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## **KNEE DISLOCATION RECONSTRUCTION MCL (ACUTE)**

### **POST-SURGICAL REHABILITATION PROTOCOL**

#### **POST-OP DAYS 1 – 14**

- Dressing:
  - POD 1: Debulk dressing, TED Hose in place
  - POD 2: Change dressing, keep wound covered, continue TED Hose
  - POD 7-10: Sutures out, D/C TED Hose when effusion resolved
- Brace – Locked in extension x 4 weeks
- Crutches – Flat foot weight bearing (FFWB) in brace
- CPM – 0-45 degrees (2-hr increments for 8-10 hours/day)
- **No AROM or AAROM by patient, No Stationary bike** Patellar mobilization (teach patient)
- Calf pumping
- Passive extension to 0 degrees, **No hyperextension**
  - **Calf** (not heel) on bolster or prone hangs **with tibia supported**
- Electrical stimulation in full extension with quad sets and SLR
- Quad sets, Co-contractions quads / HS
- Straight leg raise (SLR) x 4 on mat **in brace** (parallel bars if poor quad control)
- Ice pack with knee in full extension after exercise

#### **GOALS**

- PROM 0-45 degrees
- Good quad control

#### **Weeks 2 - 4**

- Brace – Locked in extension x 4 weeks
- Crutches – Partial weight bearing (PWB) in brace
- Continue appropriate previous exercises
- AAROM by patient 0-60 degrees
- **No AROM or Stationary bike x 6 weeks**
- Scar massage when incision healed
- Weight shifts, Mini squats 0-30 degrees in brace (supported in parallel bars)
- Stretches –hip flexors, Hamstring with leg supported in brace

#### **GOALS**

- AAROM 0-60 degrees
- No extensor lag

#### **WEEKS 4 - 6**

- Brace – Open to available range if pt has good quad control
  - Not to exceed 90 degrees
- Crutches – PWB, progress to Weight bearing as tolerated (WBAT)
- Continue appropriate previous exercises
- AAROM by patient 0-90 degrees
- **No AROM or Stationary bike x 6 weeks**

- Multi-angle Co-contractions quads / Hamstrings at 0, 20, 40, 60
- SLR x 3 on mat without brace (**No ADD**) – No resistance
- **No ABD if LCL involved**
- Limited arc open chain quad extension 75-60 degrees
- Mini squats 0-45 degrees, supported in parallel bars
- Double leg heel raises

#### **GOAL**

- AAROM 0-90 degrees

#### **WEEKS 6 - 8**

- D/C brace
- Crutches – WBAT, D/C when gait is normal
- Continue appropriate previous exercises
- PROM, AAROM, AROM 0-100 degrees
- Partial wall squats – No knee flexion past 45 degrees
- Forward, lateral, and retro step downs in parallel bars
- No knee flexion past 45 degrees (small step)
- SLR x 3 (no ADD) with light weight below knee
- Single leg heel raises
- Leg press with resistance no more than  $\frac{1}{4}$  body weight
- No knee flexion past 45 degrees
- Stationary bike to assist with ROM
- Treadmill – Forward walking

#### **GOALS**

- AROM 0-100 degrees
- Normal gait

#### **WEEKS 8 - 10**

- Continue appropriate previous exercises
- PROM, AAROM, AROM 0-115 degrees
- Leg press with resistance no more than  $\frac{1}{2}$  body weight Hamstring curls – Carpet drags or rolling stool (closed chain)
- Proprioceptive training – Single leg standing in parallel bars
- Double leg BAPS for weight shift
- Stationary bike with minimal resistance
- Elliptical trainer
- Treadmill – Forwards and backwards walking
- Pool therapy – Walking / running (no kicking)

#### **GOAL**

- AROM 0-115

#### **WEEKS 10 - 12**

- Continue appropriate previous exercises
- PROM, AAROM, AROM to regain full motion
- Hip machine x 4 bilaterally – Including ADD (and ABD)
- Leg Press 0-90 degrees with resistance as tolerated
- Proprioceptive training – Single leg BAPS, ball toss and body blade
- Stationary bike for progressive resistance and time
- Treadmill – Walking progression program

#### **GOAL**

- Full AROM

### **MONTHS 3 - 4**

- Sports Brace (per Ortho)
- Continue appropriate previous exercises with progressive resistance
- Leg press with single leg, no > 90 degrees
- Hamstring curl weight machine 0-90 degrees, light resistance < ¼ body weight
- Knee extension weight machine 0-90 degrees as tolerated
- Fitter
- Slide board
- Swimming

#### **GOAL**

- Walk 2 miles at 15 min/mile pace

### **MONTHS 4 - 6**

- Continue appropriate previous exercises
- Sit-up progression
- Treadmill – Continue speed walking, no running yet
- Stretches – Quads, ITB
- Transition to home / gym program

#### **GOAL**

- Walk 3 miles at 15 min/mile pace

### **MONTHS 6 - 12**

- Biodex depending on patient progress and surgeon request
- Continue appropriate previous exercises
- Agility drills / Plyometrics
- Treadmill – Running progression program

#### **GOAL**

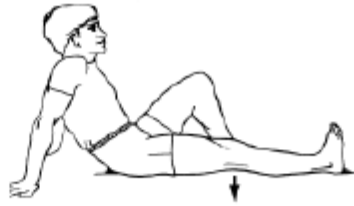
- Return to all activities

***\*NO CONTACT OR CUTTING SPORTS UNTIL 12 MONTHS POST-OP\****

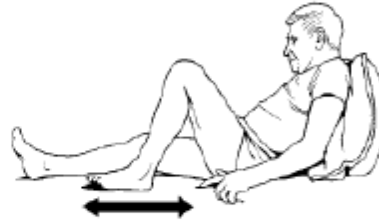
## KNEE POST-OP PHASE I

Perform exercises below frequently: 30 reps, 3 – 5x a day

**Quad Isometrics**



**Heel Slides**



**Active Assisted Motion**



**Ice Position 15 minutes 2-3 x per day**



**ADAPTED FROM:**  
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