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## PCL/PLC Reconstruction Rehabilitation Guidelines

Progression is based on healing constraints and functional progression specific to the patient. Phases and time frames are designed to give a general sense of progression. If the patient also had ACL, meniscal repair, or MCL surgery, the PCL/PLC protocol takes precedence. If the guidelines below need to be altered, that will be included on the PT script. It is very important to protect the reconstruction during the first 6-8 weeks. Please do not hesitate to contact me with any questions or concerns.

PHASE I:	Generally 0 - 6 weeks post-op	
PHASE I GOALS:	Protect surgical graft 0-90° Knee ROM Regain adequate quadriceps control	
PRECAUTIONS:	*Wear brace at all times (even while sleepi * <u>NO</u> knee hyperextension or AROM knee f	ng)* exion exercises. <u>NO</u> hamstring strengthening *
CRUTCHES:	Touch weight-bearing (Foot flat: 0 - 25% body weight)	
BRACE:	Locked at 0° x 6 weeks	
WOUND:	Post-op dressing remains intact until post-op day #2-3 (~48-72 hours after surgery) May begin showering after post-op day #2 -3 (keep incision site clean) * <b>Do <u>NOT</u></b> submerge knee in tub or pool for 4 weeks* Bilateral compression stockings for 7-10 days: unilateral use thereafter as needed Suture/staple removal @ 10-14 days per Ortho/PT	
REHABILITATION:	<ul> <li>Frequent use of cryocuff and/or ice with lo Begin patellar mobilizations (10 reps each of Begin scar massage after incision site sloug Begin the first 3 exercises below and add of Calf pumping with tubing</li> <li>Static quad sets (with estim until patient ab PROM/AAROM exercises <ul> <li>Wks 1-2: 0-30°</li> <li>Wks 3-4: 0-60°</li> <li>Wks 5-6: 0-90°</li> </ul> </li> <li>Gentle hamstring stretching Supine passive extension to 0° extension SLRs (with brace on) : All directions (with estim ankle weights may be added to the SL Seated bilateral calf raises - progress to seat Seated ankle disk training</li> </ul>	<ul> <li>direction TID) after suture/staple removal hs/scar is formed thers gradually as tolerated</li> <li>ble to do 10 SLRs without extension lag)</li> <li>Strengthening: (add light wgt when pain free) <ul> <li>Wks 1-2: Short arc quads (0-30°)</li> <li>Wks 3-4: Medium arc quads (0-60°)</li> <li>Wks 5-6: Long arc quads (0-90°)</li> </ul> </li> <li>xception of <u>NO</u> ABD or ADD for PLC repair) – .R exercise gradually as tolerated</li> </ul>
FOLLOW-UP:	Physical Therapy: Weekly; Ortho: ~6 weeks post-op; Supervised rehabilitation: 2-3 x per week as needed	
DOCUMENTATION:	Precautions, pain level, medications, 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
<b>PRECAUTIONS</b> :	*Continue to wear brace at all times (except while sleeping)* * <u>NO</u> knee hyperextension. <u>NO</u> open kinetic chain hamstring strengthening * * <u>NO</u> pool program or swimming*
CRUTCHES:	Progress gradually to full weight-bearing during post-op weeks 7-8
BRACE:	<ul> <li>Unlock brace for ambulation per the following schedule:</li> <li>Wks 7-8: 0-30°</li> <li>Wks 9-10: 0-60°</li> <li>Wks 11-12: 0-90°</li> </ul>
<b>REHABILITATION:</b>	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, using low weights, high repetitions, and in a painless ROM*
~weeks 7-8	Active assisted weight shifts Stationary bike for ROM - progress to biking for conditioning Progressive AROM and ROM stretching exercises as tolerated General LE stretching (calf, HS - add quads, HF, hip adductors @~week 9) Calf press Leg press Double leg mini-squats (0-45°) - add weight gradually as tolerated
~weeks 9-10	<ul> <li>Bilateral calf raises – add unilateral calf raises @~week 9</li> <li>Stepups</li> <li>Unilateral leg mini-squats (0-45°)</li> <li>Gait training (cone walking, marching, retrowalking, cariocas, shuffles, etc.)</li> <li>Progressive standing balance exercises (body blade, plyoball, platform training, etc.) (progress in duration, intensity, double leg to single leg, etc.)</li> </ul>
~weeks 11-12	Elliptical
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 80-90% quadriceps and HS strength return	
PRECAUTIONS:	* <u>NO</u> participation in sports or military schools*	
BRACE:	Hinged knee sports brace (as needed per ortho)	
<b>REHABILITATION:</b>	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.	
~weeks 13-16	Aerobic conditioning (biking, elliptical, stairmaster) LE weight lifting (Calf press, leg press, squats (0-60°), knee ext, hip add/abd) Progressive pool program Progressive balance training	
~weeks 16-26	<ul> <li>Active HS curls with ankle weights progress gradually to using HS curl machine – using low weight, high reps</li> <li>Progressive jogging program (Begin jogging for 5-10 minutes TIW - increase time and/or distance no more than 10-20% per wk)</li> <li>Straight line jogging (up to 50% speed on treadmill or other level terrain)</li> <li>Progressive functional training: Begin at 25-50% intensity and progress gradually (jumping, hopping, directional jogging, cariocas, shuffles, etc.)</li> </ul>	
FOLLOW-UP:	PT: Monthly; Ortho: ~6 months post-op; Supervised rehabilitation: 1-2 x per week as needed	
DOCUMENTATION:	Pain level & medications Effusion Knee ROM & quadriceps function Hop for distance at 6 months post-op Biodex testing at 6 months post-op	
MISCELLANEOUS:	<ul> <li>After 6 months post-op: Exercises in phase III are continued, gradually increasing intensity &amp; duration as tolerated.</li> <li>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.</li> </ul>	