

Evidence in focus

Study summary

Iriuchishima T, Ryu K. *J Knee Surg* (2017)*



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JOURNEY[®] II BCS restores function comparable to bicruciate retaining Oxford Unicompartmental Knees (UKA)

The bicruciate stabilising design reproduces anterior and posterior cruciate ligament function and native knee rollback



Study design

A single-surgeon retrospective study comparing outcomes at 6–9 months follow-up of patients treated with:

- JOURNEY II BCS: n=64 patients (mean age, 71.3 years ± 7.2 years)
- UKA: n=50 patients (mean age, 73.8 years ± 6 years)
- Control group: contralateral asymptomatic knees of subjects with UKA



Key results

Post-operative lateral knee radiograph (full flexion) showed:

- No significant difference in rollback ratio or knee flexion angle among the three groups (Table 1)
- Significant correlation between rollback ratio and knee flexion angle among the three groups (p=0.002) (Table 1)

	JOURNEY II BCS	UKA	Control
Rollback ratio %, mean (standard deviation)	37.9 (± 4.9)	35.7 (± 4.2)	35.3 (± 4.8)
Flexion angle degrees, mean (standard deviation)	123.8 (± 8.4)	125.4 (± 7.5)	127 ± (10.3)

Table 1. Rollback ratio and flexion angle measurement



Conclusion

- JOURNEY II BCS showed no significant difference in rollback ratio when compared with UKA or asymptomatic control knees.
- The implant design is likely to reproduce native anterior and posterior cruciate function and native knee rollback.



Considerations

- Pre-operative evaluation of rollback ratio and knee flexion was not performed



Study citation

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