

JOURNEY[◇] II BCS patients demonstrate significantly better stair climbing ability when compared with cruciate retaining (CR) and posterior stabilised (PS) total knee arthroplasty (TKA) patients

+ Plus points



89%

JOURNEY II BCS patients were able to climb stairs “one step at a time”



JOURNEY II BCS patients had **significantly better stair climbing ability** compared to CR and PS TKA patients

Overview

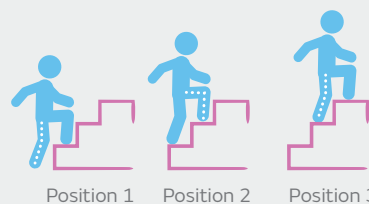
Case-controlled, single surgeon study comparing stair climbing and descending ability in JOURNEY II BCS patients compared to CR and PS TKA patients.

Patients were administered a questionnaire pre-TKA and 12 months post-TKA to assess their stair climbing and descending ability and necessity of a handrail.

- 63 JOURNEY II BCS patients (TKAs, 66; mean age, 75.2 years)
- 47 CR patients (FINE[®] Total Knee System [Teijin Nakashima Medical, Okayama, Japan]; number of TKAs, 56; mean age, 76.4 years)
- 38 PS patients (FNK[®] Total Knee System [Teijin Nakashima Medical, Okayama, Japan]; number of TKAs, 42; mean age, 78.6 years)

Results

- At 12 months post-TKA, a significantly higher percentage of JOURNEY II BCS patients (89%) were able to climb stairs “one step at a time” compared to CR (72%) and PS TKA patients (58%; $p < 0.05$; Figure)
- No significant differences in the percentage of patients able to descend stairs “one step at a time” or among handrail necessity between JOURNEY II BCS (59 and 75%), CR (49 and 77%) and PS (45 and 89%) TKA patients



JOURNEY II BCS: 89%
CR TKA: 72%
PS TKA: 58%

Figure: Percentage of patients able to climb stairs “one step at a time” 1-year post-TKA

Conclusions

JOURNEY II BCS results in significantly better “one step at a time” stair climbing ability compared to CR and PS TKAs.

Citation

*Iriuchishima T, Ryu K. Bicruciate substituting total knee arthroplasty improves stair climbing ability when compared with cruciate-retain or posterior stabilizing total knee arthroplasty. *Indian J Orthop*. 2019;53:641-645. Available at: [Indian Journal of Orthopaedics](http://www.indianjournaloforthopaedics.com)