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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

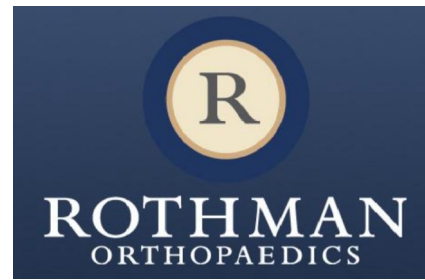
Goals:

- ❖ 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

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- ❖ Emphasize patient compliance to HEP and weight bearing precautions/progression

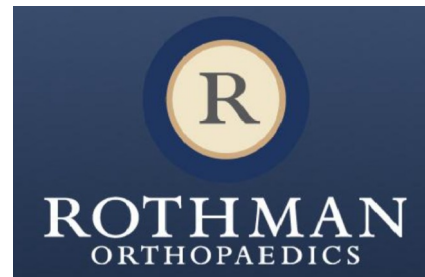
Precautions:

- ❖ 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 quadriceps lag
- ❖ 0°knee extension, minimum of 90°knee flexion
- ❖ Able to demonstrate unilateral (involved extremity) weightbearing without pain

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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)

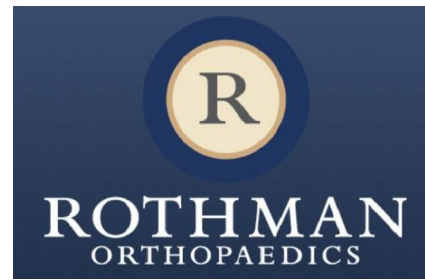
Precautions:

- ❖ 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

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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

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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

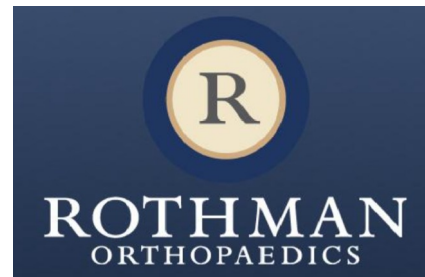
Precautions:

- ❖ 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

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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