10-Year Survival of Acetabular Reinforcement Rings/Cages for Complex Hip Arthroplasty

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INTRODUCTION
Acetabular reinforcement rings/cages (AR) are commonly used for reconstruction of bone defects in complex hip arthroplasty. The aim of this study was to retrospectively investigate the 10-year survival rate of Ganz reinforcement rings and Burch-Schneider cages used in a single institution.

MATERIAL AND METHODS
Between September 1999 and June 2002 all ARs, implanted in one institution, were identified. All patients had regular clinical and radiographic follow-up and were included in this study. Their prospectively collected clinical and radiographic data was retrospectively analyzed. In case of death before the 10-year follow-up examination, patient's families or their general practitioner was contacted by telephone. The main outcome measures were survival of the ARs and kind of revision surgery.

RESULTS
The 10-year survival rate was 77.7%. At 10-year follow-up, 5/60 (8,3%) patients could not be located and had to be excluded therefore. 27/55 (49,1%) were dead, whereof 22 had no revision of the ARs before death (after a mean of 66 months; range: 0 - 123). Of the remaining 28/55 (50,9%) patients, 23 patients (24 ARs) had no revision of the ARs.

CONCLUSION
Despite the high mortality rate of this study's collective, ARs for complex primary or revision total hip arthroplasty provided predictable long term results.

LEVEL OF EVIDENCE
Clinical investigation.

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