

Incidence and sequence of total hip and knee arthroplasties in patients undergoing operations of more than one joint.

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Introduction

Patients operated with total hip (THA) or knee joint arthroplasty (TKA) often undergo further operations of any of the other hip or knee joints. We analysed the incidence of multiple joint replacements and the detailed sequence concerning side and anatomic location.

Methods

We cross-matched the Swedish Hip and Knee Arthroplasty Registers for patients with primary osteoarthritis operated during 1992-2014. 177835 patients with THA (55.8% females, mean age 68,5 years) and 128162 patients with TKA (59,8% females, 69.4 years) were extracted (index operation).

Results

Predominantly right-sided index operations were performed (56,1%). 28,1% of the patients with index operation TKA left and 25,6% of the patients with index operation TKA right continued with a second operation of the same joint opposite side. Patients with index operation TKA left side, more frequently underwent joint replacement of any of the remaining joints.

The mean time to a second operation of any joint was 4.0 years after a THA and 3.1 years after a TKA as the index operation ($p < 0.001$). Decreasing age (HR 1.029), female sex (1.13), TKA at index operation (1.34) and left-sided index operation (1.12) were associated with a higher probability for at least one additional primary THA or TKA.

Discussion

During the observation-period, 25-33 % of the patients who received their first THA or TKA underwent at least one additional replacement of either the hip or the knee.

Conclusion

Knee osteoarthritis more frequently resulted in staged bilateral joint replacement than in patients who primarily were suffering from hip osteoarthritis.