

Meniscal Root Repair Post-operative Rehabilitation Protocol

Phase 1: 0-2 weeks post-operatively

Goals	 Protect repair Minimize pain Minimize swelling Begin passive range of motion exercises Start physical therapy or home exercise program 1-3 days after surgery Work on quad recruitment
Brace/Crutch Use	25% weight bearing with crutches, brace 0-90° when ambulating and sleeping, can remove brace for hygiene and physical therapy
Range of Motion	 Obtain full extension if lag is present Passive knee flexion limited to 90°
Strengthening	 Ankle pumps Heel slides in brace Quad recruitment with Time Modulated AC (aka Russian Stim) SLR in brace at 0° until quad can maintain knee locked Patella mobilizations as needed
Home Instructions	 Keep surgical dressings clean and dry Change surgical bandages on the 2nd day after surgery (keep covered until first clinic visit) Can bathe on the 2nd day after surgery (do not scrub, soak, or submerge the incisions) Crutches with 25% weight bearing for 6 weeks after surgery Take Aspirin (or other DVT medication) for 2 weeks after surgery

Phase 2: 2-6 weeks post-op

Goals	 Protect repair Minimize pain Minimize swelling Progress range of motion Continue to restore quad recruitment
Brace/Crutch Use	25% weight bearing with crutches, brace 0-90° when ambulating and sleeping, can remove brace for hygiene and physical therapy
Range of Motion	 Obtain full extension if lag is present Passive knee flexion limited to 90°

Strengthening	 Ankle pumps Heel slides in brace Quad recruitment with Time Modulated AC (aka Russian Stim) SLR in brace at 0° until quad can maintain knee locked Patella mobilizations as needed Aquatic therapy with clearance from doctor after first post-op visit, perform functional ROM in waist deep water, forward and retro-walking, marching, lateral stepping Stationary bike with seat high – lower seat height as tolerated until reaching normal Leg press with 25% BW max Leg extensions within ROM restrictions, using high volume and light weight
Home Instructions	 Crutches with 25% weight bearing for 6 weeks after surgery Must keep brace locked at 0° ambulating and sleeping, can remove brace for hygiene and physical therapy Continue physical therapy/home exercise program, work on restoring full range of motion

Phase 3: 6-12 weeks post-op

Goals	 Full weight bearing Encourage full knee range of motion as tolerated Normalize gait mechanics
Brace/Crutch Use	 Begin gradual transition off crutches over a 2 week period from 25%WB to full WB Discontinue brace, can use ace wrap or neoprene sleeve if needed
Range of Motion	Restore and maintain full active range of motion
Strengthening	 No pivoting, twisting, hopping, jumping, running Progress PREs open/closed chain as tolerated Treadmill forward and retro-walking Cable column exercises Single leg stands for proprioception Cardiovascular training using equipment of choice Slide board – start with short distance and increase as tolerated Be aware of PTF signs and symptoms – manage accordingly Can start transitioning to exercises on affected leg only after 8 weeks Single leg squats after 8 weeks Incorporate plyometrics at 10 weeks post-op – start with both feet and progress to single leg as soon as tolerated

Phase 4: 12-20 weeks post-op

Goals	 Full range of motion Normal gait mechanics Work on sport-specific drills
Brace/Crutch Use	Can use ace wrap or neoprene sleeve if needed
Range of Motion	Maintain full active range of motion

Strengthening

- Continue as above
- Plyometrics for speed and power
- Work quad strength to within 15% or less of uninvolved leg
- Full return to sport/work involving pivoting, squatting, twisting, running at 5 month mark

For any questions about operative details or rehabilitation guidelines, please contact the respective surgeon's Athletic Trainer at the contact information found at this link: https://med.virginia.edu/orthopaedic-surgery/orthopaedic-divisions/sports-medicine/protocols/