

Paper #26

20-Year Results of Uncemented Jumbo Cups for Revision Total Hip Arthroplasty

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Introduction: Uncemented jumbo cups are the most common method of acetabular revision because they are technically straightforward and provide good mid-term results. Because this method is common and because jumbo cups do not provide notable bone stock restoration, understanding long-term survival is essential. The hypothesis of this study was that the 20-year results of uncemented jumbo cups would show good clinical outcomes, radiographic results, and survivorship.

Methods: We retrospectively reviewed 89 patients with uncemented jumbo cups implanted prior to 1993 with a single design (Harris-Galante). The median cup diameters were 68 mm in males and 62 mm in females. Harris hip scores (HHS), radiographic results and Kaplan-Meier survivorship curves were evaluated. Mean age was 74 years. Mean follow-up was 20 years.

Results: The mean postoperative HHS was 71, increased from 53 (p=0.001). A total of 5 jumbo cups were revised for aseptic loosening, 1 for infection, and 1 for recurrent dislocation. Eight liners were revised with metal shell retention: 6 during femoral revisions, 1 for wear, and 1 for recurrent dislocations. One unrevised patient had radiographic acetabular loosening, and 3 had radiographic acetabular osteolysis; none of these implants had evidence of migration or screw breakage. The 20-year survivorship free from aseptic loosening of the metal acetabular component was 88%, free from aseptic loosening of the metal acetabular component was 85%, and free from acetabular metal shell revision for any reason was 83%.

Conclusion: The 20 year results of uncemented jumbo acetabular components demonstrate acceptable clinical outcomes and radiographic stability. Concerns regarding the lack of bone restoration with jumbo cups are mitigated by the excellent long-term survivorship. These results justify the use of jumbo cups as a common method of acetabular revision and also leave room for improved results with highly porous versions, which may provide even better long-term fixation.