A registry-based patient reported outcome and functional comparison between matched TKA patients with the JOURNEY II Bi-Cruciate stabilizing knee system and THA patients

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Introduction and aims

This study examined whether the use of the kinematically optimized JOURNEY II Bi-Cruciate Stabilizing Total Knee System (JIIBCS TKA) in total knee arthroplasty (TKA) patients will increase the level of patient reported activity and satisfaction scores to equal those reported by demographically matched total hip arthroplasty (THA) patients.

Method

A retrospective review of an Internal hospital Red Cap registry was conducted using 48 demographically and clinically matched JIIBCS TKA and 48 THA patients. Comparisons were made both preoperatively and postoperatively on Knee Society (KS) clinical and function scores, Harris Hip scores, patient satisfaction scores, UCLA activity scores and EuroQol patient reported outcome scores using an independent-samples t-test or a non-parametric Mann-Whitney U test.

Results

Results showed no statistically significant differences between the groups on patient demographics or on the clinical variables of gender, ASA score, and primary diagnosis. Ninety-eight percent of the KS clinical scores were >= 95 and 89.6% of KS function scores were >= 90 measured one year postoperatively. 81.3% of Harris Hip scores were greater than or equal to 90 at one year post-op. There was also no statistically significant difference found on patient satisfaction scores (p = .472), or on the EuroQol scores (p = .827). There was a statistically significant difference at one-year postop on the UCLA activity score (p = .045) favoring the TKA group. One month post-operative measures of return to work, activities of daily living and return to sports were not statistically different. No patient was readmitted in < 90 days, and there were no adverse events reported.

Conclusions

Published TKA functional outcomes and patient satisfaction scores are commonly accepted to be inferior to THA.¹ This study demonstrated that patients receiving the JII BCS TKA reported, at one-year, equable postop patient satisfaction scores and superior activity scores which were comparable to demographically and clinically matched THA patients.
References