ACL Reconstruction Physical Therapy Protocol

Name __________________________________________ Date ______________________

Diagnosis s/p RIGHT/LEFT ACLR BTB Autograft Hamstring Autograft Allograft MM/LM Repair/Meniscectomy

Date of Surgery _____________________________

Frequency:  1     2     3     4      times/week    Duration:  1     2     3     4     5     6 Weeks

POST – OPERATIVE PHASE I (WEEKS 0-2)

Critical Aspects of this Phase:
Patella mobility; Full knee extension; Improve quad contraction; Control pain/effusion

Goals:

❖ ROM:
  ➢ Full passive extension
    ▪ Extremely important
  ➢ Minimum of 90°knee flexion

❖ Normalize patella mobility

❖ Weightbearing:
  ➢ Progressive weight bearing to WBAT with brace locked in extension
  ➢ Ok to use assist device to help normalize gait and minimize knee swelling

❖ Control post-operative pain / swelling

❖ Prevent quadriceps inhibition
  ➢ Ok to use stim

❖ Promote independence in home therapeutic exercise program

Treatment Recommendations:

❖ Towel under heel for knee extension, A/AAROM for knee flexion, patella mobilization, quadriceps re-education (NMES and/or EMG), hip progressive resisted exercises, proprioception training, short crank bike, bilateral leg press (5 – 70°), SLR supine (with brace locked to without brace), SLR in all planes, cryotherapy for pain and edema
Emphasize patient compliance to HEP and weight bearing precautions/progression

**Precautions:**

- Avoid active knee extension: 40 → 0°
- Avoid ambulation without brace locked @ 0°
- Avoid heat application
- Avoid prolonged standing/walking

**Minimum Criteria for Advancement to Next Phase:**

- Able to SLR without quadriiceps lag
- 0°knee extension, minimum of 90°knee flexion
- Able to demonstrate unilateral (involved extremity) weightbearing without pain
**POST – OPERATIVE PHASE II (WEEKS 2-6)**

**Critical Aspects of this Phase**

Normalize knee ROM and patella mobility; Minimize knee effusion; Normal gait

**Goals:**

- ROM: 0-125° progressing to full ROM
- Continue to work on patella mobility and minimize swelling
- Restore normal gait without assist devices
  - Patient should have a non-antalgic gait
- Ascend 8” stairs with good control, without pain
- Promote independence in home therapeutic exercise program

  → **Treatment Recommendations:**

- Continue phase I exercises as appropriate
- Advance AAROM knee flexion/extension exercises (emphasize full passive extension), hamstring/calf flexibility, standard bike (if ROM 115°), leg press (80 – 0°arc), mini squats, active knee extension to 40°, proprioceptive training, forward step up program, underwater treadmill (incision benign), open brace (0 – 50°) ambulate with crutches as quadriceps strength improves; modalities (ultrasound, stim, contrast, heat before and ice after exercise), initiate indoor bike
- Progress/advance patients home exercise program (evaluation based)

**Precautions:**

- Avoid descending stairs reciprocally until good quad control & knee alignment
- Avoid pain with therapeutic exercise & functional activities

  → **Minimum Criteria for Advancement to Next Phase:**

- ROM 0→125°
- Normal gait pattern
- Demonstrate ability to ascend 8” step
- Good patella mobility
POST – OPERATIVE PHASE III (WEEKS 6-12)

Critical Aspects of this Phase

Improving quad strength; Eccentric quad control

Goals:

- Restore full ROM
- Able to descend 8” stairs with good leg control & no pain
- Improve ADL endurance
- Improve lower extremity flexibility
- Protect patellofemoral joint

Treatment Recommendations:

- Progress squat/leg press program, initiate step down program, advance proprioceptive training, agility exercises, retrograde treadmill ambulation/running, quadriceps stretching, continue stationary bike, continue modalities
- Emphasize patient compliance to both home and gym exercise program

Precautions:

- Avoid pain with therapeutic exercise & functional activities
- Avoid jumping down from a box
- Avoid running and sport activity until adequate strength development and MD clearance

Minimum Criteria for Advancement to Next Phase:

- Normal ROM
- Ability to descend 8” stairs with good leg control without pain
- Functional progression pending functional assessment
POST – OPERATIVE PHASE IV (WEEKS 12-20)

Goals:

- Demonstrate ability to run pain free
- Maximize strength and flexibility as to meet demands of ADLS
- Hop Test > 75% limb symmetry

Treatment Recommendations:

- Start forward running (treadmill) program when 8” step down satisfactory
- Advance agility program / sport specific
- Start plyometric program when strength base sufficient

Precautions:

- Avoid pain with therapeutic exercise & functional activities
- Avoid jumping down from a box
- Avoid running and sport activity until adequate strength development and MD clearance

Minimum Criteria for Advancement to Next Phase:

- Symptom free running
- Hop Test > 75% limb symmetry
- Functional progression pending functional assessment
POST – OPERATIVE PHASE V (WEEKS >20)

Goals:

- Lack of apprehension with sport specific movements
- Maximize strength and flexibility as to meet demands of individual’s sports activity
- Hop Test > 85% limb symmetry

- Treatment Recommendations:
- Continue to advance LE strengthening, flexibility & agility programs
- Advance plyometric program
- Agility training with sport specific brace on

Precautions:

- Avoid pain with therapeutic exercise & functional activities
- Avoid sport activity until adequate strength development and MD clearance

- Criteria for Discharge:
- Lack of apprehension with sport specific movements
- Hop Test > 85% limb symmetry
- Flexibility to accepted levels of sport performance
- Independence with gym program for maintenance and progression of therapeutic exercise program at discharge