

ANDREW L. MERRITT, MD — PROLIANCE ORTHOPEDIC ASSOCIATES

YOUR MENISCECTOMY RECOVERY A GUIDE TO PHYSICAL THERAPY

What to expect — a quick recovery driven by swelling and quad strength

THE ROLE OF PHYSICAL THERAPY IN YOUR RECOVERY

Part of your meniscus was removed — not repaired. Because nothing was sewn together, there is no healing tissue to protect. You can walk full weight right away. Recovery is entirely about two things: controlling the swelling (which temporarily shuts off your quad muscle) and restoring quad strength. Most patients walk without crutches within a few days and return to full activity within 8–12 weeks.

Important: You advance by milestones — full motion, no swelling, normal quad strength — not simply by the calendar. Return to sport requires quad strength of at least 90% compared with the other leg.

YOUR RECOVERY TIMELINE

PHASE	TIMEFRAME	PT VISITS	WHAT YOU'RE WORKING ON
1	Weeks 1–2	2–3× per week	• Full weight-bearing right away — no crutch restrictions • Ice after every exercise session and as needed throughout the day • Quad sets every hour to wake up the muscle • Restore full range of motion — 0–90° by Week 1, full motion by Week 2
2	Weeks 2–4	2× per week	• Strengthening — step-ups, mini squats, stationary bike • Single-leg activities when quad is strong enough • Gait normalization — walk without a limp • Return to work and everyday activities
3	Weeks 4–12	1× per week or as needed	• Progressive strengthening and jogging program • Return to sport when quad strength reaches 90% symmetry • Sport-specific drills and agility training • Most patients complete formal PT within 6 weeks

Questions about your PT progress? Call our office or bring them to your next appointment. We are always glad to coordinate with your therapist.

MENISCECTOMY — PHYSICAL THERAPY PROTOCOL

Patient Name: _____ **Surgeon:** Andrew L. Merritt, MD
Date of Surgery: _____ **PT Start Date:** _____

Overview & General Principles

Partial meniscectomy (arthroscopic) removes the damaged, irreparable portion of the meniscus. Unlike meniscus repair, there is no repair site to protect — recovery is limited by quad atrophy, swelling, and pain rather than tissue healing constraints. The focus shifts quickly from protection to strength and proprioceptive restoration. Patients can expect a return to light activity within 4–6 weeks and full sport return at 8–12 weeks, depending on quad strength recovery and resolution of swelling.

- **NO HEALING CONSTRAINT:** Because no repair was performed, ROM and weight-bearing are limited only by pain and swelling — not by tissue biology. Progress is driven by clinical milestones.
- **EFFUSION CONTROL:** Post-operative swelling causes arthrogenic muscle inhibition (AMI) — the knee reflexively inhibits the quadriceps in the presence of effusion. Controlling swelling early is as important as exercise.
- **QUAD RESTORATION PRIORITY:** Quad strength must return to $\geq 90\%$ of the contralateral side before return to sport. Do not rush sport return at the expense of adequate quad strength.

PHASE 1 — EARLY RECOVERY (Weeks 0–2)

INFORMATION FOR THE PATIENT — What to Expect This Phase

In the first two weeks, the main goals are to control swelling, regain your full knee movement, and start activating your quad. You are allowed to walk right away and should wean off crutches as soon as you can walk comfortably. Ice your knee after every exercise session. Most people are walking without crutches within a few days.

Goals:

- Control post-operative swelling and pain
- Achieve 0–90° ROM by end of Week 1; full ROM by end of Week 2
- Resolve quad lag — straight-leg raise without extensor lag
- Normalize gait on level surfaces without assistive device

Weight-Bearing Status:

Full weight bearing as tolerated immediately. Crutches for comfort only — wean as tolerated, typically within 2–5 days. There is no WB restriction.

Range of Motion:

Full, as tolerated. Goal: 0–90°+ by end of Week 1; full ROM (0–130°+) by end of Week 2. Pain and swelling are the only limiting factors.

Bracing:

No brace required. Compression sleeve for swelling management if desired.

Exercises:

- Quad sets — 3×15, every waking hour
- Straight-leg raises (all 4 planes: flexion, abduction, extension, adduction) — 3×10
- Heel slides (active-assisted knee flexion) — 3×15
- Ankle pumps — every hour
- Supine hamstring stretching — 3×30 sec
- Stationary bike: begin Day 2–3 if ROM allows; low resistance, 10–15 minutes
- Terminal knee extension (TKE) with resistance band — 3×15
- Ice and elevation after each session — 20 minutes

Progression Milestones:

- ROM 0–90°+ by end of Week 1; full ROM by Week 2
- SLR without extensor lag
- Ambulating without crutches with near-normal gait
- Swelling diminishing — minimal effusion at rest

PHASE 1 PRECAUTIONS

- Do not push through significant pain — pain >4/10 with exercise warrants regression
- Monitor for reactive effusion — if knee is significantly more swollen the morning after exercise, reduce intensity and frequency
- No resisted knee extension machine in Phase 1 (arthrogenic inhibition makes it inefficient and risks reactive effusion)

Rationale: Post-operative effusion reflexively inhibits the quadriceps (arthrogenic muscle inhibition). Aggressive exercise before controlling swelling does not build strength efficiently and may worsen effusion. Swelling control is a prerequisite for meaningful quad activation.

PHASE 2 — STRENGTHENING & PROPRIOCEPTION (Weeks 2–8)**INFORMATION FOR THE PATIENT — What to Expect This Phase**

Now the focus turns to rebuilding your quad strength and leg muscle coordination. You will progress from basic exercises to squats, step training, and balance work. By the end of this phase, most patients are back to walking, cycling, and light recreational activity without pain.

Goals:

- Achieve full pain-free ROM (0–130°+)
- Normalize gait on all surfaces including stairs
- Quad strength ≥70–75% contralateral by Week 6
- Single-leg squat and step-down without pain
- Return to light recreational activity (walking, cycling, swimming)

Weight-Bearing Status:

Full weight bearing without restriction.

Range of Motion:

Full, unrestricted. Progress stationary bike seat height for end-range flexion loading.

Bracing:

No brace required.

Exercises:

- Stationary bike — 20–30 minutes, increase resistance progressively
- Mini-squats (0–60°, progress to 0–90°) — 3×15, add load as tolerated
- Step-ups (4 inch, progress to 8 inch) — 3×10
- Step-downs (eccentric quad control) — 3×10
- Leg press (bilateral progressing to single-leg) — 3×12
- Hamstring curls — 3×12, progress resistance
- Hip abduction/adduction — 3×12 each
- Terminal knee extension with band — 3×15
- Single-leg balance: firm → foam → eyes closed — 3×30 sec
- Walking program: progress duration and terrain
- Swimming (straight kick, no breaststroke kick until full ROM confirmed)

Progression Milestones:

- Full ROM (0–130°+) without pain
- Step-down (8 inch) without pain or dynamic valgus
- Quad strength ≥75% contralateral
- Single-leg stance ≥30 seconds on flat surface
- 30 minutes continuous walking without pain or swelling

PHASE 2 PRECAUTIONS

- Reactive swelling after exercise (morning effusion) indicates too much load — regress
- Avoid plyometrics, running, or cutting movements until Phase 3 criteria are met
- Monitor for any medial or lateral joint line pain with deep knee flexion — may indicate residual meniscal irritation

Rationale: Strength recovery, not tissue healing, drives progression in partial meniscectomy. Returning to impact activity before adequate quad strength (≥80% LSI) significantly increases re-injury risk to the remaining meniscus and surrounding structures.

PHASE 3 — RETURN TO SPORT (Weeks 6–12)**INFORMATION FOR THE PATIENT — What to Expect This Phase**

In this final phase, you will build toward running, jumping, and sport-specific movement. Return to sport is based on meeting strength and function tests — not just time. Most patients are cleared for full sport activity between 8 and 12 weeks after surgery.

Goals:

- Quad strength ≥90% contralateral (isokinetic or functional testing)
- Hop test ≥90% limb symmetry index

- Return to full sport or recreational activity without pain

Weight-Bearing Status:

Full, unrestricted.

Range of Motion:

Full, unrestricted.

Exercises:

- Single-leg squats — 3×12–15
- Lunges (forward and reverse) with load
- Leg extension machine (if cleared) — progress resistance
- Running program: walk-jog intervals → continuous running over 2–3 weeks
- Plyometric progression: bilateral → single-leg jumps; bilateral landing → single-leg landing
- Lateral agility drills, cutting, deceleration training
- Sport-specific skills at increasing intensity
- Hop testing: single-leg hop, triple hop, crossover hop for distance

Progression Milestones:

- Quad strength ≥90% contralateral
- Single-leg hop test ≥90% limb symmetry index
- Running 20 minutes continuously without pain or swelling
- Sport-specific movements performed without pain or hesitation

PHASE 3 PRECAUTIONS

- Clearance for return to sport requires meeting strength AND hop test criteria — do not return on time alone
- Patients who have undergone significant meniscal resection have increased long-term risk of compartment degeneration — counsel on appropriate weight management, activity levels, and follow-up

Rationale: Return-to-sport after partial meniscectomy is a strength- and performance-based decision. Premature return with quad weakness risks repetitive articular cartilage loading and may accelerate joint degeneration in the affected compartment.

RETURN TO SPORT CRITERIA**Criteria for Return:**

- Quad strength ≥90% contralateral (isokinetic 60°/sec or functional testing)
- Single-leg hop test ≥90% limb symmetry index
- Full pain-free ROM (0–130°+)
- No effusion after activity
- Running 20 minutes continuous without pain
- Surgeon clearance (typically 8–12 weeks post-op)

Surgeon Notes / Special Instructions:

