

KNEE DISLOCATION RECONSTRUCTION

LCL and/or CHRONIC 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 -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
- **No AROM or Stationary bike x 6 weeks**
- Passive range of motion (PROM) 0-45
- Patellar mobilization
- 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
- Active assisted range of motion (AAROM) by patient 0-45 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 0-45 degrees
- No extensor lag

WEEKS 4 - 6

- Brace - Open to available range if pt has good quad control
- Not to exceed 60 degrees
- Crutches - PWB, progress to weight bearing as tolerated (WBAT)
- Continue appropriate previous exercises
- AAROM by patient 0-60 degrees
- **No AROM or Stationary bike x 6 weeks**
- Multi-angle Co-contractions quads / Hamstring at 0, 20, 40, 60
- SLR x 3 directions on mat without brace (**no ABD**) - No resistance
- **No ADD if MCL involved**
- Mini squats 0-45 degrees, supported in parallel bars
- Double leg heel raises

GOAL

- AAROM 0-60 degrees

WEEKS 6 - 8

- D/C Brace
- Crutches - weight bearing as tolerated (WBAT), D/C when gait is normal
- Continue appropriate previous exercises
- PROM, AAROM, AROM 0-90 degrees
- Limited arc open chain quad extension 75-60 degrees, light weight
- 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 ABD) with light weight below knee - No ADD if MCL involved
- 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 range of motion
- Treadmill - Forward walking

GOALS

- Active range of motion (AROM) 0-90 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)
- Hip machine x 4 bilaterally - Including ABD (and ADD)
- 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
- Standing SLR x 4 with Theraband bilaterally
- 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 < $\frac{1}{4}$ 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****