



Preface  
Anterior cruciate ligament reconstruction



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*Guest Editors*

Over the past 20 years, the anterior cruciate ligament (ACL) has been studied as much as any orthopedic structure. A literature search through *PubMed* reveals almost 5000 articles published over the past two decades. Research in anatomy, biomechanics, epidemiology, graft sources, fixation methods, and clinical outcomes of the ACL and its reconstruction has led to an explosive understanding of this ligament, as well as the ability to consistently and predictably reconstruct it.

ACL injuries were once considered to be career-ending. These days, they are often a mere blip in an athlete's career path, and surgical reconstruction commonly allows a return to preinjury levels of performance. Moreover, clearer understandings are evolving regarding how ACL injuries occur in noncontact situations and why women are significantly more predisposed to ACL ruptures; from this, techniques are being developed to precondition the knee to decrease the rate of injury.

As with many orthopedic procedures, there is more than one way "to skin a cat" when it comes to ACL reconstruction. An understanding of the anatomy, adherence to sound biomechanical principles, and appropriate rehabilitation programs ensure good results—more so than the choice of a particular graft or fixation method.

Also important is the increasing knowledge of the biomechanics of the ACL-deficient knee and the

potential for long-term damage, or lack thereof, depending on activity level. This knowledge has helped the orthopedist and patient make better decisions regarding the ultimate need for ACL reconstruction. As surgical techniques (arthroscopic, in particular) improve, the ability to tackle increasingly complex problems evolves. Complex decisions regarding meniscal repair and transplantation and cartilage repair and regeneration are now commonplace, as are decisions regarding the need for osteotomies in arthritically unstable knees.

Our mission in developing this two-part series on ACL reconstruction for the *Orthopedic Clinics of North America* was to compile all of this information into a definitive, up-to-date reference. Having reviewed all of the articles, we were most impressed with the depth and clarity the authors brought to their work.

We are extremely grateful to our contributors, many of whom are groundbreakers in the science of ACL reconstruction, for their commitment of time and effort time taken away from their practices and families. In the procedure-related articles, we asked that the authors describe their surgical procedures in a way such that the reader would be able to reproduce the technique, complete with tips on avoiding pitfalls and pearls obtained through years of experience. In each case this request was followed to a fault.

We are also indebted to Deb Dellapena of W.B. Saunders for her support, expertise, and gentle per-

sistence. Finally, we would like to thank our families for their support and understanding while yet another article was written or read.

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