

Hybrid Total Knee Arthroplasty: A 10 – 16 Year Follow-up Study
Jeffrey R. McLaughlin, MD

Introduction: Cementless femoral components are technically less difficult to implant than cemented components when small incisions are utilized during primary total knee arthroplasty. The purpose of this study was to evaluate the outcome, at a mean follow-up of 14 years (range 10 to 16 years), of a hybrid total knee replacement.

Methods: A cohort of 250 consecutive hybrid total knee arthroplasties in 218 patients was retrospectively reviewed. All surgeries were performed by a single surgeon between 1993 and 1995. A porous coated femoral component was implanted without cement, and the tibial and patellar component were inserted with cement. The outcome of all 250 total knee arthroplasties was determined in both living and deceased patients. Radiographic follow-up was obtained on 148 total knee arthroplasties (128 patients) at a mean of 14 years (range 10-16 years).

Results: Six (2%) of the 250 total knee arthroplasties required revision of all components. Three of these were revised for sepsis; two for polyethylene wear and instability, and one was revised for fracture. Ten additional re-operations were performed (4%). In three, a loose patellar component was revised, and seven knees required tibial bearing exchange for wear. Radiographically three patellar components were loose, two tibial components were possibly loose and no femoral components were loose.

Conclusion: In this series of 250 hybrid total knee arthroplasties, 98% of the uncemented femoral components, 97% of the cemented tibial components, and 95% of the patellar components remained in place and well fixed at 14 years. These results support the use of a hybrid total knee in patients requiring total knee arthroplasty.