

## **ACL Sprain**

### **Non-op Physical Therapy Protocol**

#### **POST-OPERATIVE PHASE**

**\*Blood Flow Restriction (BFR) encouraged at all stages**

#### **Phase 1, Weeks 0-2**

**Primary goals: Eliminate swelling; Regain ROM and quad control**

- WBAT, with brace, crutches until gait controlled, discontinue crutches as progressing (by 7-10 days)
- Unlock brace for ambulation with return of active straight leg raise
- Brace locked in extension for sleep
- ROM as tolerated (minimum 0-90°), heel and wall slides
- Patella mobilization
- Ankle pumps, straight leg raise, quad sets, gluteal sets, hamstring stretch
- Sit to stand squats – 0-45°
- BAPs – proprioception
- Swelling/effusion control

#### **Phase 2, Weeks 2-4**

**Primary goals: Increase ROM; Increase total leg strength; Normalize gait**

- ROM as tolerated (minimum 0-110°), emphasis on full extension
- Emphasize patellar mobilization
- Stationary bike, treadmill walking
- Step ups: anterior – 4 inches @ 2 weeks; 6 inches @ 3 weeks
- Balance board – Bilateral: frontal and sagittal planes
- Half squats and lunges
- Multi-angle isometrics, leg raises (4 planes), hamstring/calf stretching
- BAPs – FWB
- Unilateral stance Leg press – Bilateral 0-90°

#### **Phase 3, Weeks 4-8**

**Primary goals: Normal ADLs; Increase functional capacity; Increase strength**

- ROM – WNL
- Resisted walking

- Stairmaster – ipsilateral rotation and straight
- Mini squats – bilateral
- Step ups – Anterior: 8 inches
- Step ups – Anteromedial: 8 inches
- Step downs – Anterior & medial: 4 inches, progress to 8 inches
- Hamstring curls
- Unilateral squats
- Unilateral stance on trampoline
- Leg press – unilateral

#### **Phase 4, Weeks 9-12**

##### **Primary goals: Increase functional leg strength; Normalize balance and proprioception**

- Discontinue brace for ADLs
- 2# ball toss on trampoline – unilateral stance – increase dispersion with improved control
- Balance board – unilateral – sagittal & frontal
- Step downs – posterolateral @ 8 inches
- Lunges – anterior and lateral for distance and speed (not depth)
- Increase strengthening especially in frontal and transverse planes
- Stairmaster – contralateral rotation and straight
- Sliding board
- Emphasize eccentric quad
- Continue closed chain, step ups, mini squats, leg press
- Hip abduction/adduction, calf raises

#### **Phase 5, Weeks 12+**

##### **Primary goals: Increase agility and speed of training; Normalize strength; Increase muscular endurance in preparation for release to sport activities**

- Brace for high-risk activities
  - Initiate Plyometrics
  - Initiate running program (\*16 weeks for allograft)
  - Initiate agility drills
  - Sport specific training
  - Sliding board side-side with rotation
  - Lunges – anterolateral, anteromedial
  - Bilateral hopping – low intensity/high volume
  - Fitter side-side
- \*Decision for full return to sport is based on peer-reviewed physical testing and performance in sport-specific drills\*