

PROTOCOL

POST OPERATIVE TOTAL KNEE ARTHROPLASTY

	Approximate Time Frame (Weeks)	Activity	Goals
PHASE I	0-2	<p>WB Status: Progressive WB x2-4 weeks with crutches or walker</p> <p>ROM: 0-90*</p> <p>Manual: patella mobilization, gentle STM to reduce edema, soreness, stiffness above/below knee PRN</p> <p>Exercise Progression:</p> <ul style="list-style-type: none"> • Quad sets (w/NMES PRN) • P/AA range of motion exercises • Multiplane SLR/OKC hip w/knee straight • Ankle pumps/Calf raises • Hamstring and calf stretches • No mini-squats allowed in this phase 	<ul style="list-style-type: none"> ◇ Extension to 0; <i>Avoid hyperextension</i> ◇ Flex to 90 ◇ Improve VMO activation ◇ SLR no lag ◇ Reduce and Control inflammation ◇ Minimize DVT risk ◇ Normalize PF mobility ◇ Normalize gait with AD
PHASE II	2-6	<p>WB: FWBAT no limp</p> <p>ROM: progress as tolerated</p> <p>Manual: STM/MFR PRN, scar mobilization once healed. Patella mobs 0/30.</p> <p>Exercise progression:</p> <ul style="list-style-type: none"> • Extension– heel props and prone hangs as needed; work towards 0, avoid pushing into hyperextension • Flexion-continue with heel slides, wall slides, EOB flex • Multi-plane OKC and CKC hip strengthening • Global LE flexibility • DL mini squat progression or partial range LP • Step up progression • Hamstring and glut activation/strengthening • Proprioception drills <p>*Swelling and pain will dictate tolerance to CKC loading</p> <p>Cardiovascular:</p> <p>Stationary bike as swelling, pain, ROM permit; add resistance as tol</p> <p>Short walks on TM or outdoors with focus on proper gait mechanics</p> <p>Alter-G: walking per post-surgical guidelines</p>	<ul style="list-style-type: none"> ◇ Normalize gait, wean off AD ◇ Minimize swelling ◇ Normalize PF and scar-mobility ◇ Extension to 0 deg; <i>Avoid hyperextension</i> ◇ Flexion goal of 120-130 deg ◇ SLR no lag ◇ Improve proprioception ◇ Proper squat pattern; <i>perform on two legs with good control in pain free range</i>

*See MD's post op orders for exceptions

*Progression is criterion-based and will be slower than timeframes listed if phase goals are not met

	Approximate Time Frame (Weeks)	Activity	Goals
PHASE III	6-12	<p>Manual: STM/MFR PRN, scar mobilization, Patella mobs 0/30.</p> <p>Exercise progression:</p> <ul style="list-style-type: none"> • Independent myofascial management (FR, massage stick, ball) • Controlled movement series • CKC PRE's bilateral & unilateral progression as appropriate based on prior strength levels and activity goals • Advance core program/accessory hip muscles • Progress proprioception drills • Leg press and HS curls-increase loading and progress strengthening <p>Cardiovascular:</p> <ul style="list-style-type: none"> • Biking: progress resistance and duration as tolerated • Swimming • Elliptical or Arc Trainer • TM or Outdoor walking <p>Activity Progression</p> <ul style="list-style-type: none"> • Outdoor biking and walking to tolerance • Swimming freestyle 	<ul style="list-style-type: none"> ◇ Minimal to no PF pain as strength training advances ◇ Full ROM ◇ Minimal swelling ◇ Improve cardiovascular fitness with increased duration, intensity of low impact training ◇ Progressive strengthening
PHASE IV	12+ weeks	<p>Manual: STM/MFR and scar mobs, patella mobs 0/30 PRN</p> <p>Strengthening:</p> <ul style="list-style-type: none"> • Continue to progress as outlined in phase III <p>Cardiovascular:</p> <ul style="list-style-type: none"> • Same as above; progressing resistance and endurance based on patient tolerance <p>Activity Progression</p> <ul style="list-style-type: none"> • Golfing-interval golf progression • Minimal impact sports (doubles tennis) • Skiing (avoid bumps) 	<ul style="list-style-type: none"> ◇ Limb symmetry with all strength exercises ◇ Increase muscular strength, flexibility and endurance ◇ Establish long-term flexibility and strengthening program ◇ Education on appropriate activities and joint protection