

# LATERAL COLLATERAL LIGAMENT (LCL) RECONSTRUCTION POST-OPERATIVE PROTOCOL

# PHASE I – MAXIMUM PROTECTION:

#### **WEEKS 0-2:**

- Brace locked at 20°. Physician will open brace to full range of motion at first post-op clinic visit. Brace to we worn at all times, especially while ambulating.
- Use crutches non-weight bearing for 6 weeks.
- Ice and modalities to reduce pain and inflammation
- Range of Motion:
  - Begin aggressive patella mobility
  - ROM 30-90° WITH VALGUS STRESS APPLIED
  - Quadriceps setting, focusing on VMO
  - Multi-plane straight leg raising

## **WEEKS 2-6:**

- Continue with program outlined above:
- Range of Motion: Full knee extension (NO HYPEREXTENSION); flexion limited as follows:
  - Weeks 2-4: ROM 0-90°
  - Weeks 4-6: ROM 0-120°

# PHASE II – PROGRESSIVE STRETCHING AND EARLY STRENGTHENING:

# **WEEKS 6-12:**

- Continue with modalities to control inflammation
- At week 6, may begin to progressively <u>increasing weight bearing IN MEDIAL UNLOADER</u>
  BRACE (to be worn AT ALL TIMES when weight bearing)
- Range of Motion:
  - Full knee extension (no hyperextension)
  - Progress to full range of motion as tolerated
- Exercises:
  - Continue with phase I exercise
  - Bilateral closed kinetic chain squatting
  - Multi-plane open and closed kinetic chain hip strengthening
  - Step-up progression
  - Stationary biking
  - Pool program; focus on ROM
  - Proprioception drills

#### **WEEKS 12-16:**

- Range of Motion: Full knee flexion and extension
- Exercises:
  - Advance strengthening program progressing to unilateral as tolerated
  - Increase intensity of stationary bike program may add treadmill walking
  - Advance intensity of pool program; focus on strengthening.



# PHASE III - ADVANCED STRENGTHENING AND PROPRIOCEPTION PHASE:

### **WEEKS 16-20:**

- Follow-up examination with the physician, with functional knee brace fitting in clinic
- Range of Motion: Full knee flexion and extension with terminal stretch
- Exercises:
  - Advance cardiovascular program; no running
  - Increase intensity of closed kinetic chain exercises
  - Advance proprioception drills
  - Initiate gym strengthening progressing from bilateral to unilateral as tolerated
    - o Leg press, squats, partial lunges, hamstring curls, ab/adduction, calf raises
  - Increase intensity of bike and walking program, may add elliptical trainer
  - May begin a pool running program

# PHASE IV - ADVANCE STRENGTHENING AND PLYOMETRIC DRILL PHASE:

#### **WEEKS 20-24:**

- Implement a full gym strengthening program; including leg extensions at 30° 0°, progressing to full range as PF arthrokinematics normalize
- Begin straight plane running
- Begin controlled lateral functional cord drills

# PHASE V - RETURN TO SPORT AND FUNCTIONAL DRILLS PHASE:

# **WEEKS 24-28**

- Continue with aggressive lower extremity strengthening, cardiovascular training, and flexibility
- Implement multidirectional agility drills
- Begin plyometric drills from bilateral to unilateral as tolerated
- Sports test for return to competition at 5-6 months, depending on patient progress