

PHASE I:	Generally 0 - 6 weeks post-op
PHASE I GOALS:	Protect surgical repair ROM: full knee extension, 90° knee flexion Regain adequate quadriceps control
PRECAUTIONS:	*Wear brace at all times (even while sleeping)* * NO bending knee with load applied (i.e., squat, leg press, etc.) (Note: bending knee & partial weight bearing are allowed, <u>BUT</u> not at the same time)
CRUTCHES:	Begin with touch weight-bearing: progress gradually only when wearing brace locked at 0° <ul style="list-style-type: none"> ○ Wks 1: Partial weight-bearing @ 0-25% body weight ○ Wks 2: Partial weight-bearing @ 25-50% body weight ○ Wks 4: Partial weight-bearing @ 50-75% body weight
BRACE:	Locked at 0° extension for 6 weeks
WOUND:	Post-op dressing remains intact until post-op day #2 (~48 hours after surgery) May begin showering after post-op day #2 (no need to cover incision site) * Do NOT submerge knee in tub or pool for 4 weeks* Bilateral compression stockings for 3-7 days: unilateral use thereafter as needed Suture/staple removal @ 10-14 days per Ortho/PT
REHABILITATION:	Frequent use of cryocuff and/or ice with lower extremity elevated Begin patellar mobilizations (10 reps each direction TID) after suture/staple removal Begin scar massage after incision site sloughs/scar is formed
~Weeks 1-2	Calf pumping with tubing Heel slides - assisted as needed: within the limits of 0-90° Static quad sets (with estim until patient able to do 10 SLRs without extension lag) SLRs: All directions - may add light weight when pain free Supine passive extension with towel under heel Gentle hamstring stretching
~Weeks 3-4	Short arc quads - may add light weights as tolerated Seated ankle disk training Seated bilateral calf raises - progress to standing bilateral calf raises UBE and/or well leg cycle
~Weeks 5-6	Hamstring Curls - light weight in a painless ROM Beginning level pool exercises: only gait training & deep water jogging (No "whip" kicking)
FOLLOW-UP:	Physical Therapy: Weekly; Ortho: ~6 weeks post-op; Supervised rehabilitation: 2-3 x per week
DOCUMENTATION:	Precautions, pain level - medications and modalities Observation: (incision sites) - Signs/symptoms of infection? Site healing well? Effusion? Neurovascular status: Distal pulses, motor and sensation intact? Presence of calf pain? Knee ROM & quadriceps function

PHASE II: Generally 7-12 weeks post-op	
PHASE II GOALS:	Normal gait and stair ambulation Full Knee ROM
PRECAUTIONS:	*Continue to wear brace at all times (except while sleeping)* * NO jogging/running until 3 months post-op*
CRUTCHES:	Progress gradually to full weight-bearing during weeks 7-8 post-op, until gait normal
BRACE:	Open to full ROM
REHABILITATION:	*Continue phase I exercises as needed* Progress to the following exercises and increase intensity gradually when patient is ready (i.e., no increase in knee pain or effusion since the previous exercise session) *Note: all strengthening should be done with the brace on, starting with low weights, high repetitions, and in a painless ROM*
~7-8 weeks	Stationary bike for conditioning - begin with 5-10 minutes and progress gradually Gait training (cone walking, marching, retrowalking, exercise band, etc.) Progressive strengthening (calf press, leg press, squats (0-45°), HS curls) (first set: 30 repetitions, then 1 additional sets at the same weight to muscle failure) Step-ups General LE stretching (calf, HS, quads, HF, hip adductors)
~9-10 weeks	Progressive standing balance exercises (body blade, plyoball, platform training, etc.) (progress in duration, intensity, double leg to single leg, etc.) Progressive strengthening (calf press, leg press, squats (0-45°), HS curls, hip abd/add) (first set: 20 repetitions, then 2 additional sets at the same weight to muscle failure)
~11-12 weeks	Along with stationary bike, gradually add elliptical and/or stairmaster for conditioning Progressive pool program as tolerated
FOLLOW-UP:	PT: Bimonthly; Ortho: ~12 weeks post-op; Supervised rehabilitation: 2-3 x per week as needed
DOCUMENTATION:	Precautions, pain level, medications, modalities Effusion Knee ROM & quadriceps function Gait

PHASE III: Generally 4-6 months post-op	
PHASE III GOALS:	Jog at own pace and distance without pain ≥ 90% quadriceps and hamstring strength compared to the uninvolved side ≥ 90% hop for distance compared to the uninvolved side
PRECAUTIONS:	*NO participation in contact/collision sports until ~9 months post-op*
BRACE:	None required
REHABILITATION:	*Continue phase II exercises as needed* Progress in duration and intensity of exercise only if there is no increase in knee pain or effusion since the previous exercise session
~13-16 weeks	Warm-up: 5-10 minutes (bike, elliptical, stairmaster) General LE stretching: 5-10 minutes (calf, HS, quads, HF, hip adductors) Progressive functional training (2 legged plyometrics, jump roping, etc.) Progressive strengthening (calf press, leg press, squats (0-60°), HS curls, hip abd/add) (first set: 10 repetitions, then 2 additional sets at the same weight to muscle failure) Progressive balance training as needed Jogging on treadmill: start with 5 minutes per session. Do not exceed 20 minutes per session or 60 minutes per week until 4 months post-op
~17-26 weeks	Progressive jogging program (increase time and/or distance no more than 10-20% per wk) Progressive functional training: Begin at 25-50% intensity and progress gradually (jumping, hopping, directional jogging, cariocas, shuffles, etc.)
FOLLOW-UP:	PT: Monthly; Ortho: ~6 months post-op; Supervised rehab: 1-2 x per week as needed
DOCUMENTATION:	Pain level & medications Effusion Knee ROM & quadriceps function Hop for distance Isokinetic testing at 6 months post-op
MISCELLANEOUS:	After 6 months post-op: Exercises in phase III are continued, gradually increasing intensity & duration as tolerated. The recommendation is to wait until 9-12 months post-op to return to contact/collision Sports. This time period may be adjusted slightly by the surgeon and therapist according to patient progress.