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White Paper Journal  
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***Title***

**A HIGH FLEXION TOTAL KNEE ARTHROPLASTY DESIGN  
REPLICATES HEALTHY KNEE MOTION**

***Authors***

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***Publication***

*Clinical Orthopaedics and Related Research*. 2004;(428):174-179

***Purpose/Premise***

This article reports on a study designed to compare the patellofemoral motion of nonimplanted knees with knees implanted with a prosthesis designed for high flexion.

***Material and Methods***

Fluoroscopy was used to evaluate the three-dimensional patellofemoral kinematics during deep flexion for five control patients, with a healthy knee, five patients with an ACL deficiency, and 20 patients with a high-flex knee implant.

***Outcomes***

Patients with the high-flex implants showed consistent posterior femoral rollback. The average weightbearing range of motion was 125° for the patients with a high-flex implant, with a maximum of 154°. Seven of the 20 patients had greater than 140° range of motion.

***Conclusion/Recommendation***

The authors concluded that the consistent posterior femoral rollback observed was associated with high levels of weightbearing flexion.

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