

## Post-operative Rehabilitation Protocol

### Anterior Cruciate Ligament (ACL) Reconstruction: Quadriceps Tendon Autograft

<b>General Guidelines</b>	<ul style="list-style-type: none"> <li>- Physical therapy should begin 3-5 days after surgery</li> <li>- You will be weight bearing as tolerated with crutches (Unless meniscus repair performed – follow meniscus repair protocol for first 6 weeks)</li> <li>- You will be in a brace until you can perform straight leg raise without quad lag</li> <li>- Return to sport will be at 9-12 months after surgery</li> <li>- Contact therapist or physician with any questions/concerns</li> </ul>		
	<b>Range of Motion</b>	<b>Brace</b>	<b>Exercises</b>
<b>Phase 1 – Early protection</b> <i>Weeks 0 - 2</i>	Restore full knee extension immediately following surgery, minimize swelling, activate quad  <u>Ice</u> : 20 minutes on, 20 minutes off every hour	Locked in extension for walking and sleeping. D/C crutches when gait is non-antalgic	Straight leg raises with brace locked, quad sets, calf pumps, patellar mobilizations  E-stim after 1 week if tolerated
<b>Phase 2 – Early loading</b> <i>Weeks 2 - 6</i>	Goal to achieve full, pain-free ROM. *Maintain extension*	Unlocked when quad control is adequate D/C brace between 3-4 weeks if good quad control	<u>Exercises</u> : Progress strengthening → Mini squats, weight shifts, leg press (0 – 80° arc), stationary bike. Proprioception training Initiate step-up program <u>Modalities</u> : E-stim, Game ready
<b>Phase 3 - Strength</b> <i>Weeks 6 - 16</i>	Full, pain-free ROM	None	<u>Exercises</u> : Progress phase 2. Leg press, lunges. Progressive squat program. Initiate step down program. Endurance – Elliptical, Versaclimber
<b>Phase 4 – Jog to Run</b> <i>Weeks 16 – 22</i>	Full, pain-free ROM	Fitted for ACL brace if desired for return to sports	Begin forward running program (Treadmill) Continue strengthening and Flexibility Begin plyometrics: Single-leg hop downs, directional jumps, tuck jumps Advance sport-specific agility drills
<b>Phase 4 – Jog to Run</b> <i>Weeks 22+ Return to Sport</i>	Full, pain-free ROM	Fitted for ACL brace if desired for return to sports	<u>Criteria to return to sports</u> : At least 90% limb symmetry on hop and isokinetic strength test. No reactive pain or swelling after sport-specific activities. MD Clearance <u>Encourage maintenance program based on functional sports assessment</u>