AAHKS Surgical Techniques and Technologies Award

Patient Acceptable Symptom State After UKA: A Matched Pair Analysis in ACL Deficient & Intact Knees

Kevin D. Plancher, MD, MPH, Jasmine Brite, BS, Karen K. Briggs, MPH, Stephanie C. Petterson, PhD

Notes

Introduction: The Patient Acceptable Symptom State (PASS) is considered a level of well-being as measured by the patient. The aim of this study was to determine if the proportion of patients who achieved an acceptable level of function (PASS) after medial UKA was different based on the status of the ACL at the time of UKA.

Methods: Patients were included in the study who underwent UKA for isolated medial osteoarthritis. Exclusion criteria were ACL reconstruction within the past five years. The Knee injury Osteoarthritis Outcome Score function score (KOOS-ADL) was used as the primary outcome variable with a PASS of 87.5, as described for total knee arthroplasty (TKA). Patients completed all other KOOS subscales, Lysholm, WOMAC, and VR12. Failure was defined as conversion to TKA.

Results: Survivorship at 10 years was 97% in the ACL-deficient and ACL-intact groups. The median survival for the ACL-deficient group was 16.1 years [95% CI: 15.3-16.8] and 15.6 [95% CI: 14.8-16.361] (p=0.878) for the ACL-intact group. At an average of 9±3.5 years in the ACL-deficient group, 87% of patients reached PASS for KOOS ADL. In the ACL-intact group, at an average of 8.6±3 years follow-up, 85% reached PASS for KOOS ADL. There was no difference in the percentage of patients who reached PASS for all KOOS subscales and Lysholm between the ACL-deficient and ACL-intact groups.

Conclusion: PASS was achieved in 85% of all knees for KOOS ADL, similar to reports on TKA. Fixed-bearing medial non-robotically-assisted UKA resulted in 97% survival at 10 years in both the ACL-deficient knee and ACL-intact knee. The ACL-deficient cohort results were not significantly different from the ACL-intact knee for all measures of outcomes. Understanding PASS will allow better communication between surgeons and patients to improve of care for knees with single compartment arthritis.