

POST-OPERATIVE REHABILITATION PROTOCOL

Quadriceps / Patellar Tendon Repair

William McLaughlin, MD | Sports Medicine Surgery | Advanced Bone & Joint

Phase 1 | 0-6 Weeks

GOALS FOR THIS PHASE

- Protect the tendon repair — brace locked in extension at all times except therapy.
- Progress flexion ROM in stepwise fashion (0-30° → 0-60° → 0-90°).
- Initiate quadriceps activation and patellar mobility.

Weight Bearing & Bracing

- WBAT.
- Brace locked in extension at all times except with therapy.

Range of Motion Goals

- Weeks 0-2: 0-30°.
- Weeks 2-4: 0-60°.
- Weeks 4-6: 0-90°.

Therapeutic Exercises

- Patella mobilization.
- SLR supine with brace locked at 0°; quad sets.
- Ankle pumps.

Phase 2 | 6-12 Weeks

GOALS FOR THIS PHASE

- Unlock brace for ambulation; wean from brace as tolerated.
- Discontinue crutches when gait normalizes.
- Normalize ROM — no limits.
- Begin short-crank ergometry, progress to standard ergometry.
- Advance quadriceps strengthening.

Weight Bearing & Bracing

- Unlock brace for ambulation; wean from brace as tolerated.

- May discontinue crutches when gait normalized.

Range of Motion

- Normalize ROM — no limits.

Therapeutic Exercises

- Begin short-crank ergometry and progress to standard (170 mm) ergometry once knee ROM > 115°.
- Advance quadriceps strengthening.
- Mini squats / weight shifts.

Phase 3 | 3-6 Months

GOALS FOR THIS PHASE

- Normal gait, WBAT without assist.
- Full, normal ROM.
- Advance leg press, squats, and isotonic knee extensions.
- Initiate running/jogging.
- Normalize quadriceps strength.

Weight Bearing

- Normal gait, WBAT with no assist.

Range of Motion

- Full, normal ROM.

Therapeutic Exercises

- Leg press, squats.
- Initiate running/jogging.
- Isotonic knee extensions (90°-40°, closed chain preferred).
- Agility exercises (sport cord).
- VersaClimber / NordicTrack.
- Normalize quadriceps strength.

This protocol is a general guideline. Progression is patient-specific and at the discretion of William McLaughlin, MD.