Rehabilitation guidelines for Arthroscopically assisted ACL reconstruction

DAY 1 TO WEEK 2

- CPM 2 hours twice per day; increase ROM as tolerated, Discontinue when $0 110^{\circ}$ achieved
- Ice as indicated, no more than 15 minutes each hour
- WBAT with crutches. Discontinue crutches if able to stand on involved leg with brace locked
- Drop lock knee brace in locked position except when exercising. Remove brace for therapeutic exercises and CPM
- PROM per patient tolerance; 0 110°; stress full extension
- Supine and prone sustained extension stretching. Never put anything under the knee
- Soft tissue mobilization of scar
- Supine wall slide
- Seated hamstring (carpet drags) / prone hamstring curls / sports cord knee flexion
- Stationary bicycle
- Isometric quadriceps contraction in complete / supported extension.
- Biofeedback, NMES, etc.; techniques to overcome quad inhibition
- SLR x 4 directions <u>without</u> extension lag, resistance above the knee. If lag, patient may perform SLRs with brace locked
- Isometric quadriceps contractions at.0 and 65° with/without electric stimulation
- Patella mobilizations
- Modalities to decrease swelling and pain
- Flexibility exercises: hamstrings, quadriceps, gastrocsoleus, ITB, and hip flexors
- Airdyne and UBE aerobic program / Upper body and core strengthening program

<u>WEEK 2 - 3</u>

- Continue with the above program
- PWB balance activities
- Bilateral "mini-squats" (0 40°); progress to semi-squats (0-80°)
- Bilateral Leg Press (0-80°)
- Bilateral calf raises
- Unlock brace for sitting (monitor for loss of extension). Continue with locked brace for sleeping
- Unlock brace for ambulation if SLR without lag

<u>WEEK 3 - 4</u>

- Discontinue brace at night if extension is maintained
- Step-ups
- Walking on heels
- FWB balance and proprioception exercises (provided adequate quad control)

<u>WEEK 4 – 5</u>

- Discontinue brace for ambulation. Monitor for loss of extension
- Short arc quads; isolated quad strengthening
- Wall sits (consider PFP)
- Unilateral eccentric leg press
- Stairmaster as tolerated
- Lateral shuffles
- Double leg hops
- Profitter & slide board

<u>WEEK 6 - 8</u>

- Full arc quads / Isokinetic program progress as tolerated (monitor for patellofemoral pain)
- Single-limb hopping on leg press
- Eccentric "star" taps
- Eccentric step downs
- Aquatic program if applicable
- Record Isokinetic test, KT-1000, KOS @ 6 weeks
- Introduce perturbation progression

WEEK 8-12

- Single leg hops on ground
- Unilateral Eccentric Leg Press
- Progress step height for step ups/down
- Bosu or stability step-ups
- Record Isokinetic test, KT-1000, Hip MMT, KOS @ 12 weeks
- Unilateral "minisquats" (0 40°);
- Advance in perturbation training

WEEK 12 to 20

- Roller-blading and ice-skating as tolerated. (Check with physician, may need ACL orthosis)
- Plyometrics program; box jumps, scissor jumps
- Jogging straight ahead
- Jumping rope
- Lunges sideways / forward

WEEK 20- 36

- Cutting I Agility drills and sports-specific training
- Reactive jumping
- Record Isokinetic test., KT-1000, Hip MMT, KOS @ DC

WEEK 36 - Return to Sport (52 wks for Allograft)

Advance to full sports activities if <20% strength deficit. Brace if KT-1000 >5mm and <3mm improvement from pre-op, Single-Limb Hop test $\geq80\%$ of uninvolved LE.