DR. KAISEN YAO, MD

ORTHOPEDIC SPORTS MEDICINE SURGEON

Post-Operative Physical Therapy Protocol

Hamstring 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

- **Weeks 0-6: Toe Touch Weight Bearing with crutches. Brace set from 30-90 degrees of knee flexion.** Follow these restrictions until cleared by the surgeon.
- Avoid combined hip flexion with knee straightening, straight-leg raises, hamstring stretching, and prolonged sitting with the hip flexed and knee straight during the early phase.
- Keep the dressing clean and dry; bandages may be removed on **post-operative day 7.** No bathing, swimming, or immersion until cleared by the surgeon.
- Elevate the extremity for swelling control. **KEEP THE KNEE BENT. Do not elevate the leg with the knee straight.**
- Contact the surgeon for fever, excessive drainage, uncontrolled pain, or new numbness or tingling down the leg.

PHASE I
Protected Healing

TIMEFRAME
WEEKS 0-6

Goals:
Protect the repair, control pain and swelling, and maintain safe mobility within brace limits.

Precautions:
Toe Touch Weight Bearing with crutches; brace set at 30-90 degrees of knee flexion. No straight-leg raises, hamstring stretching, or combined hip flexion with knee extension. Keep the knee bent during elevation.

Interventions:
Begin PT when directed by the surgeon. Cryotherapy; gentle hip and knee motion within brace limits; quad sets with the knee kept bent, gentle glute activation, and core work that avoids combined hip flexion and knee extension. Gait training within Toe Touch Weight Bearing restrictions.

Criteria to Progress:
Pain controlled, incision healing well, and tolerating protected motion.

PHASE II

Progressive Motion & Weight Bearing

TIMEFRAME

WEEKS 6–10

Goals:
Progress to full weight bearing, wean from the brace as cleared, and gradually restore hip range of motion.

Interventions:
Progressive hip range of motion, gentle isometric hamstring activation once permitted, stationary bike, gait training, and closed-chain glute/hip strengthening.

Precautions:
Continue to avoid aggressive stretching and high-load hamstring activity.

Criteria to Progress:
Full weight bearing without an assistive device, minimal pain, and improving hip range of motion.

PHASE III

Progressive Strengthening

TIMEFRAME

WEEKS 10–20

Goals:
Restore hamstring strength and length gradually, and improve dynamic hip and pelvic control.

Interventions:
Gentle hamstring stretching progressing as tolerated, progressive resistance hamstring and glute strengthening, single-leg balance work, and low-impact conditioning.

Functional Focus:
Emphasize pain-free hip hinge mechanics and symmetrical gait.

Criteria to Progress:
No pain with progressive loading, improving strength and flexibility, and good single-leg control.

PHASE IV

Return to Running, Agility & Sport

TIMEFRAME

5–9+ MONTHS

Goals:
Safely progress running, sprinting mechanics, and sport-specific movement.

Interventions:
Criterion-based walk-jog-run progression, eccentric hamstring strengthening, plyometrics, and sport-specific retraining.

Return to Sport/Work:
Return to sprinting, cutting, or high-demand sport should follow surgeon and therapist clearance based on strength symmetry and pain-free function.

Discharge Criteria:

Full pain-free range of motion, symmetrical hamstring strength and flexibility, and safe mechanics during advanced dynamic tasks.

This protocol is a general guideline. Because hamstring repairs are particularly sensitive to early loading, progression should be individualized by the treating physical therapist in coordination with Dr. Yao's office based on repair technique and tendon retraction.