

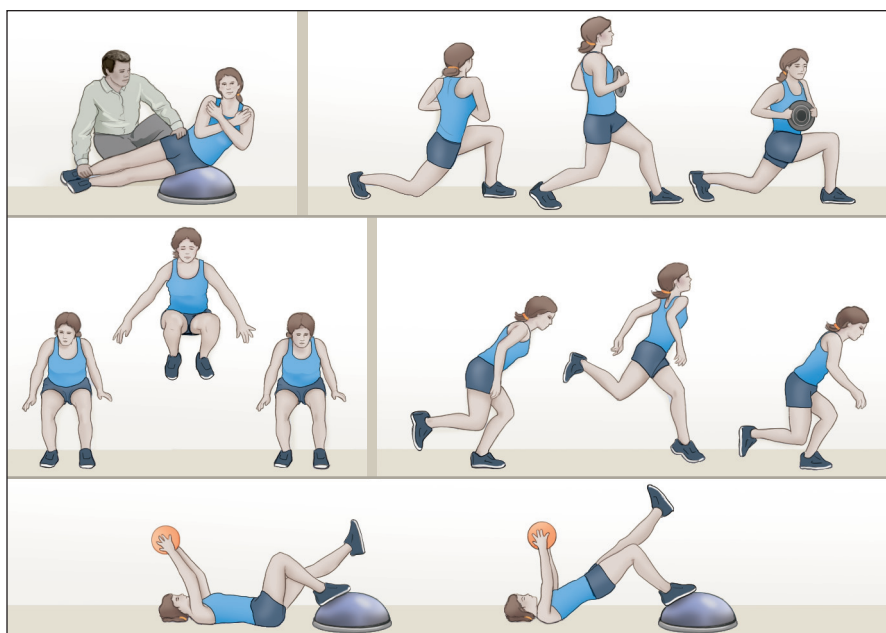
# Anterior Cruciate Ligament Surgery

## *Optimize Return to Activity and Minimize Risk of a Second Injury*

*J Orthop Sports Phys Ther* 2013;43(11):793. doi:10.2519/jospt.2013.0506

**A** torn anterior cruciate ligament (ACL) can be a devastating injury for active individuals and athletes. After the injury, some individuals will recover with a good rehabilitation program and will not need surgery. However, if the injured knee feels like it gives way or if the knee is not stable, surgery to “reconstruct” the ACL may be required. After surgery, returning to preinjury activities can be challeng-

ing. In fact, the authors of a review article published in the November 2013 issue of *JOSPT* report that only 44% of athletes successfully returned to sports 3.5 years after ACL surgery, and that a second injury to the ACL of the same or other knee was as high as 30% after surgery. Their findings provide new insight and research-based strategies to help enhance performance and limit the risk of reinjury after ACL surgery.



**RECOMMENDED EXERCISES.** Exercises for return to activities and sports focus on jumping and landing, lunging, and tuck jumps as well as core and hip stability. The researchers outlined 11 exercise progressions that can be tailored for individuals based on their needs.

This *JOSPT* Perspectives for Patients is based on an article by Di Stasi et al, titled “Neuromuscular Training to Target Deficits Associated With Second Anterior Cruciate Ligament Injury,” *J Orthop Sports Phys Ther* 2013;43(11):777-792. Epub 11 October 2013. doi:10.2519/jospt.2013.4693.

This Perspectives article was written by a team of *JOSPT*'s editorial board and staff, with Deydre S. Teyhen, PT, PhD, Editor, and Jeanne Robertson, Illustrator.

### NEW INSIGHTS

The authors reviewed 162 articles to find research-based suggestions for optimizing return to activity after ACL surgery while minimizing risk of a second injury. They suggest that although some of the risk factors cannot be changed, others may be improved with specific postsurgery exercises. A common risk factor that can be modified with specifically designed exercises is poor control of hip and knee motion during such activities as jumping, landing, cutting, and pivoting. This poor control of motion is also what often leads to the first ACL injury. The authors suggest that advanced balance, stability, and core strength exercises need to be part of the return-to-activity or return-to-sport phase of rehabilitation. Specialized exercises that focus on high-end functional activities, agility, control, and power should be performed to help decrease risk of reinjury and optimize return to activity.

### PRACTICAL ADVICE

Following ACL surgery, safe return to full activity and prevention of reinjury require advanced physical therapy rehabilitation. Specialized exercise routines improve both strength and control of the muscles and joints in the leg. Based on your specific sport or activity, your physical therapist will individualize your program. It is important that you not return to sporting activities too soon. Your physical therapist will design challenging activities that retrain your body movements and base the speed of your return on how well you perform them. For more information on rehabilitation following ACL surgery, contact your physical therapist specializing in musculoskeletal disorders.

For this and more topics, visit *JOSPT* Perspectives for Patients online at [www.jospt.org](http://www.jospt.org).



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