Abstract Information

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Abstract Title

Please use title case where the first, last and important words are capitalized except for articles (a, an, the), conjunctions and prepositions.

Total Knee Arthroplasty after Anterior Cruciate Ligament Reconstruction: Not Just Another Routine Primary

I confirm that a senior author will attend the meeting and be available during the presentation to answer questions.

Yes

Has this information been presented or published at the national level?

No

FDA Status

AAHKS policy provides that "off-label" uses of a device or pharmaceutical may be described in the AAHKS CME activities so long as the "off-label" status of the device or pharmaceutical is also specifically disclosed (i.e. that the FDA has not approved labeling the device for the described purpose). Any device or pharmaceutical is being used "off-label" if the described use is not set forth on the product's approved label..

Documentation of FDA status for uses described in my work for this jointly-sponsored Academy educational program:

Not Applicable

Select the category that best reflects the content of your proposal:

Primary Knee

Type or paste your Abstract in the text box below including introduction, methods, results and conclusions.

Total abstract word limit is 300 words. We will add formatting (bold, italics) in the final program.

Abstract:

Introduction: Despite the success of restoring joint stability and improving functional outcomes after anterior cruciate ligament reconstruction (ACLR) for rupture, the long-term risk of developing symptomatic osteoarthritis requiring knee arthroplasty is higher than the uninjured population. The purpose of this study was to compare operative characteristics and early outcomes of patients undergoing TKA after ACLR with control subjects having routine osteoarthritis.

Methods: All patients who had undergone TKA from 2006 to 2013 at our institution with a history of prior ACLR and minimum two year follow-up where identified from a prospective research database. These patients were matched by demographic and surgeon variables to patients

who had not undergone prior ACLR. Outcomes included Knee Society Scores (KSS), range of motion, operative variables, complications, and reoperations.

Results: 122 patients were identified in the ACL study group and compared to the matched control cohort. The mean age at surgery was 58 years and 55% of the patients were male. Mean follow-up in the ACL and control groups was 3.3 and 3.0 years, respectively. KSS scores were generally similar between groups both pre and post-operatively. Although preoperative flexion was statistically lower in the ACL group (119 degrees) than in the control (123 degrees) ($p = 0.005$), there was no difference between groups postoperatively. Fifty percent of ACL patients required hardware removal at the time of TKA. The operative time was significantly longer in the ACL group (88 minutes) compared to the control group (72 minutes) ($p < 0.001$). There were 11 total reoperations in the ACL group, including four periprosthetic infections, whereas there were only two reoperations in the control group. The risk of reoperation in the ACL group was more than five times higher than the control group (relative risk 5.5, 95% confidence interval 1.2 to 24.3; $p = 0.01$).

Conclusions: The results of this retrospective matched cohort study suggest that prior ACLR is a results in longer operative time and increased risk of early reoperation after TKA.