

Differences in case mix and outcomes between Swiss and Scottish total knee arthroplasty patients

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PURPOSE

The clinical benefits of total knee arthroplasty (TKA) are well defined, but little attention has been paid to the cross-cultural variation. The objective of this study was to compare case mix and outcomes following TKA in Swiss and Scottish patients.

METHODS

Data from local registries at a Swiss and a Scottish orthopaedic hospital were extracted to evaluate: (A) age, sex, body mass index (BMI), self-reported health status (EQ-5D), and joint awareness (Forgotten Joint Score-12 (FJS-12)) at pre-surgery, (B) improvement in EQ-5D and FJS-12 scores from pre-surgery to 1 year, and (C) patient satisfaction at 1 year.

RESULTS

Data from 2075 Swiss and 994 Scottish TKA patients were available from the local registries. Swiss and Scottish patients differed in age (69.3 vs 68.8 years, $p = 0.046$), sex ratio (62.9% vs 56.9% women, $p = 0.002$) and BMI (29.6 vs 30.9, $p < 0.001$). At pre-surgery, FJS-12 scores were comparable (Swiss 12.1 vs Scottish 10.9, n.s.), but EQ-5D scores were better in Swiss patients (0.52 vs 0.40, $p < 0.001$). Post-operative improvement was greater in Switzerland for the FJS-12 (+ 55.1 vs + 32.2, $p < 0.001$), but not for the EQ-5D (+ 0.31 vs + 0.29, n.s.). The satisfaction rate was similar in both groups (88.3% vs 89.6%, n.s.).

CONCLUSION

Subtle cross-cultural variation was evident in TKA case-mix factors between the two countries. Satisfaction and improvement in health status were similar, while improvement in joint-specific outcome was notably greater in Switzerland. Understanding cross-cultural variability of the outcome has important implications when interpreting study and registry data from other countries and when counselling a patient in daily practice.

LEVEL OF EVIDENCE

Retrospective cohort, Level III.

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