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ACLR with Allograft Protocol

Name _____ **Date** _____

Procedure _____

Procedure Date _____

Frequency 1 2 3 4 5 times/week **Duration** 1 2 3 4 5 6 weeks

Therapist will change your dressing at your first appt. This is typically 2-3 days after surgery. Surgical wounds are closed with absorbable suture and covered with steri-strips or black Nylon sutures. There will be gauze and padding over the incisions and the extremity wrapped with an ACE wrap. The surgical dressing should be changed by the therapist using *sterile* technique. This includes sterile field, sterile gloves, betadine or chlorhexidine skin cleanser and sterile supplies when redressing the wounds. Do NOT remove steri-strips. The new dressing should include dry gauze and ACE wrap. Before the new dressing is applied the wounds should be clean and dry. Please do not use tegaderm unless it was used at the time of surgery or if specifically stated on the orders.

The dressing will be changed for the second time at your second therapy visit. After the second visit and second dressing change patient is permitted to shower at home. Remove the ACE wrap before shower. The wounds should be covered with Press-N-Seal. If the wounds get wet, use a hair dryer to *completely dry* the area prior to covering with ACE wrap after the shower.

Once you are permitted to get the incisions wet, warm soapy water should *gently* rinse the surgical area. Do NOT scrub the area. Pat the area dry with a clean towel and keep free of lotions or creams. Do NOT soak in a pool, bath or hot tub until permitted by the surgeon's office. Please wear clean clothes following shower and be conscious of any pet hair or other contaminants near the surgical area.

Anytime the dressing is changed or examined, *please wash hands* prior with antibacterial soap. Do not apply any ointments or medications to the area.

*****Range of motion is an important progression of therapy, but limiting swelling is important. Respecting swelling will decrease pain and improve motion.*****

ACLR with Allograft

	REHAB GOALS	PRECAUTIONS	THERAPEUTIC EXERCISES	PROGRESSION CRITERIA
PHASE 1 0-6 WEEKS	<p>Protect graft fixation!</p> <p>Because there is no donor tissue harvested, the pain and swelling from surgery will typically subside quickly. These patients may have a false sense of progression. Remember to protect the graft from excessive loading and sharing forces, especially in the early stages as the graft heals at a slower rate.</p> <p>Minimize effects of immobilization</p> <p>Control inflammation</p> <p>Full extension ROM</p> <p>Educate patient on rehabilitation</p>	<p>Brace: weeks 0-1 locked in full extension for ambulation and sleeping</p> <p>Brace: weeks 1-6 unlocked for ambulation, remove for sleeping</p> <p>Allograft revascularization is slower than with autograft. Patients may weight bear as tolerated, but protected for 6 weeks with crutches.</p>	<p>Heel slides</p> <p>Quad sets, hamstring sets</p> <p>Patellar mobilization</p> <p>Non-weight bearing gastrocnemius/soleus, hamstring stretches</p> <p>SLR (all planes) with brace locked in full extension until quadriceps strength is sufficient to prevent extension lag</p> <p>Quadriceps isometrics at 60° and 90° of knee flexion</p>	<p>Good quadriceps set, SLR without extension lag</p> <p>90° of knee flexion</p> <p>Full extension</p> <p>No signs of active inflammation</p>
PHASE 2 6-8 WEEKS	<p>Initiate weight bearing (closed kinetic chain) exercises</p> <p>Restore normal gait</p> <p>Protect graft fixation</p>	<p>Brace: DC use of brace when patient has full leg extension and can perform SLR without extension lag</p> <p>Crutches: DC crutches when patient exhibits non-antalgic gait pattern; consider</p>	<p>Wall slides, 0°-45°, progression to mini squats</p> <p>4-way hip</p> <p>Stationary bike (begin with high seat and low tension to promote range of motion, progress to single leg)</p> <p>Weight bearing terminal knee extension with resistive tubing or weight machine</p>	

		using single crutch or cane until gait is normalized	<p>Toe raises</p> <p>Balance exercises (e.g.: single leg)</p> <p>Hamstring curls</p> <p>Aquatic therapy with emphasis on normalization of gait</p> <p>Continue hamstring stretches, progress to weight bearing gastrocnemius/soleus stretches</p>	
PHASE 3 2-6 MONTHS	<p>Full ROM</p> <p>Improve strength, endurance and proprioception of the lower extremity to prepare for functional activities</p>	<p>Avoid oversteering the graft</p> <p>Protect the patellofemoral joint</p>	<p>Continue and progress previous flexibility and strengthening activities</p> <p>Seated knee extensions, 90°-45° and progress to eccentrics</p> <p>Advance weight bearing activities (single leg mini squats, leg press, 0° to 45° flexion, step ups beginning at 5cm and progressing to 20cm, etc.)</p> <p>Progress proprioceptive activities (slide board, use of ball, etc.)</p> <p>Progress aquatic program to include pool running, swimming, etc.)</p>	<p>Full, pain-free ROM</p> <p>No evidence of patellofemoral joint irritation</p> <p>Strength and proprioception of approximately 70% of the uninvolved side</p> <p>Physician clearance to initiate advanced weight bearing exercises and functional progression</p>
PHASE 4 6-9 MONTHS	<p>Continue and progress previous flexibility and strengthening activities</p> <p>Functional progression, including walk/jog progression, forward/backward</p>			<p>No patellofemoral or soft tissue complaint</p> <p>Necessary joint ROM, strength, endurance and proprioception to safely return to work or athletics</p> <p>Physician clearance to resume partial or full duty</p>

	running at half, ¾ and full speed			
PHASE 5 AFTER 9 MONTHS	Initiate cutting and jumping activities Completion of appropriate functional activities Maintenance of strength, endurance and proprioception Patient education with regard to any possible limitations			

Running progression to be started if strength, ROM, effusion and pain milestones have been met (at week 24-unless otherwise discussed with the surgeon):

In place on mini-trampoline or any other compliant surface is encouraged first.

- Level 1 0.1 mile running, 0.1 mile walking, total 1 mile
- Level 2 0.2 miles running, 0.1 mile walking, total 2 miles
- Level 3 0.4 miles running, 0.1 mile walking, total 2 miles
- Level 4 0.5 miles running, 0.1 mile walking, total 2 miles
- Level 5 0.7 miles running, 0.1 mile walking, total 2.4 miles
- Level 6 1 mile running, 0.2 mile walking, 2 cycles
- Level 7 1.25 miles running, 0.25 mile walking, 2 cycles
- Level 8 1.5 miles running
- Level 9 2 miles running
- Level 10 track running

Initially, no back-to-back days running. Stop or decrease a level if effusion or soreness increase.

Comments:

FCE _____ Work Conditioning/Work Hardening _____ Teach HEP _____

Every patient’s therapy progression will vary to a degree depending on many factors. Please use your best clinical judgment on advancing a patient. If other ideas are considered to improve patient’s outcome do not hesitate to call.

Patient's recovery is a team approach: Patient, family/friend support, therapist, and surgeon. Every team member plays an important role in recovery.

Signature _____ **Date** _____