



Austin Cole, MD

Meniscus Transplant Post-Operative Protocol

Phase I – Maximum Protection

Weeks 0 to 6:

- Brace – 0-90 degrees
 - Recommend locking brace in extension for sleep
- 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
- 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 16 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 26:

- Follow-up examination with the physician

Goals

- Pass return-to-sport functional test at > 90% (involved vs uninvolved limb) by 26 weeks

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