

Ligament and Meniscal Injuries of the Knee

Course Description:

This course is designed to provide the Physical Therapist and Physical Therapist Assistant with an understanding of ligament and meniscal injuries of the knee. The content focuses on anterior cruciate ligament (ACL), posterior cruciate ligament (PCL), and medial collateral ligament (MCL) injuries, as well as, injuries of the menisci. Information on biomechanics and treatment options are provided. Also, clear treatment protocols are included in order to provide the therapist with knowledge for critical decision making and comprehensive clinical treatment.

This course is offered with licensing approval and permission from Elsevier as reproduced from: Brotzman, MD and Wilk, PT, *Clinical Orthopaedic Rehabilitation* 2nd edition, Mosby, 2003. Chapter 4 Knee Injuries. Content was written under the direction of Michael D'Amato, MD and Bernard R. Bach, Jr., MD, with contributions by Bruce Reider, MD and Kenneth Mroczek, MD.

Course content is 60 pages and includes many helpful illustrations, tables and photos.

◆Course ELCO4E, *Evaluation of the Knee*, is recommended as an adjunct to this course◆

Course Objectives:

Course Participants will be able to:

- A. Describe ACL injuries
 1. Describe rehabilitation rationale
 2. Describe basic science and biomechanics of ACL injury
 3. Describe graft properties, healing, and fixation
 4. Describe open- and closed-kinetic chain exercise rationale related to ACL repair
 5. Describe rehabilitation considerations related to ACL reconstruction
 - a. Pain and effusion
 - b. Motion loss
 - c. CPM use
 - d. Weight-bearing status
 - e. Muscle training
 - f. E-stim and biofeedback
 - g. Proprioception
 - h. ACL bracing
 6. Describe gender issues associated with ACL injury
 7. Describe issues associated with older patients with ACL injuries

8. Describe effects of graft selection on post-op rehab protocol
9. Describe functional training associated with ACL repair
10. Describe functional testing after ACL repair
11. Identify criteria for return to sports after ACL reconstruction
12. Describe common complications of ACL repair recovery
13. Identify appropriate protocols for recovery after ACL injury

B. Describe PCL injuries

1. Describe the normal PCL ligamentous structure and common mechanism of injury
2. Describe evaluation and classification of PCL injuries
3. Describe biomechanics of the PCL deficient knee
4. Describe the biomechanics of exercise associated with the PCL injury
5. Describe rehabilitation considerations after PCL injury
 - a. Motion
 - b. Weight-bearing
 - c. External support
 - d. Muscle training
6. Describe rehabilitation protocols for the nonoperative and surgical treatment of the PCL deficient knee

C. Describe MCL injuries

1. Describe clinical background
2. Describe physical examination and differential diagnosis
3. Describe treatment of isolated and combined MCL injuries
4. Describe rehabilitation after MCL injuries including use of protocols for isolated MCL disorders.

D. Describe meniscal injuries

1. Describe clinical background including meniscal movement and healing
2. Describe rehabilitation considerations for meniscal injuries
 - a. Weight-bearing and motion
 - b. Axial limb alignment
 - c. Rehab after meniscectomy and meniscal repair including reference to rehabilitation protocols

CEU Approvals:

For information on specific state approval of this course, refer to PT On-Line Courses "About State Approvals" page.