

### PHYSICIAN'S CORNER



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ACL tears may occur when an athlete suddenly pivots on the knee causing excessive extension and rotational forces on the ligament. ACL injuries can be the result of contact (tackling) or non-contact injuries (landing from a jump, pivoting on uneven surfaces or rapidly changing directions). Common symptoms associated with ACL tears may include an audible "pop" at the time of injury, a sudden giving way of the knee, swelling of the knee and pain. Higher-risk sports include soccer, basketball, cheerleading, and gymnastics. Females are at a significantly higher risk of injuring their ACLs as compared to males playing the same sports. If there is suspicion of an ACL tear, evaluation by an orthopaedic physician is critical. In an active athlete, surgery to reconstruct the ligament is frequently recommended.

### REHABILITATION AFTER ACL RECONSTRUCTION

The goal of surgical reconstruction of the ACL is to restore the stability of the knee. Advances in surgical techniques and materials have allowed for accelerated ACL rehabilitation programs. The focus of early rehabilitation following the surgery is oriented toward regaining motion, mobility and strength while protecting the graft (and donor site) during the healing process. It is important that the exercises and activities during the first 6-12 weeks of rehabilitation are carefully selected so they do not overstress the fixation of the graft site.

The guiding principles for ACL rehabilitation include:

- Reducing pain, swelling and inflammation to allow for early range of motion and a normalized walking pattern.
- Promoting quadriceps and hamstring activity to prevent muscle atrophy. It is important to follow ACL precautions as instructed by the physician and physical therapist.
- Progressive lower extremity stretching and strengthening for conditioning to prepare for return to prior activities and sports.
- An individualized, goal oriented protocol and plan that will allow for the safe progression during the process of recovery.
- Progression driven by achievement of the goals, balanced with the timing of graft healing.



### PREVENTION

- Maintain good strength of lower body, especially the hamstrings and calf muscles
- Improve proprioception or awareness of body position in space
- Develop good soft landing techniques following jumps
- Perform a well rounded dynamic warm up before activity
- Enhance agility and coordination
- Increase core and buttock strength
- Use proper footwear for the activity

### NUTRITION TIP:

TO ENSURE HYDRATION, IT IS RECOMMENDED FOR ATHLETES TO DRINK 17 TO 20 OZ OF WATER OR DILUTED SPORTS DRINK (50% WATER, 50% SPORTS DRINK) 2 TO 3 HOURS BEFORE COMPETITION.