

**Dr. Thomas X. Nguyen M.D.'s  
ACL Reconstruction Rehab Protocol**

**Pre-Surgery Rehabilitation**

- Achieve full extension
- Walk normally
- Reduce swelling
- Develop good quadriceps control and strength

**Phase 1: Immediate Post-Op (Surgery-week 2)**

- Immediate weight bearing and range of motion
- Regain full knee extension
- Perform straight leg raise without lag
- Walk without assistive device
- Reduce swelling
- Develop good quadriceps control

**Phase 2: Early Rehabilitation (weeks 2-6)**

- Full ROM
- Improve muscle strength with increasing resistance
- Return to normal daily living activities: walking, standing, going up and down stairs, getting in and out of a car.

**Phase 3: Strengthening and Control (weeks 7-12)**

- Open chain exercises are now safe
- Maintain full range of motion equal to contralateral knee
- Increase strength 70-75% of contralateral knee
- Improve single leg balance and motor control
- Single and double leg hopping in place with proper mechanics and no pain
- Add sports-specific activities as tolerated
- Symmetric weight bearing with squatting by week 12
- Run without deviation by week 13
- Hop without instability by week 13

**Phase 4: Advanced Training (weeks 13-16)**

- Run without pain or swelling
- Hop without pain or swelling (bilateral and unilateral)
- Neuromuscular and strength training exercises without difficulty

**Phase 5: Return to Sport (weeks 17-20)**

- Sport specific training without pain, swelling, or difficulty.
- 85% on contralateral strength
- Single leg jumping/landing maneuvers without pain, instability or evidence of quad/ligament/limb dominance

**Return to Sports Criteria**

- No functional complaints
- Confidence with running, cutting, jumping at full speed
- 85% of contralateral values on hop testing