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PHASE I:	Generally 0 - 4 weeks post-op
PHASE I GOALS:	Normal gait and stair ambulation ROM: full knee extension, \geq 120° knee flexion
PRECAUTIONS:	Progress as tolerated unless stated by ortho/PT
CRUTCHES:	 Weight-bearing as tolerated - (suggest a gradual increase as follows): Days 1-3: partial weight-bearing @ 25-75% body weight Days 4-7: weight-bearing as tolerated @ 75-100% body weight
	D/C crutches when the patient has a normal gait pattern
BRACE:	Per ortho/PT: Typically no brace required
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 @ 7-10 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 scope site sloughs/scar is formed
~Days 1-7	Calf pumping w/ tubing Heel slides - assisted as needed Static quad sets (with estim until patient able to do 10 SLRs without extension lag) Supine passive extension with towel under heel (prone hangs as needed) Gentle hamstring stretching
~Days 8-14	SLRs: All directions - may add light weight when pain free Stationary bike for ROM - progress to biking for conditioning Gait training (cone walking, marching, retrowalking, cariocas, shuffles, etc.) Forward, lateral, and retro step-ups (start with 4", progress as tolerated) General LE stretching (calf, HS, quads, HF, hip adductors)
~Days 15-28	Heel raise progression: begin bilateral heel raises - progress to unilateral Double leg mini-squats (0-45°) - progress to single leg Leg press & hamstring curls (low weights, high repetitions, and in a painless ROM) May add elliptical gradually
FOLLOW-UP:	Physical Therapy: Weekly; Ortho: ~4-6 weeks post-op; Supervised rehabilitation: 2-3 x per week as needed
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, & gait



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PHASE II:	Generally 5-8 weeks post-op
PHASE II GOALS:	Full knee ROM ≥ 90% quadriceps and hamstring strength compared to the uninvolved side Hop without pain using good form
PRECAUTIONS:	Progress as tolerated
BRACE:	None required
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 starting with low weights, high repetitions, and in a painless ROM*
~5-6 weeks	Aggressive stationary biking and elliptical for conditioning - may add stairmaster gradually Beginning to intermediate level pool exercises 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 1 additional set at the same weight to muscle failure)
~7-8 weeks	May begin progressive jogging program when no effusion is present (Begin jogging for 5-10 minutes TIW - increase time and/or distance no more than 10-20% per wk) Progressive pool program as tolerated Progressive functional training (2 legged plyometrics, jump roping, etc.) Progressive strengthening (calf press, leg press, squats (0-45°), HS curls, hip abd/add) (first set: 10 repetitions, then 2 additional sets at the same weight to muscle failure)
FOLLOW-UP:	PT: Bimonthly; Ortho: ~4-6 weeks post-op; Supervised rehabilitation: 2-3 x per week as needed
DOCUMENTATION:	Precautions, pain level, medications, modalities Effusion Knee ROM & quadriceps function Gait



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PHASE III:	Generally 2-3 months post-op
PHASE III GOALS:	Jog at own pace and distance without pain Hop for distance > 90% of uninvolved side
PRECAUTIONS:	Progress as tolerated
BRACE:	None required
REHABILITATION:	Progress in duration and intensity of exercise only if there is no increase in knee pain or effusion since the previous exercise session. Warm-up: 5-10 minutes (bike, elliptical, stairmaster) General LE stretching: 5-10 minutes (calf, HS, quads, HF, hip adductors) Progressive strengthening (calf press, leg press, squats (0-60°), HS curls, hip abd/add) (first set: 8-10 repetitions, then 2 additional sets at the same weight to muscle failure) Progressive balance training as needed Progressive jogging program (increase time and/or distance no more than 10-20% per wk) Progressive functional training: Begin at 50-75% intensity and progress gradually (jumping, hopping, directional jogging, cariocas, shuffles, etc.) Continue other phase II exercises as needed
FOLLOW-UP:	PT: ~3 months post-op; Ortho: ~3 months post-op; Supervised rehab: 1-2 x per week as needed
DOCUMENTATION:	Pain level & medications Effusion Knee ROM & quadriceps function Hop for distance
MISCELLANEOUS:	After 3 months post-op: Exercises in phase III are continued, gradually increasing intensity & duration as tolerated. The recommendation is to wait until 3-4 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.