



**Austin Cole, MD**

## **Meniscus Repair- Radial/Root**

### **Post-Operative Protocol**

#### **Phase I – Maximum Protection**

##### **Weeks 0 to 6:**

- Brace – 0-90 degrees x6 weeks, locked in extension for ambulation for 3 weeks
  - Recommend locking brace in extension for sleep for 3 weeks
- Non-weight bearing with two crutches for 6 weeks
- Limit knee flexion to 90-degrees for 3 weeks; allow 90-120 degrees between 3 to 6 weeks

##### Goals

- Reduce inflammation and pain
- 0 degrees of knee extension

##### Exercise progression

- Emphasize patellofemoral mobilizations
- Passive/active knee range of motion with 90° flexion limit
- Quadriceps setting emphasize VMO function
- Multi-plane straight leg raising
- Open chain hip strengthening
- Gait training

#### **Phase II – Progressive Stretching and Early Strengthening**

##### **Weeks 6 to 8:**

- Brace – open to 0-90 degrees for ambulation, discontinue with sleep
- Continue using two crutches, with gradual progression of weight bearing
  - Increase WB to FWB over next 2 weeks

##### Exercise progression

- Gradual progression to full knee flexion
- Continue to emphasize patella mobility
- Begin bilateral closed kinetic chain strengthening limited range initially
- Step-up progression
- Begin stationary bike with light resistance initially
- Gait training - normalize gait pattern

#### **Phase III – Advanced Strengthening and Proprioception**

##### **Weeks 8 to 12:**

##### Goals

- Full knee range of motion

##### Exercise progression

- Avoid rotational movements for 14 weeks
- Advance stationary biking program (increase intensity)
- Introduce treadmill walking and elliptical trainer
- Begin unilateral closed kinetic chain program
- Gym strengthening progression (leg press above 90-degrees, hamstrings curls etc.)

## **Phase IV – Advanced Strengthening and Plyometric Drills**

### **Weeks 12 to 16:**

#### Exercise progression

- Begin light bilateral plyometrics

## **Phase V – Return to Sport**

### **Weeks 16-20:**

#### Exercise Progression

- Plyometric drills from bilateral to unilateral at 16 weeks
- Linear running progression at 16 weeks
- Progress to lateral and rotational stresses at 18 weeks
- Multi-directional drills at 18-20 weeks

#### Criteria to be released for return to sport

- Follow-up examination with the physician
- Pass return to sport functional test at >90% (involved vs uninvolved limb)
  - Perform test at 20 weeks or after, depending on patient readiness
  - See testing protocol
- Display symmetry and confidence in high-speed cutting, multi-plane plyometric drills, sprinting and decelerating