

## **RESEARCH REPORT**

### **Knee**

#### **Influence of functional bracing on the kinetics of the anterior cruciate ligament injured knee**

**Lu TW, Lin HC, Hsu HC Clinical biomechanics 2006 Jun 21 (5) 517-24  
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This study investigated the changes of the 3D kinetics of the knee joint after wearing a functional knee brace in anterior cruciate deficient (ACLD) and anterior cruciate reconstructed (ACLR) patients during level walking.

Functional knee bracing was shown to alter the kinetics at the affected knees after ACL rupture or reconstruction. Bracing produced changes in the kinetics of the affected knees that led to improvement of kinetic symmetry in the frontal plane for both ACLD and ACLR patients and in the sagittal plane for ACLR patients.

The authors suggest that functional bracing can be recommended for ACLR patients to assist in achieving the rehabilitation goal of better bilateral kinetic symmetry and that for ACLD patients, apart from bracing, additional emphasis on the rehabilitative training for improved knee kinetic performance in the sagittal plane is needed. The authors conclude their work provides useful information for future design of braces and their clinical applications.

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