

**PHYSICAL THERAPY PRESCRIPTION & REHABILITATION PROTOCOL: Meniscal Root
Repair or Meniscal Radial Tear Repair**

Name: _____

Date of Surgery: _____

Diagnosis: _____

Signed: _____

Please fax progress notes.

Phase 1 → 0-6 Weeks Post-Op - Protection Phase

Brace:

- Locked in extension except for physical therapy

Precautions:

- Non-weight bearing – if unable to tolerate then heel touch weightbearing
 - o 0°-70° for Weeks 0-2
 - o 0°-90° for Weeks 3-6
 - o 0°-130° for Weeks 7- Month 4. No hyperflexion until 4 months.
- No isolated hamstrings activation
- **No deep squatting/cross leg sitting for 4 months**

Goals/Criteria to Advance:

- Protect surgical repair
- Resolve joint effusion to trace amount
- Restore full ROM

Interventions:

- ROM
- Patella, patellar tendon, and quadriceps tendon mobilizations
- Quadriceps activation focusing on terminal extension
- Straight leg raising with knee in full extension
- Quadriceps stretching in Thomas stretch position (within ROM restrictions)
- Gastrocnemius stretching
- Hip and core strengthening
- Core and upper-body strengthening as indicated and appropriate

Phase 2 → 7-9 Weeks Post-Op Weight-Bearing Tolerance

Brace:

- Wean from brace locked to unlocked to no brace after 6 weeks and as patient establishes leg control, pain control and safe gait mechanics

Precautions:

- Gradual progression of WB at 6 week mark
 - o **Start 25% body weight WB and increase 25% every 4-5 days for FWB at 8 week mark**
- Knee flexion $<40^{\circ}$ with closed kinetic chain (CKC) activity
- CKC activity limited to WB Status
- **No deep squatting/cross leg sitting for 4 months**
 - o No hyperflexion $>130^{\circ}$ until 4 months

Goals/Criteria to Advance:

- Achieve full WB
- Normalize gait pattern on flat ground
- Maintain trace to no joint effusion
- Tolerate 25 minutes of standing and walking activity

Interventions:

- Progressive balance training consistent with WB status
- Calf raises
- Leg presses
- Double-leg squats once full WB with ambulation
- Core and upper-body strengthening as indicated and appropriate
- Stationary bike without resistance

Phase 3 → Begin after meeting Phase 2 criteria, usually 10-15 Weeks Post-Op - Endurance Phase

Precautions:

- Knee flexion $<70^{\circ}$ with CKC activity
- **No deep squatting/cross leg sitting for 4 months**

Goals/Criteria to Advance:

- 90-second hold in single-leg squat position at 45° of knee flexion

Interventions:

- Double-leg squats
- Static lunges
- Dynamic lunges
- Stationary bike with resistance
- Initiate running program
- *Exercise parameters: 3 sets, 15 to 25 repetitions, 30- to 60-second rest periods

Phase 4 → Begin after meeting Phase 3 criteria, usually 16 -21 Weeks Post-Op - Strength Phase

Precautions:

- Until week 20, maximum of 90° of knee flexion with CKC activity

Goals/Criteria to Advance:

- Quadriceps index $>80\%$
- Anterior reach on Y Balance Test, <8 -cm difference compared to uninvolved side

Interventions:

- Single-leg squats
- Single-leg deadlifts
- Step-ups/step-downs
- Multidirectional lunges
- Stationary bike with resistance
- *Exercise parameters: 3 sets, 8 to 12 repetitions, 2- to 3-minute rest periods

Phase 5 → Begin after meeting Phase 4 criteria, usually 22 Weeks onward Post-Op - Plyometrics and Return-to-Sport

Precautions:

- No deep squatting for 6 Months

Goals/Criteria to Advance:

- Pass Vail Sport Test, >46/54
- Anterior reach on Y Balance Test, <5-cm difference
- Y Balance Test composite score, >94%
- Quadriceps index, >90%
- Modified agility T test, >90% of uninjured
- Single-leg hop series, >90%

Interventions:

- Double-leg and single-leg jump training
- Ladder drill agility
- Lateral hops with and without resistance
- Progressive cutting activities