ACL Reconstruction Protocol

(Hamstring or Bone-Patellar Tendon-Bone Autograft)

Movement from one phase to another will be individually based dependent on individual's rate of progress and goals. Time frames given below are generalizations.

A. Phase 1: Early ROM, Quad Control, Decrease Inflammation (0-2 weeks)

1. Gait: WBAT, Wean from AD when no antalgia and no lag with SLR
2. Progressive ROM work: Maintain full extension always, 90° flexion by one week, patellar mobilization
3. Frequent cryotherapy and modalities as indicated
4. Bracing (IROM or Technol Immobilizer)
   a. Used nocturnally locked in full extension to maintain extension. It is essential to gain and maintain full knee extension in the first two weeks post-op. May wean from nocturnal use when passive extension easily maintained.
   b. Used to further stabilize knee during gait and WB activities. May wean from use during gait when quad control improves. If IROM, open 10 degrees less than active flexion measurement.
   c. Transition to functional brace (physician specific)
5. Exercise: <u>(Avoid open chain knee extensions in 45-0° arc throughout rehab process)</u>
   a. Focus on gaining quad control
   b. OKC quad work such as SLR and 90-45° leg extension
   c. Progressive CKC, balance/proprioceptive, hip and core work
   d. Non-impact cardio (stationary bike)

B. Phase 2: Progressive strength (2-6 weeks)

1. Continue as needed: ROM, patellar mobilization and start scar massage
2. Continues progressive exercise from phase 1, transitioning to PRE gym styled weight program as indicated and with PT discretion. This may include: 90-45° Knee Extension, Leg Press, HS Curl, Calf Press/Calf Raise, Squats, Step Up, Step Down, Single Leg Dead Lift
3. Progressive core stabilization and dynamic hip stabilization as indicated and with PT discretion. Examples include Clams, Reverse Clams, Side-lying Hip Abduction (Glut. Medius focus), Bridge on Swiss Ball, and Single Leg Dead Lift
4. Low level but progressive footwork drills and advanced gait training drills
5. Progressive non-impact cardio (Stationary Bike→Elliptical→Stairmaster)

C. Phase 3: Advancing strength (6-12)

1. Generally patient is independent with a strength program at a gym
2. See occasionally for advanced footwork drills, advanced proprioceptive drills, and low level, supervised agility drills, isokinetic strengthening if available, low level plyometrics
3. Bracing: Continue use of functional brace if being utilized
   If using IROM and no functional bracing, may wean from IROM

D. Phase 4: Interval jog/run introduced (Start at 10-12 weeks)

******** Progression to Phase 5 requires operating surgeon approval********

E. Phase 5: Sport Specific Training (Start at 12-16 weeks)

1. Jog advanced to running and sprinting as indicated
2. Progressive plyometrics, jump to hop drills as indicated
3. Progressive agilities and sport specific training and streamlining as indicated