

## **Minimum 15-Year Results of the Total Hip Arthroplasty for Childhood Sepsis**

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### **INTRODUCTION:**

To insert the regular-sized stem for a dysplastic femoral canal, controlled episiotomy of the femur can be performed. The purpose of this study was to determine the long-term (up to 19 years) results of total hip arthroplasties (THAs) using strut allografts combined with an episiotomy over an extensively porous-coated stem.

### **METHODS:**

We reviewed the results of 65 THAs in 63 patients (mean age, 42.1 years; range, 21-61 years) with dysplastic femur after childhood sepsis. The patients were treated using controlled episiotomy of the femur to widen the femoral canal, extensively porous-coated femoral stems and cortical strut allograft because primary axial or rotational stability could not be achieved without grafting. The mean follow up was 17.1 years (range, 15-19 years).

**RESULTS:** The mean Harris hip score at the final follow-up was  $85\pm 15$  points (range, 45-100 points). The mean Western Ontario and Mc Master Universities Osteoarthritis Index score was  $23\pm 15$  points (range, 13-53 points). The mean University of California, Los Angeles activity score was 6.3 points (range, 5-8 point). A Kaplan-Meier survivorship analysis at 19 years of follow up showed that the survival rate of the femoral components was 92% (95% CI, 89-98%), and it was 88% (95% CI, 85-92%) for the acetabular component with aseptic loosening or revision for any reason.

### **DISCUSSION AND CONCLUSION:**

We found good results in terms of longevity and functional outcome using this technique. Future mechanical studies, in addition to controlled clinical studies, are warranted.