

Long-term results of the total knee arthroplasty in the 15-year follow-up

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Abstract

From 1979 to 1984, 123 knees in 100 patients had Total Condylar Knee arthroplasty and were followed for 10 to 15 years. The first endpoint for survivorship was revision performed or recommended. The second included those knees with radiographic loosening. The life table analysis revealed a 95.12% clinical survivorship in both criteria for failure at 15 years. There were five failures: one for aseptic loosening of the tibial component; two for septic loosening six years after surgery and two for supracondylar fracture of the femur at 6th & 9th postoperative year respectively. If the two fracture cases were excluded, the survivorship was 97.03%. In the most recent follow-up, 15 patients with 17 knees were known deceased, 22 clinical evaluation. 71.3% were excellent; 21.2% were good; 1.2% were fair and 6.3% were poor. Excellent and good results account for 92.5%. The average range of motion was 103° . The average Hospital for Special Surgery knee score was 88.5 points. There were 54 knees available for more than 10 year roentgenographic follow up. The radiolucencies were noted in 48.1% of tibia, 5.6% of femur and 38.3% of patella. Only one tibia had aseptic loosening. On Merchant view, 44.7% of the patella tracked centrally but 34.0% of the patella showed wearing. Nevertheless, most of them caused no obvious patellofemoral symptoms. We concluded that the Total Condylar Knee prosthesis, which was with all-polyethylene tibia and patella, the femoral component suitable for both left and right side, all components were fixed with bone cement, was cheap and durable. Because of its simplicity, longevity and low cost, the Total Condylar prosthesis was favorable for the developing countries.