

ACL RECONSTRUCTION AND MENISCUS REPAIR

ARTHROSCOPIC MENISCAL REPAIR

WEEK 1-2

Ambulate TTWB with bledsoe brace locked in extension
Limit Range of Motion from 0° to 70°
Range of Motion Active / Active-Assisted / Passive
Quadriceps and Hamstring stretching
Quadriceps Strengthening, V.M.O. Strengthening
Begin Straight Leg Raises (Knee at 0° in Full Extension)
Electrical Stimulation for Quadriceps

WEEK 3-4

May progress ROM from 0° to 90°
Ambulate with brace locked in extension until week 6 (may unlock while seated)
Ambulate PWB (50%) progressing to WBAT by 4 weeks post op then wean crutches
May Begin Exercise Bike, Closed Kinetic Chain Exercises

WEEK 5-6

Progress to full ROM
Discontinue brace @ 6 weeks

ACL POST – OPERATIVE PHASE I (WEEKS 0-2)

GOALS:

Follow meniscal repair protocol for weightbearing and ROM

ROM: 0-70 degrees; Full passive extension (most important)
Normalize patella mobility
Weightbearing: TTWB with crutches and brace locked in extension
Control post-operative pain / swelling
Prevent quadriceps inhibition
Promote independence in home therapeutic exercise program

PRECAUTIONS:

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

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 (starting with brace locked, transitioning to no brace), SLR all planes, cryotherapy for pain and edema
Emphasize patient compliance to HEP and weight bearing precautions/progression

MINIMUM CRITERIA FOR ADVANCEMENT TO NEXT PHASE:

Able to SLR without quadriceps lag

0° knee extension, minimum of 70° knee flexion

Able to demonstrate unilateral (involved extremity) weight bearing without pain

Emphasize

Patella mobility

Full knee extension

Improving quadriceps contraction

Controlling pain/effusion

POST – OPERATIVE PHASE II (WEEKS 2-6)

GOALS:

ROM 0° - 90 only until 4 weeks post op, then progress to tolerance

Good patella mobility

Minimal swelling

Restore normal gait (non-antalgic) without assistive device

Ascend 8" stairs with good control, without pain

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)

Progress/advance patients home exercise program (evaluation based)

PRECAUTIONS:

Avoid descending stairs reciprocally until adequate quadriceps control & lower extremity alignment

Avoid pain with therapeutic exercise & functional activities

MINIMUM CRITERIA FOR ADVANCEMENT:

ROM 0 125°

Normal gait pattern

Demonstrate ability to ascend 8" step

Good patella mobility

Functional progression pending functional assessment

POST – OPERATIVE PHASE III (WEEKS 6-14)

GOALS:

Restore Full ROM

Able to descend 8" stairs with good leg control & no pain

Improve ADL endurance

Improve lower extremity flexibility

Protect patello-femoral joint

TREATMENT RECOMMENDATIONS:

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

PRECAUTIONS:

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

MINIMUM CRITERIA FOR ADVANCEMENT:

ROM to WNL

Ability to descend 8" stairs with good leg control without pain

Functional progression pending functional assessment

Emphasize

Improving quadriceps strength

Eccentric quadriceps control

Normalizing knee ROM and patella mobility

Minimizing knee effusion

Normal gait pattern

POST – OPERATIVE PHASE IV (WEEKS 14-22)**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 sport activity till adequate strength development and MD clearance

CRITERIA FOR ADVANCEMENT:

Symptom-free running

Hop Test > 75% limb symmetry

Functional progression pending & functional assessment

POST – OPERATIVE PHASE V RETURN TO SPORT (WEEKS 22 - ?)**GOALS:**

Lack of apprehension with sport specific movements

Maximize strength and flexibility to meet demands of individual's sport activity

Hop Test > 85% limb symmetry

TREATMENT RECOMMENDATIONS:

Continue to advance LE strengthening, flexibility & agility programs
Advance plyometric program

PRECAUTIONS:

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

CRITERIA FOR DISCHARGE:

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