

Proximal Tibial Osteotomy (opening wedge)

Name: _____

Dr: Dr. Chris LaPrade

Date: _____

● = Do exercise for that week

Week

ROM RESTRICTIONS		Initial Exercises														
		1	2	3	4	5	6	7	8	9	10	12	16	20	24	
Full ROM within symptoms *No hyperextension x 1-2 weeks for comfort	Heel prop knee extension stretch	0°		Heel prop into hyperextension = other knee												
	Ankle pumps & nerve glides	●	●	●	●	●	●	●	●							
	Patella/Tendon mobilization	●	●	●	●	●	●	●	●							
	Calf stretch with belt/strap	●	●	●	●	●	●	●	●							
	Seated foot slides – knee ROM	●	●	●	●	●	●	●	●							
	ROM Goals	Extension: Week 1: 0°, Week 2+: Symmetrical HE Flexion: Week 2: 90°, Week 6: 120°, Weeks 8-10: Full flexion ROM														
BRACE SETTINGS		0° ISOs/SLR		ISO in flexion (foot on floor)				Multi-angle ISOs (foot unsupported = ok)								
Immobilizer x 8 weeks	Quad – additional training	SLR, resisted TKE				LAQ - no load				Resisted arc - PRE						
	SLR hip ABD, ADD, Ext (brace on)	Standing (band above knees)						Side lying + resistance band								
	Bridging	NO		KE/calves over exercise ball				Classic bridge progression								
	Hamstring strength progressions	No HS beyond AROM				ISOs				Gradually load PRE						
Weight Bearing status		Cardiovascular Exercises														
		1	2	3	4	5	6	7	8	9	10	12	16	20	24	
NWB x 8 weeks FWB @ week 12 per x-ray	Stationary bike	No Bike				ROM				Progressive intensity						
	Swimming – light flutter kick	NWB								●	●	●	●	●	●	●
	Treadmill walking (no limp)	NWB										●	●	●	●	
	Elliptical trainer/Stair stepper	NWB											●	●	●	
TIME LINES		Weight Bearing Strength														
		1	2	3	4	5	6	7	8	9	10	12	16	20	24	
Week 1 (1-7POD) Week 2 (8-14POD) Week 3 (15-21POD) Week 4 (22-28POD)	Crutch weaning – return to FWB	NWB x 8 weeks							+25% BW/week				FWB			
	Marching into brief SLS	Initiate WB at week 8								●	●	●	●	●		
	SLS balance progressions	Progress 25% BW per week x 4 weeks (MD will confirm bone healing prior to full WB @ week 12)									●	●	●	●	●	
	Squat/Leg Press (ISO → reps, 2 → 1 leg)								PWB → FWB 0-70° depth				>70° gradual			
	Step-up/Lunge Progressions									ISOs		0-70°		>70°		
	Straight leg dead lift (2 → 1 leg)										●	●	●	●	●	
	Band resisted directional stepping												●	●	●	
Agility Exercises		1	2	3	4	5	6	7	8	9	10	12	16	20	24	
Initial agility: single → multi-plane		NWB												●	●	
Physical Performance (TRAC) Test		Baseline test: 6 months, F/u test: 12 months														
High Level Activities		1	2	3	4	5	6	7	8	9	10	12	16	20	24	
Outdoor recreation progressions		NWB													●	
Return to sport progressions		NWB													●	

****NMES & BFR permitted/encouraged per any underlying contraindications****

PRECAUTIONS	NO varus or valgus stress through limb (side lying hip ABD/ADD lifts) x 8 weeks, NO resisted HS or Quad strength through arc of motion with lower leg/foot hanging freely (SAQ/LAQ, HS curls) x 6-8 weeks (per bone healing status confirmed with x-ray/MD), NO twisting, pivoting, aggressive directional movements x 6 months
ABBREVIATIONS	(BW) body weight, (FWB) full weight bearing (HE) hyperextension, (HS) hamstring, (ISO) Isometric, (KE) knee extension, (KF) knee flexion, (NWB) Non-weight bearing, (PRE) progressive resistance exercise, (SAQ) short arc quad, (SLR) straight leg raise, (SLS) single leg stance, (TKE) terminal knee extension