

TABLE E1**CORRELATES OF WOMAC PHYSICAL FUNCTION SUBSCORE**

| Variable or Outcome | p value |
|------------------------------------------------|---------------|
| Lives independently with family or assistance | 0.003* |
| Radiographic loosening of acetabular component | 0.010* |
| Weight | 0.042* |
| Rate of linear wear | 0.137 |
| Revision for acetabular loosening | 0.139 |
| Gender | 0.144 |
| Rate of volumetric wear | 0.167 |
| Age at surgery | 0.509 |
| Revision for femoral loosening | 0.663 |
| Osteolysis | 0.692 |
| Radiographic loosening of femoral component | 0.725 |
| Height | 0.762 |

*Denotes significance, $p < 0.05$.

TABLE E2**CORRELATES OF LINEAR ACETABULAR WEAR**

| Variable or Outcome | p value |
|------------------------------------------------|---------------|
| Osteolysis | 0.002* |
| WOMAC physical function subscore | 0.137 |
| Gender | 0.140 |
| Living situation | 0.261 |
| WOMAC stiffness subscore | 0.344 |
| WOMAC pain subscore | 0.380 |
| Radiographic loosening of acetabular component | 0.463 |
| Revision for acetabular loosening | 0.497 |
| Weight | 0.508 |
| Postoperative dislocation | 0.544 |
| Age at surgery | 0.555 |
| Revision for femoral loosening | 0.637 |
| Radiographic loosening of femoral component | 0.673 |
| Height | 0.929 |

*Denotes significance, $p < 0.05$.

TABLE E3**ASSOCIATION OF CEMENT GRADE WITH REVISION FOR FEMORAL LOOSENING – LIVING PATIENTS**

| Cement Grade | N | Revised for femoral loosening |
|-------------------|-----------|-------------------------------|
| A | 13 (25%) | 0 of 13 (0%) |
| B | 23 (44%) | 1 of 23 (4%) |
| C1 | 4 (8%) | 1 of 4 (25%) |
| C2 | 12 (23%) | 3 of 12 (25%) |
| Fisher exact test | p = 0.084 | |

Any Revision

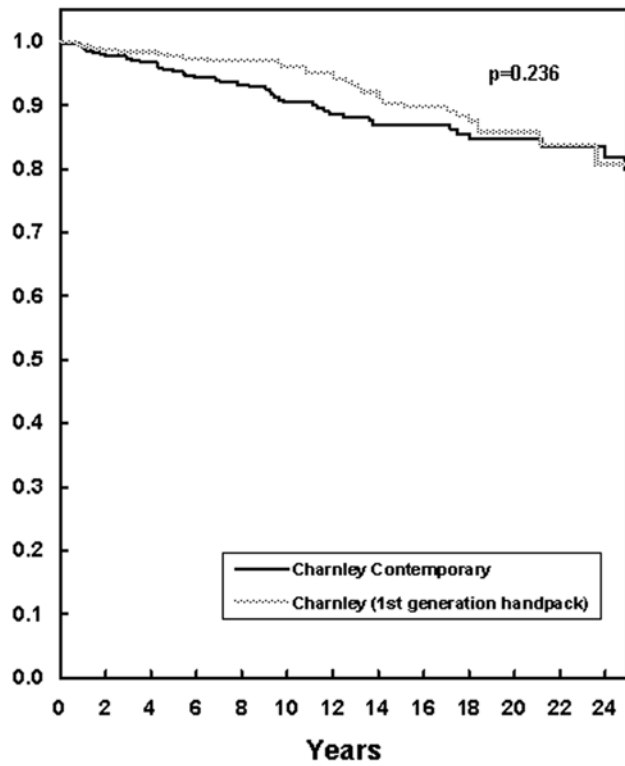


Fig. E-1A

Revision for Aseptic Loosening

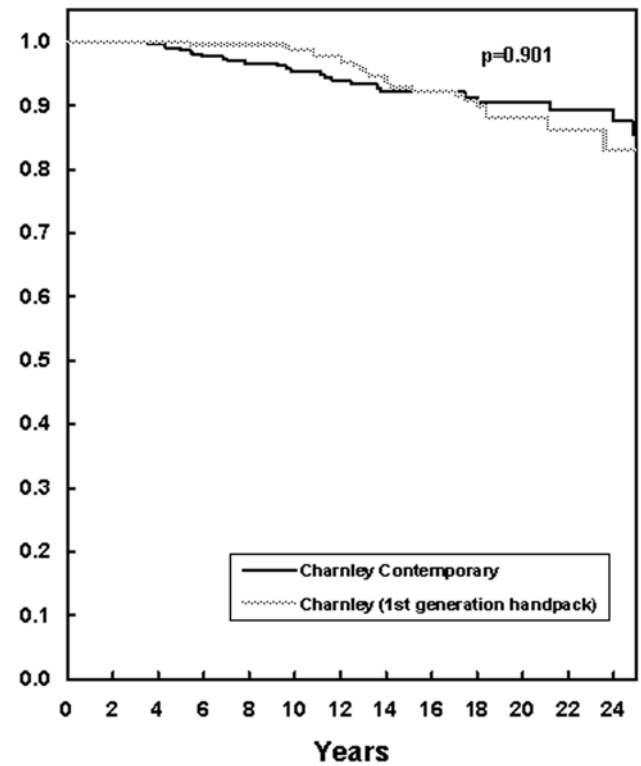


Fig. E-1B

Figs. E1-A through E1-F Survivorship curves, determined with the Kaplan-Meier method¹⁴, for the hips treated with the contemporary cementing technique and the hips treated with the hand-packing cementing technique.

Revision for Aseptic Acetabular Loosening

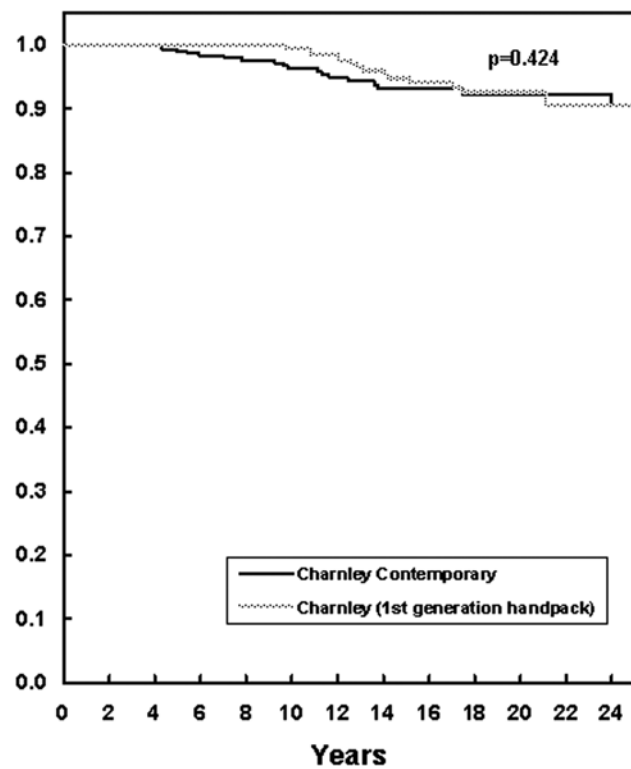


Fig. E-1C

Revision for Aseptic Femoral Loosening

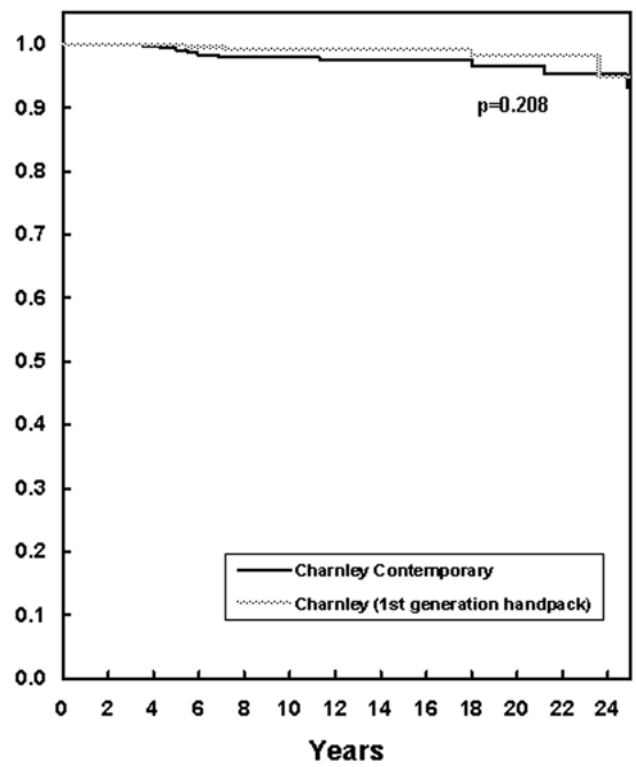


Fig. E-1D

Acetabular Loosening

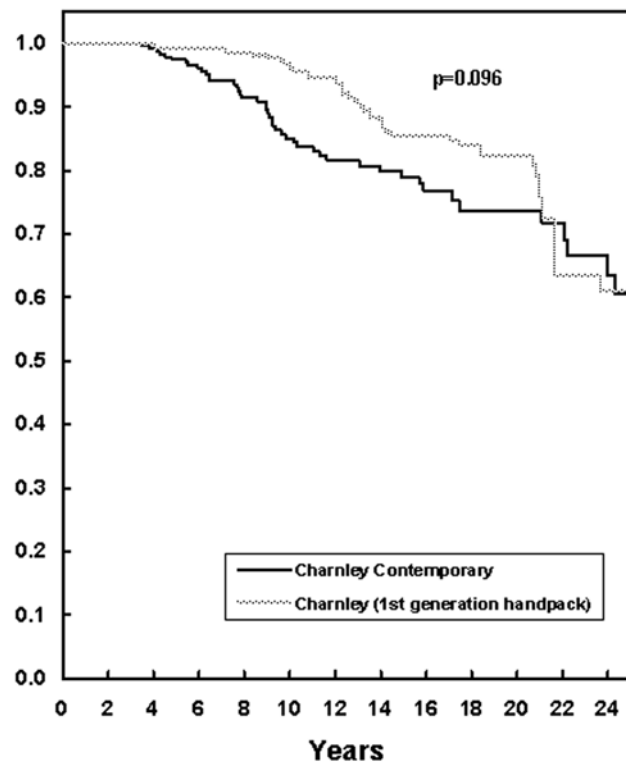


Fig. E-1E

Femoral Loosening

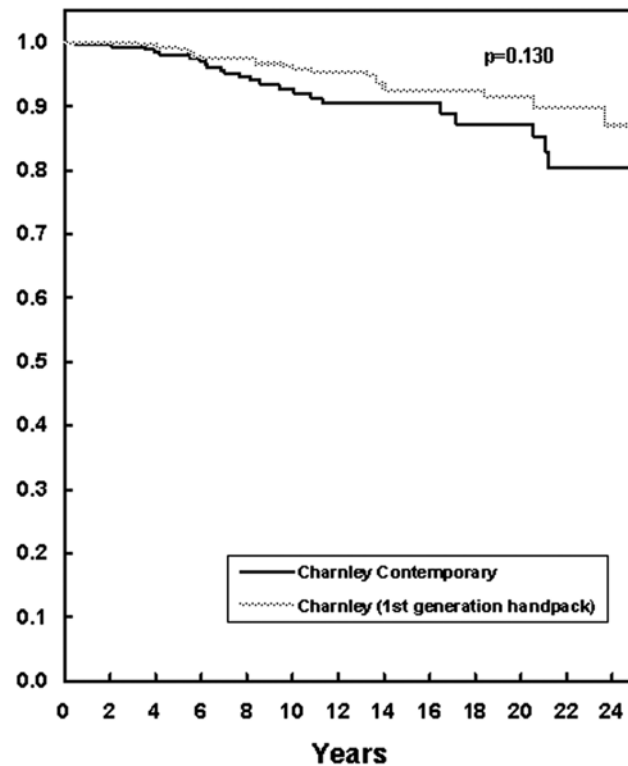


Fig. E-1F

Any Revision

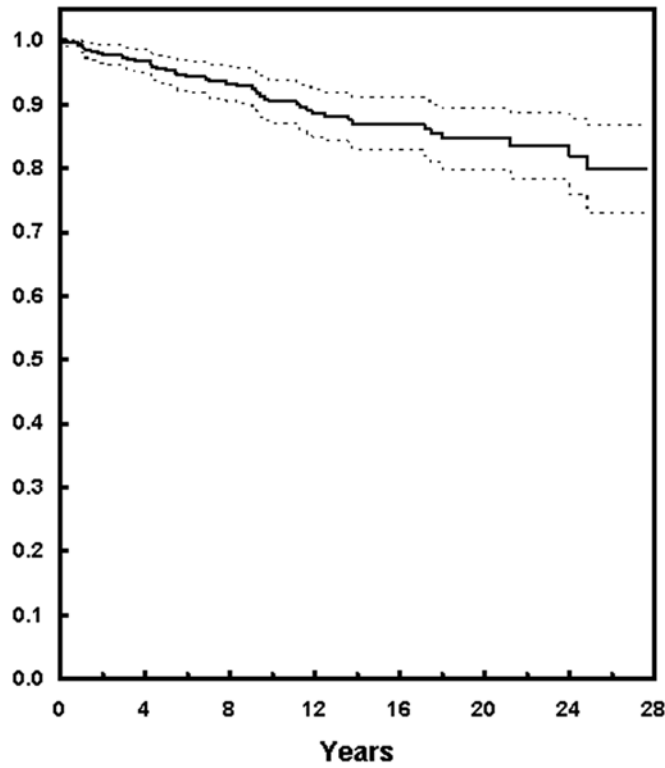


Fig. E-2A

Revision for Aseptic Loosening

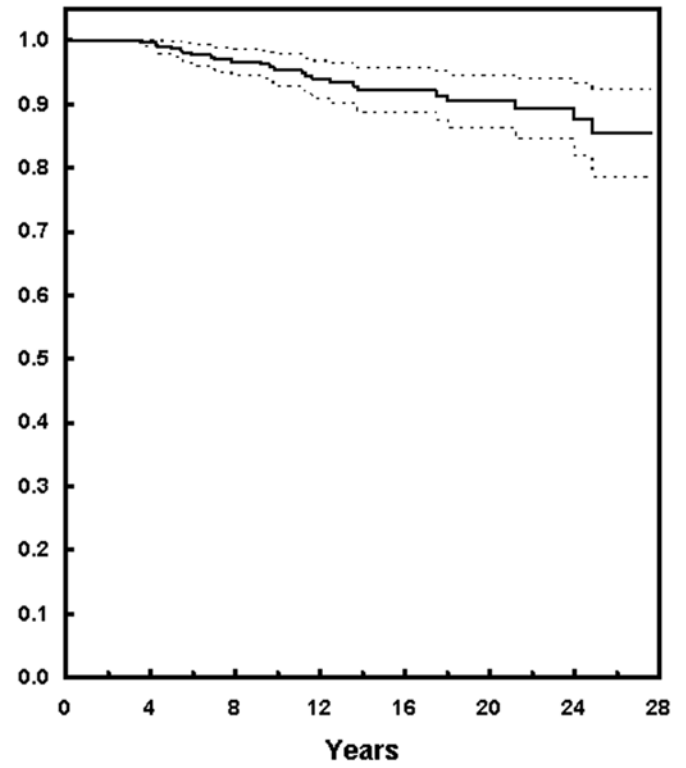


Fig. E-2B

Figs. E2-A through E2-F Survivorship curves (bold lines) and 95% confidence intervals (dotted lines), determined with the Kaplan-Meier method¹⁴, for the hips treated with the contemporary cementing technique.

Revision for Aseptic Acetabular Loosening

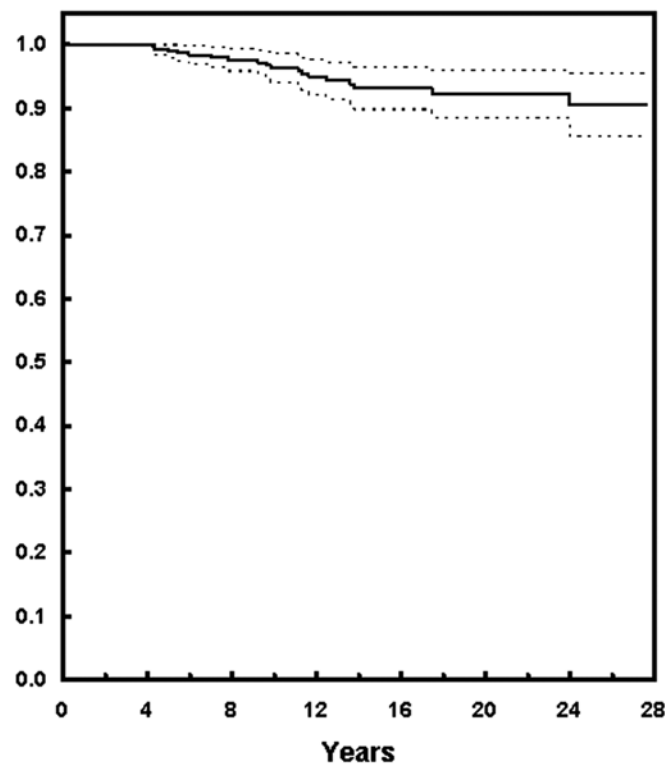


Fig. E-2C

Revision for Aseptic Femoral Loosening

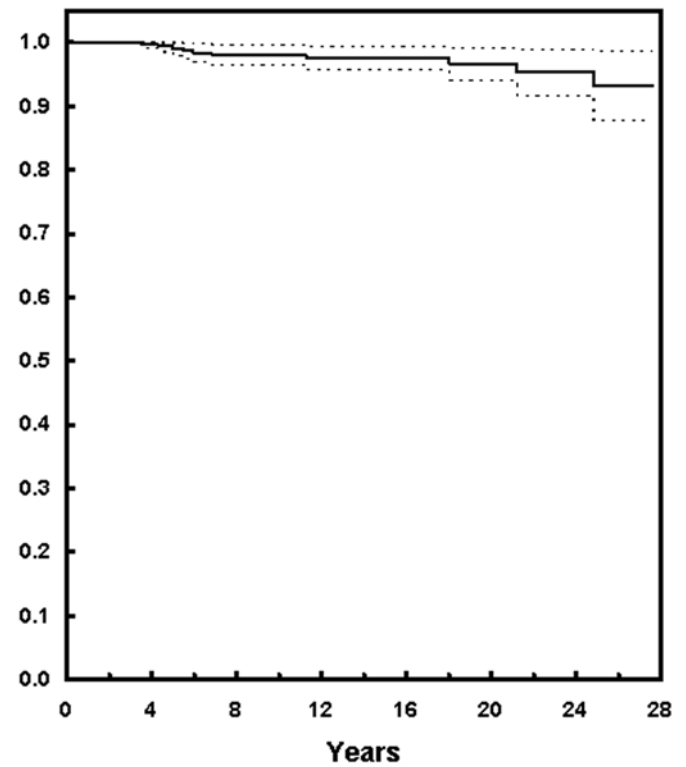


Fig. E-2D

Acetabular Radiographic Loosening

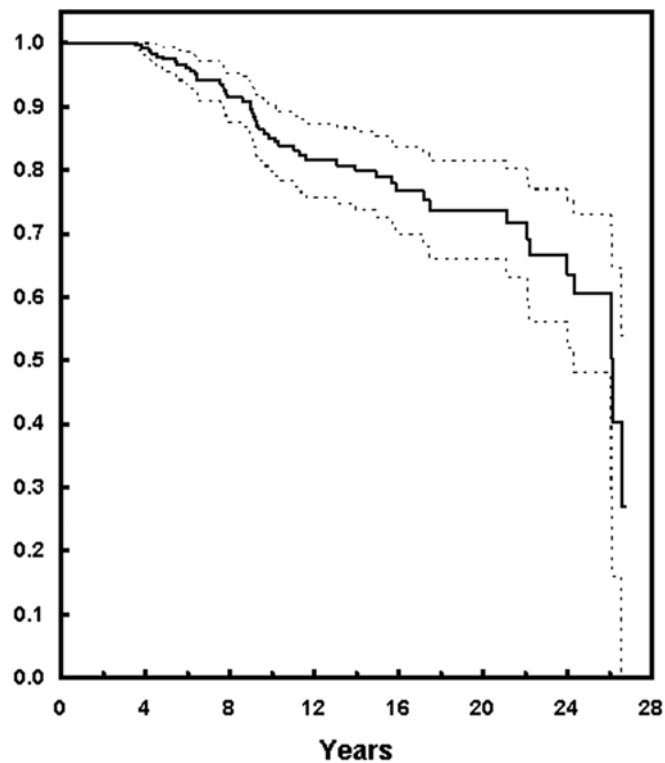


Fig. E-2E

Femoral Radiographic Loosening

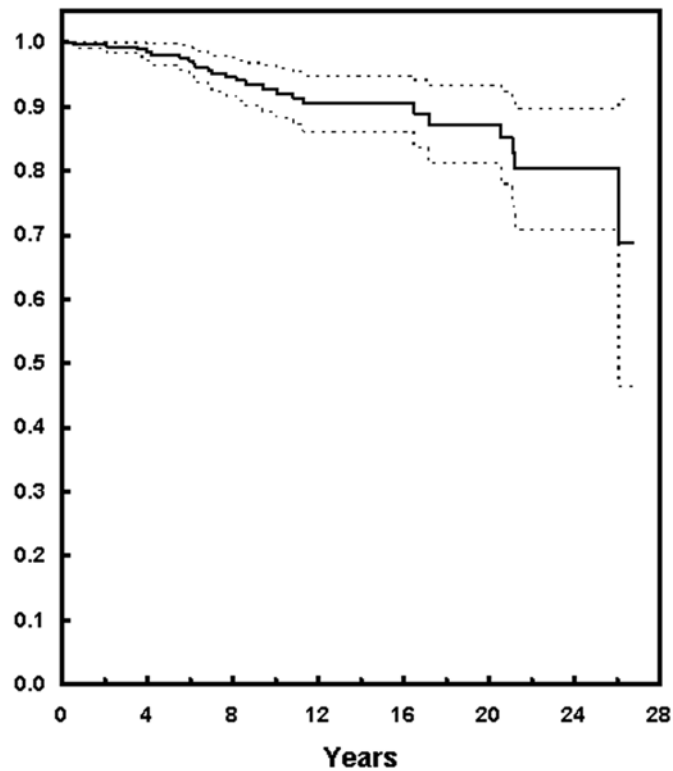


Fig. E-2F