DR. KAISEN YAO, MD

ORTHOPEDIC SPORTS MEDICINE SURGEON

Post-Operative Physical Therapy Protocol

ACL Reconstruction w/Meniscus Repair

Northwell Health • Department of Orthopedic Surgery & Sports Medicine • Dr. Kaisen Yao, MD

Patient Name	Date of Surgery	Prescribing Surgeon
		Dr. Kaisen Yao, MD

General Guidelines & Precautions

- This protocol combines standard ACL reconstruction rehabilitation with more conservative meniscus repair precautions — when the two conflict, follow the more restrictive guideline.
- Weight bearing and range of motion are typically more restricted in the first weeks than an isolated ACL reconstruction to protect the meniscal repair — follow brace and weight-bearing orders closely.
- Prioritize swelling control with ice, compression, elevation, and ankle pumps.
- Contact the surgeon for fever, calf pain, excessive drainage, uncontrolled pain, or rapidly increasing swelling.

PHASE I

Immediate Post-Op / Repair Protection

TIMEFRAME

WEEKS 0–4

Goals:
Protect the graft and meniscal repair, control pain and effusion, achieve full passive extension, and restore quadriceps activation.

Precautions:
Weight bearing typically limited to touch-down or partial as directed, brace locked or limited in extension, and flexion generally restricted to about 90° in the first weeks; avoid pivoting, twisting, and open-chain resisted knee extension.

Interventions:
Cryotherapy, compression, elevation, ankle pumps, patellar mobilizations, gentle heel slides within allowed range, extension stretching, quad sets, straight-leg raises without lag, and hip/core strengthening.

Criteria to Progress:
Full passive extension, flexion progressing per protocol, minimal increase in swelling, and straight-leg raise without lag.

PHASE II

Progressive Weight Bearing & Motion

TIMEFRAME

WEEKS 4–8

Goals:
Progress to full weight bearing and range of motion as cleared, wean from brace and crutches, and normalize gait.

Interventions:
Progress closed-chain strengthening with mini-squats and leg press in a protected range, stationary bike, bridges, hamstring strengthening, and balance/proprioception drills.

Activity:
Gradually increase walking and daily activities; continue to avoid running, jumping, cutting, twisting, and deep flexion.

Criteria to Progress:
Full weight bearing without an assistive device, minimal effusion, normalized gait, and improving single-leg control.

PHASE III

Progressive Strengthening & Dynamic Control

TIMEFRAME

WEEKS 8–16

Goals:
Restore muscular strength and endurance, improve movement quality, and build dynamic balance and control for higher-level function.

Interventions:
Progress closed-chain strengthening, step-downs, split squats, single-leg strengthening, core and hip training, elliptical, cycling, and advanced proprioceptive drills.

Functional Focus:
Emphasize symmetrical mechanics during squatting, stair negotiation, landing preparation, and single-leg activities.

Criteria to Progress:
No reactive swelling, full range of motion, adequate strength relative to the uninvolved side, and good control with single-leg and low-level dynamic tasks.

PHASE IV

Return to Running & Plyometric Progression

TIMEFRAME

4–7 MONTHS

Goals:
Safely initiate running, improve strength symmetry, develop landing mechanics, and build tolerance for higher-level functional activity.

Interventions:
Criterion-based walk-jog progression, continued progressive strengthening, double-leg then single-leg plyometric drills as tolerated, and advanced balance and deceleration training.

Activity:
Running and light agility drills may begin only when swelling is controlled, range of motion is full, and strength and control are adequate.

Criteria to Progress:
No reactive swelling, good landing mechanics, improved single-leg control, and adequate strength for more advanced agility and sport preparation.

PHASE V

Agility, Cutting & Return to Sport

TIMEFRAME

7–10+ MONTHS

Goals:
Restore high-level strength, power, confidence, and movement symmetry for return to unrestricted work, recreation, and sport.

Interventions:
Progress to advanced plyometrics, cutting, pivoting, acceleration/deceleration drills, reactive agility work, and sport-specific retraining.

Return to Sport/Work:
Return to unrestricted, cutting, and pivoting activity should follow surgeon and therapist clearance and is ideally based on functional testing, strength symmetry, and quality of movement rather than time alone.

Discharge Criteria:
Full range of motion, no significant effusion, strong and symmetrical lower-extremity performance on functional testing, and safe mechanics during advanced dynamic tasks.

This protocol is a general guideline. Because it combines ACL reconstruction with meniscal repair, progression should be individualized by the treating physical therapist in coordination with Dr. Yao's office, following the more conservative restriction whenever the two protocols differ.