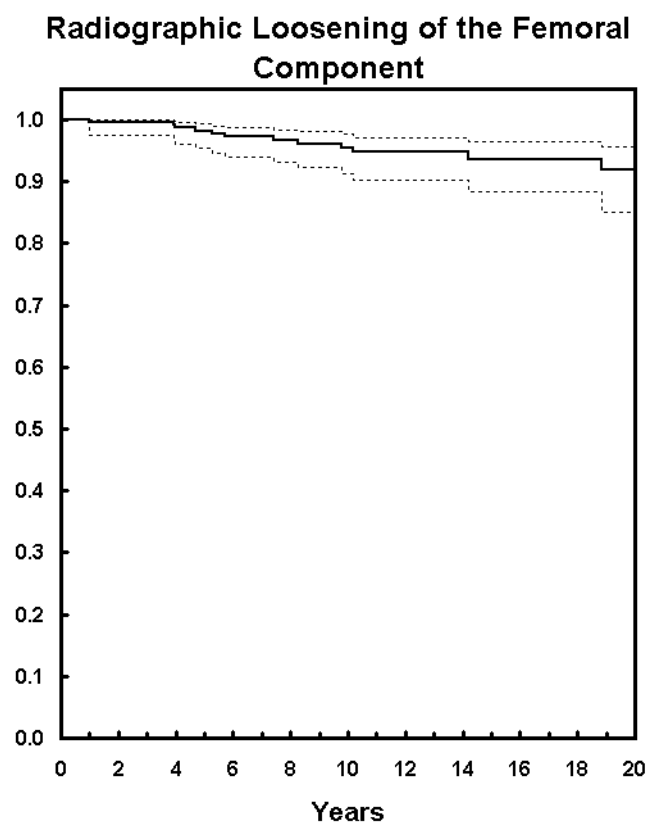


Fig. E-3

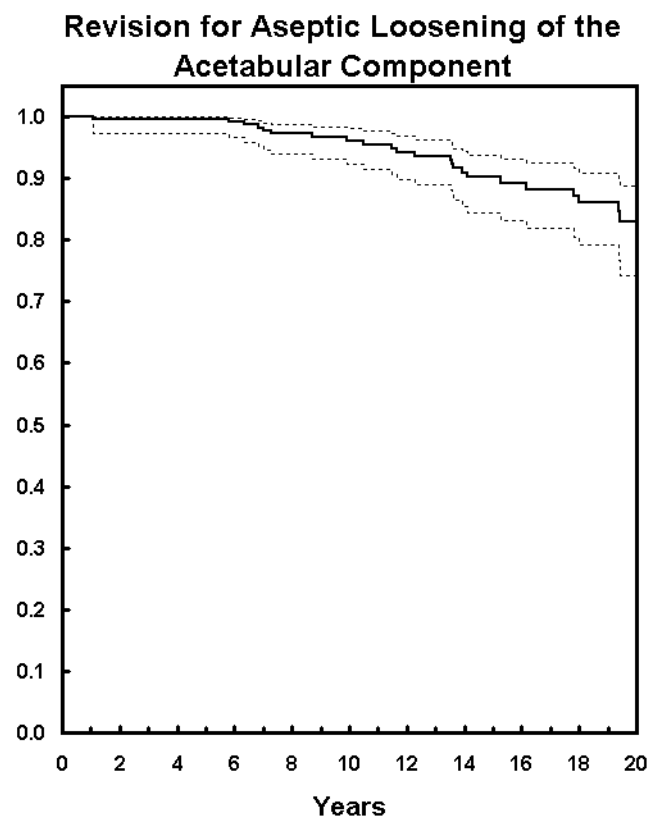


Fig. E-4

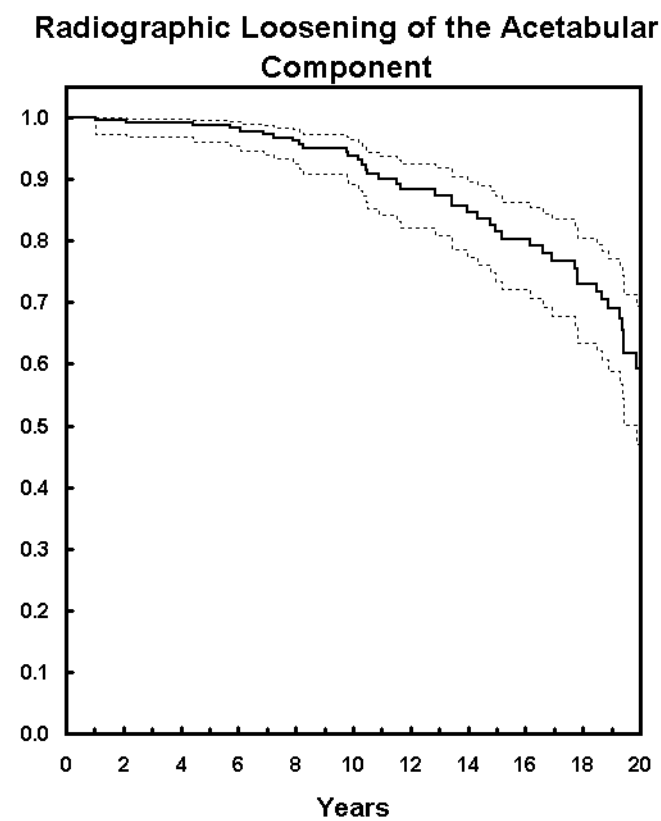


Fig. E-5

Figs. E6-A through E6-F

Survivorship analyses for the matte-finish Iowa total hip arthroplasty at nineteen to twenty years, with a comparison of age at the time of surgery (fifty years and under compared with over fifty).

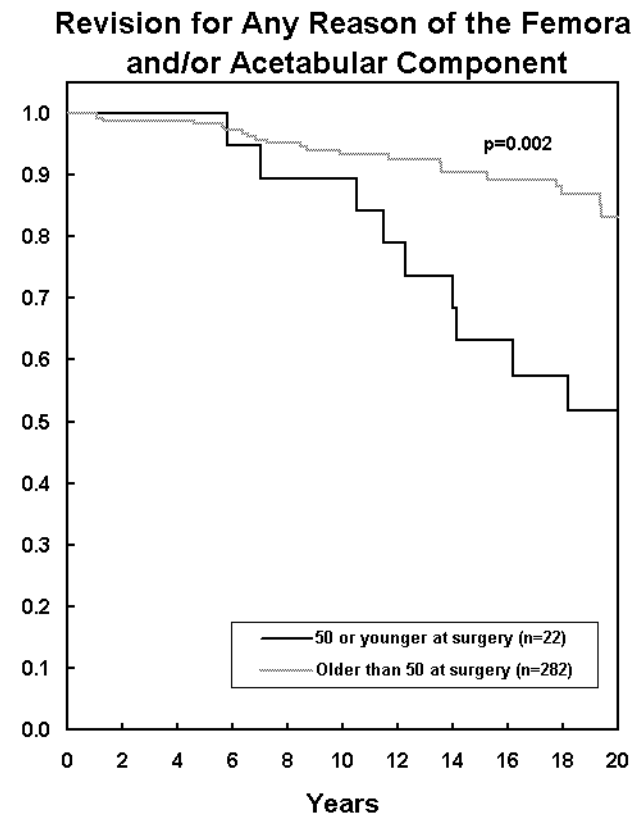


Fig. E6-A

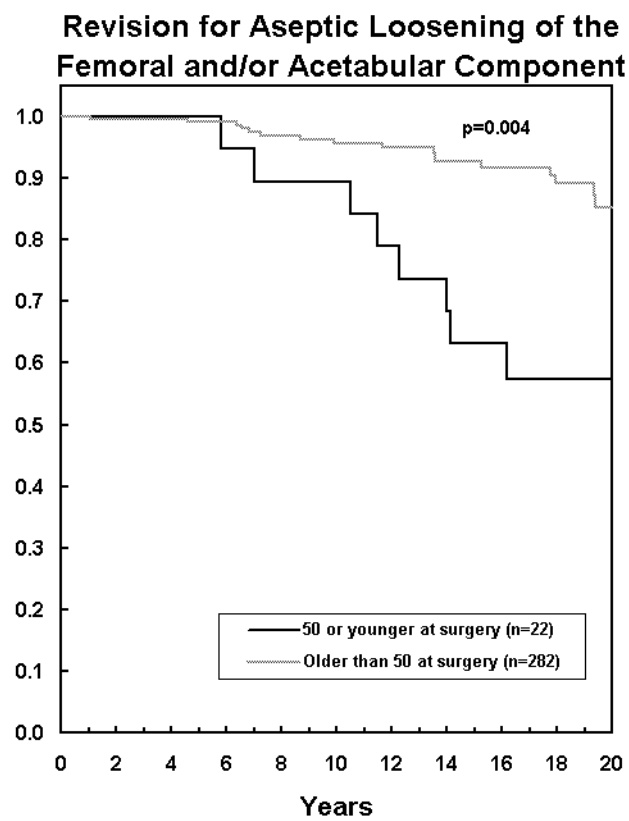


Fig. E6-B

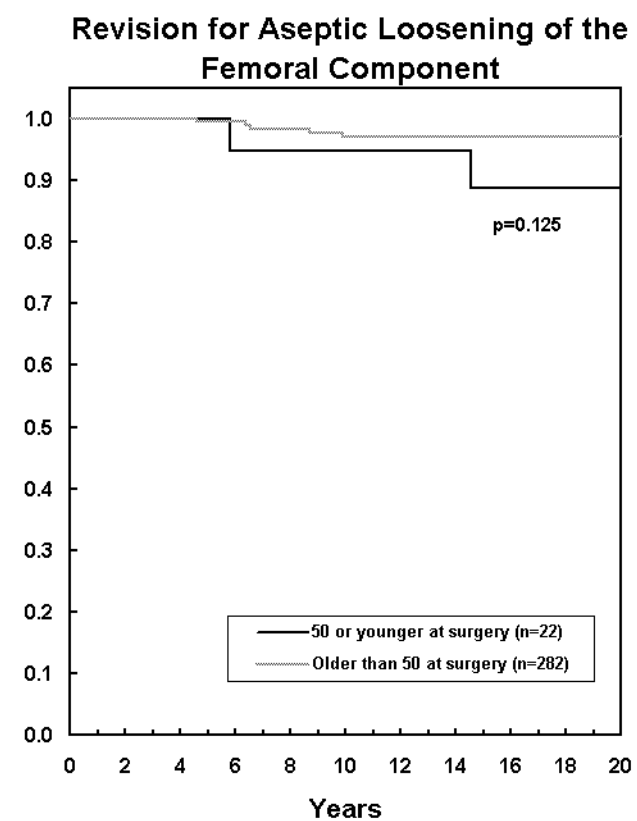


Fig. E6-C

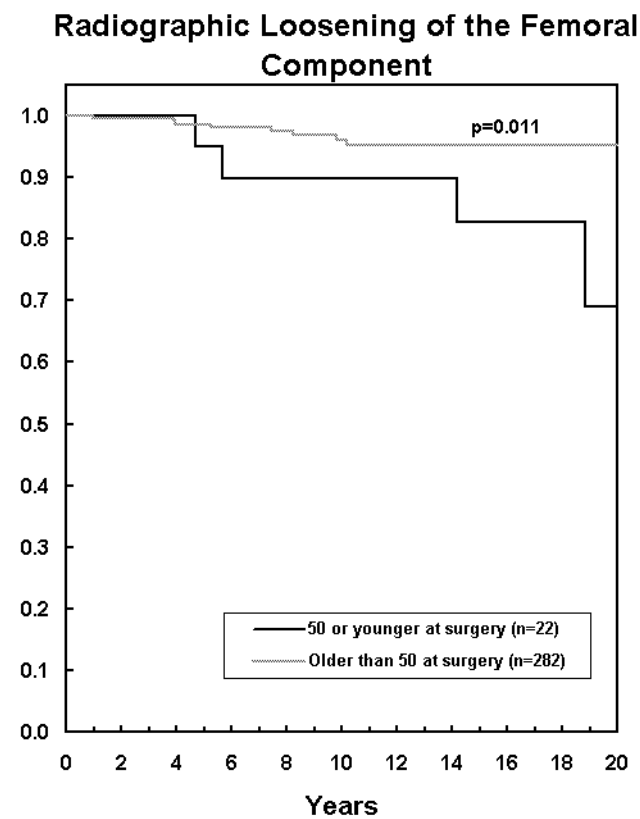


Fig. E6-D

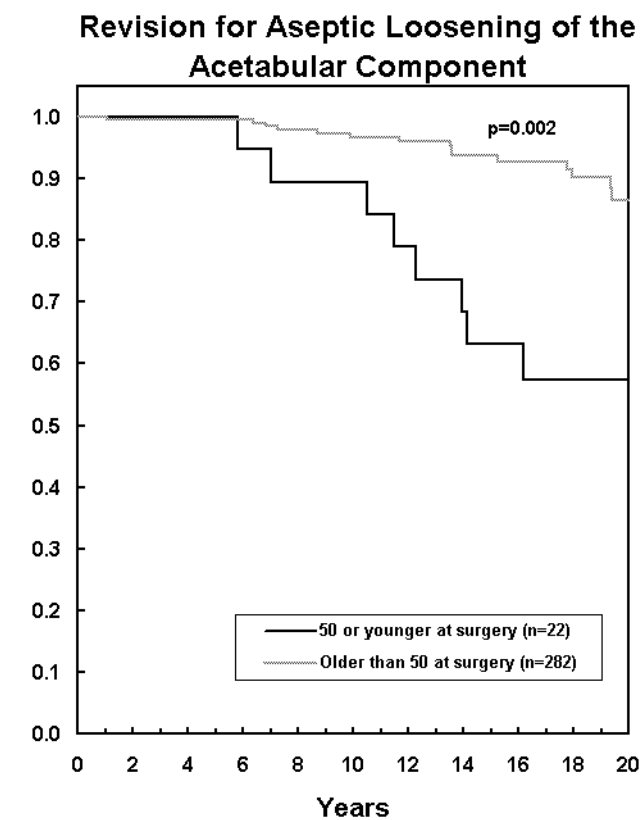


Fig. E6-E

Radiographic Loosening of the Acetabular Component

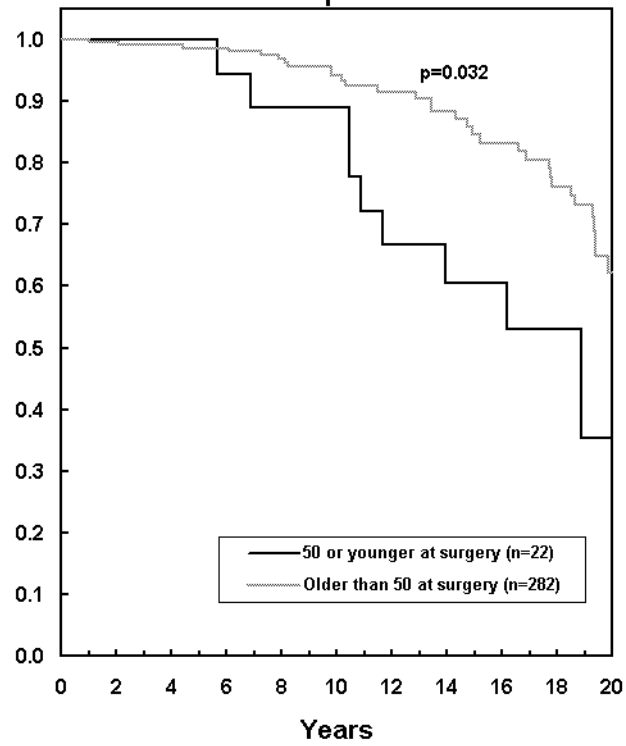


Fig. E6-F

Figs. E7-A through E7-F

Survivorship analyses for the matte-finish Iowa total hip arthroplasty at nineteen to twenty years, with a comparison of the diagnosis at time of surgery (osteoarthritis or another diagnosis).

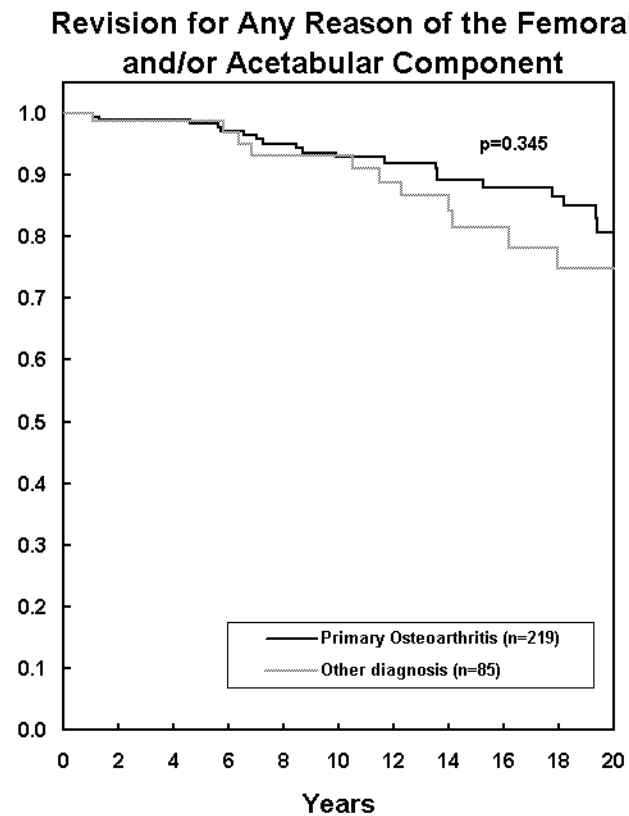


Fig. E7-A

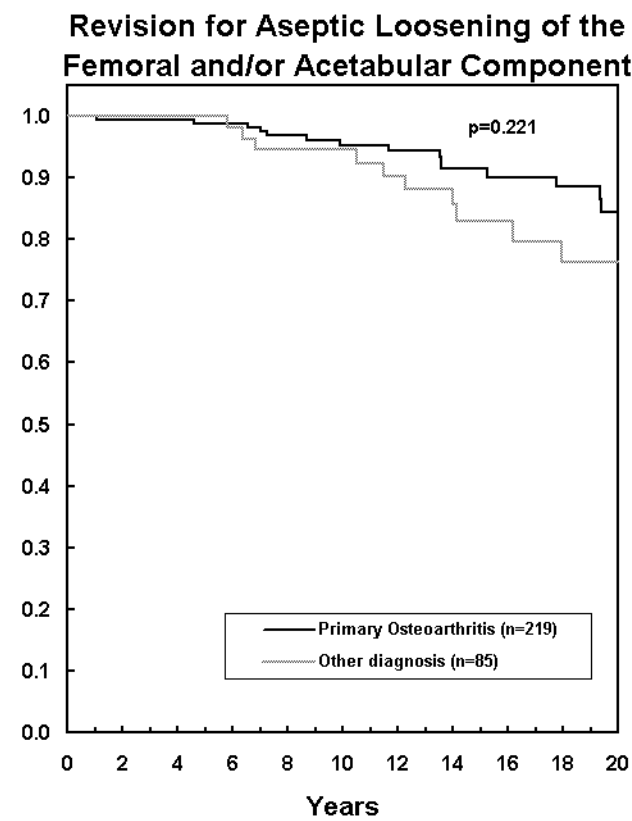


Fig. E7-B

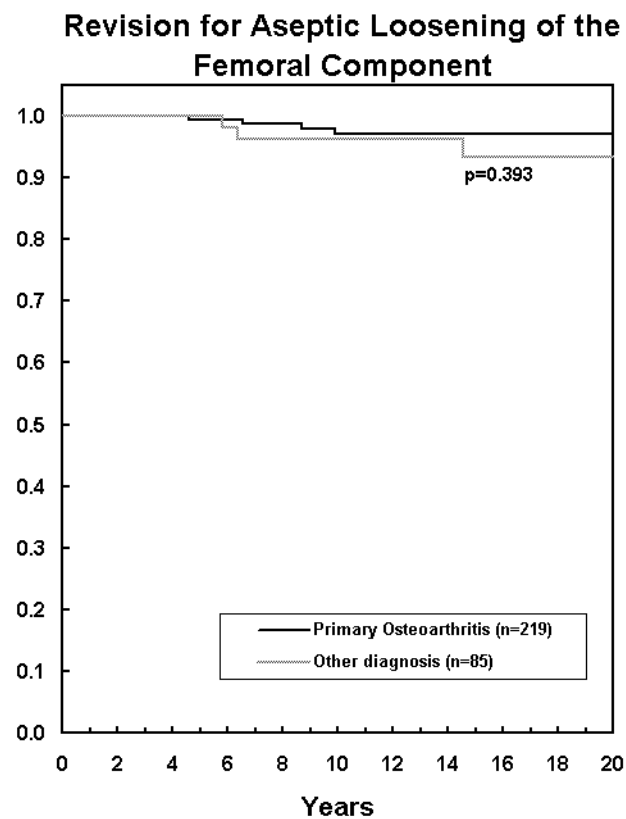


Fig. E7-C

Radiographic Loosening of the Femoral Component

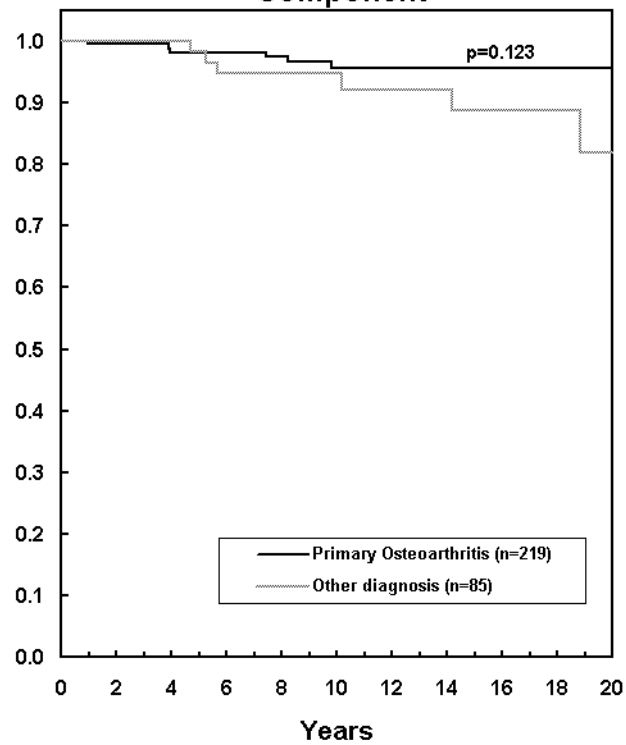


Fig. E7-D

Revision for Aseptic Loosening of the Acetabular Component

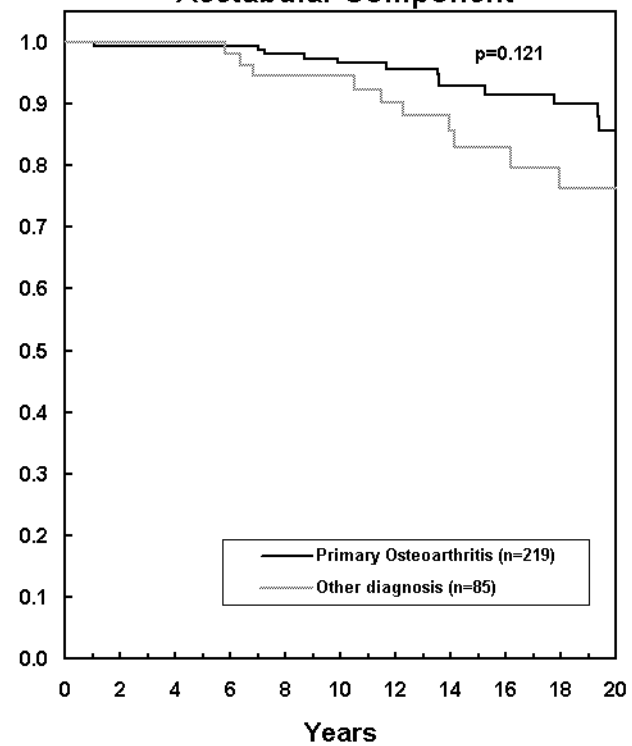


Fig. E7-E

Radiographic Loosening of the Acetabular Component

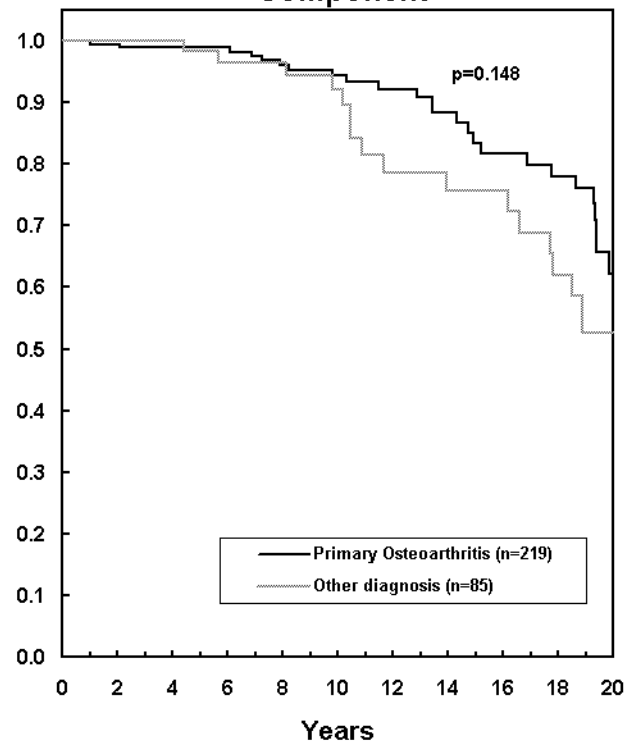


Fig. E7-F

Figs. E8-A through E8-F

Survivorship analyses for the matte-finish Iowa total hip arthroplasty at nineteen to twenty years compared with that of the Charnley total hip replacement at a minimum of twenty years.

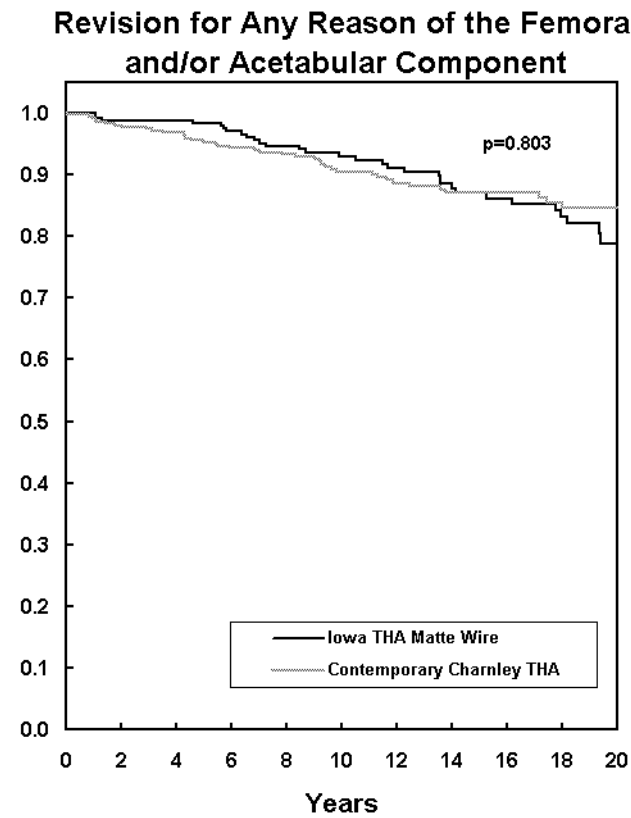


Fig. E8-A

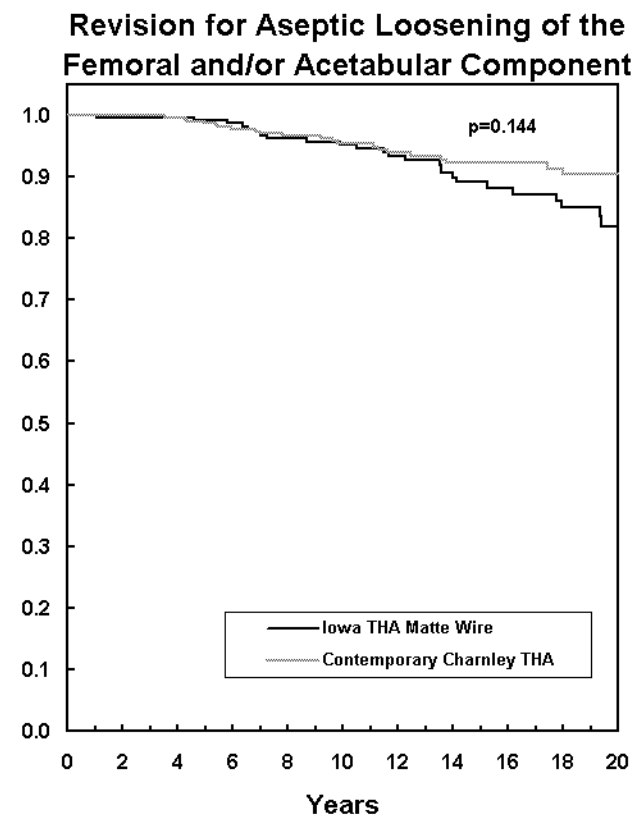


Fig. E8-B

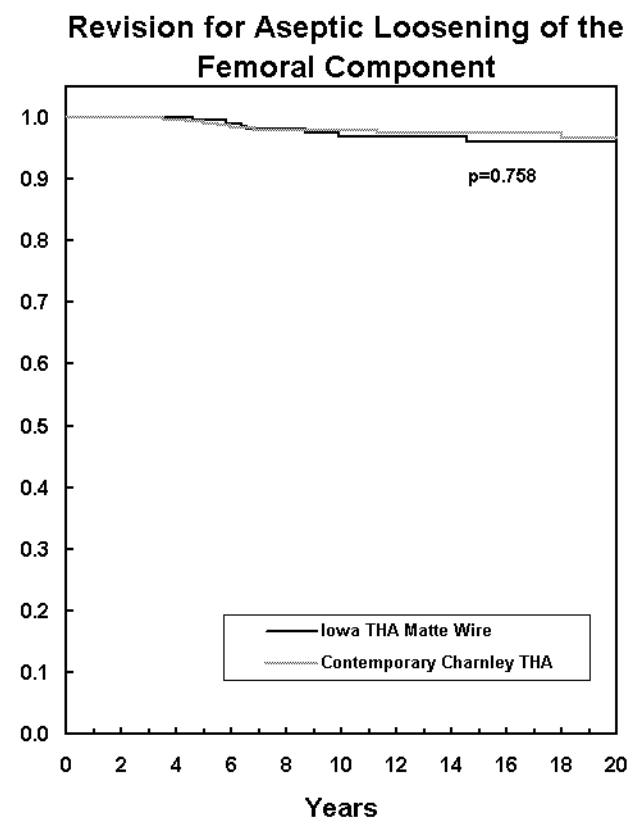


Fig. E8-C

Radiographic Loosening of the Femoral Component

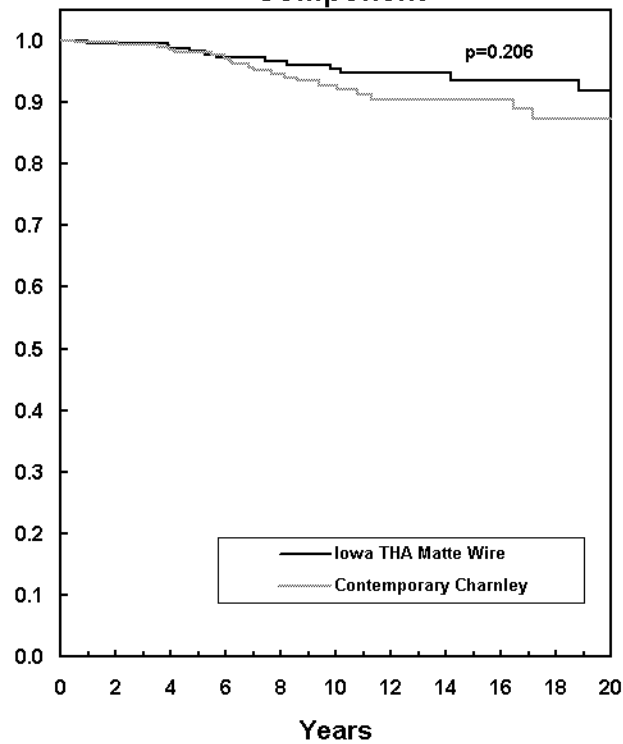


Fig. E8-D

Revision for Aseptic Loosening of the Acetabular Component

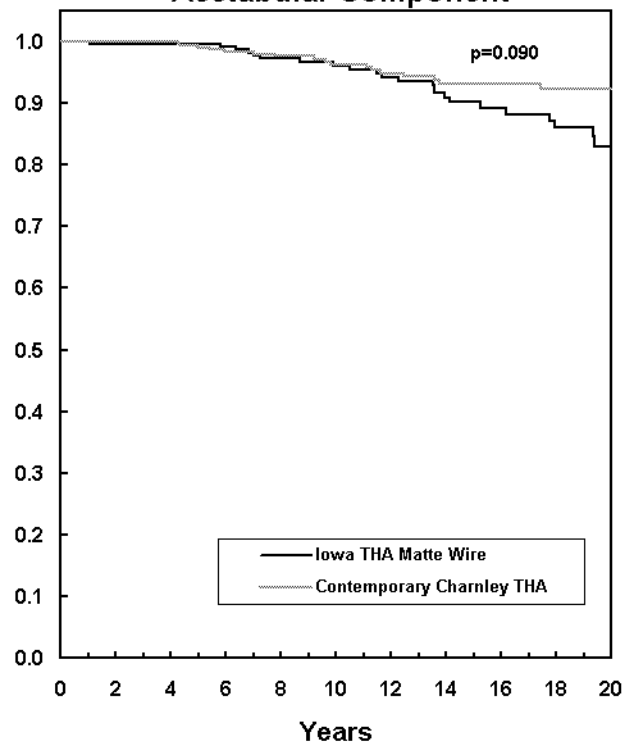


Fig. E8-E

Radiographic Loosening of the Acetabular Component

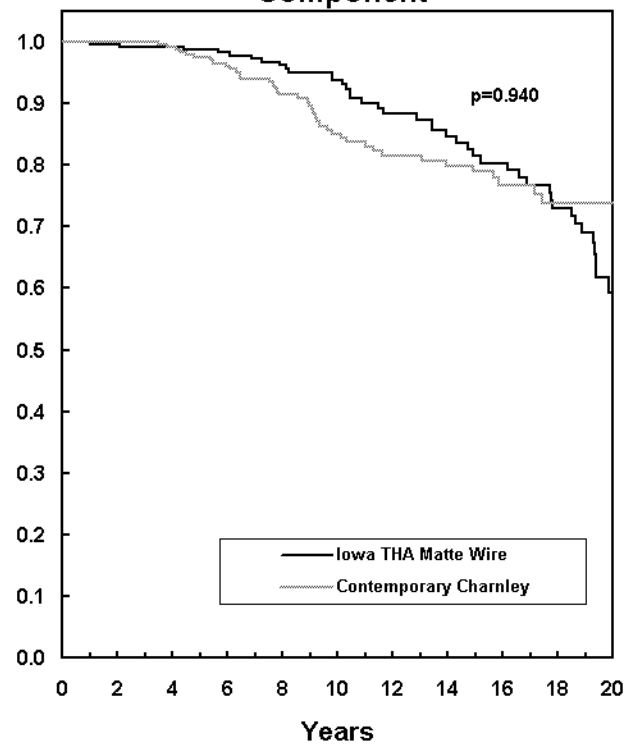


Fig. E8-F