GALLAND/KIRBY PCL RECONSTRUCTION
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 x 3 months – Locked in extension x 8 weeks
• Crutches – Partial weight bearing (PWB) in brace
• AAROM – 0-45 degrees
• 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
• 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
• AAROM 0-45 degrees
• Good quad control

Weeks 2 - 4

• Brace x 3 months – Locked in extension x 8 weeks
• Crutches – PWB in brace
• Continue appropriate previous exercises
• AAROM – 0-60 degrees
• No Hamstring curls or Stationary bike x 8 weeks
• Scar massage when incision healed
• SLR x 4 on mat in brace – Add light weight above knee if good quad control
• Double leg heel raises in brace (supported in parallel bars)
• Weight shifts, Mini squats 0-30 degrees, in brace (supported in parallel bars)
• Stretches:
  – AT, hip flexors, ITB
  – Hamstring with leg supported in brace

GOALS
• AAROM 0-45 degrees
• No extensor lag

WEEKS 4 - 6
• Brace x 3 months – Locked in extension x 8 weeks
• Crutches – PWB in brace
• Continue appropriate previous exercises
• AAROM by patient 0-60 degrees
• No Hamstring curls or Stationary bike x 8 weeks
• Multi-angle Co-contractions quads / HS at 0, 20, 40, 60 degrees
• SLR x 4 on mat, out of brace, no weights

GOALS
• AAROM 0-60 degrees
• No effusion

WEEKS 6 - 8
• Brace x 3 months – Locked in extension x 8 weeks
• Crutches – Weight bearing as tolerated (WBAT) in brace
• Continue appropriate previous exercises and the following ex without brace
• AROM, AAROM 0-90 degrees
• No Hamstring curls or Stationary bike x 8 weeks
• SLR x 4 on mat with light weight below the knee
• SAQ – 0-30 degrees over bolster with light ankle weights
• Double leg heel raises
• Wall squats 0-45 degrees
• Leg press 0-45 degrees with resistance no more than ¼ body weight
• Forward, retro and lateral step downs in parallel bars (small step)
• Proprioceptive training – Single leg standing in parallel bars
  – Double leg BAPS in parallel bars
• Elliptical trainer – No resistance
GOAL

• AAROM 0-90 degrees

WEEKS 8 - 12

• Brace x 3 months – Open to available range
• Crutches – D/C when gait is normal
• Continue appropriate previous exercises
• AROM, AAROM 0-110 degrees
• Forward, retro and lateral step downs – medium step
• Single leg heel raises
• Leg Press – 0-60 degrees with resistance up to ½ body weight
• Hamstring curls – 0-60 degrees, with ankle weights prone or in standing
  – Progress to weight machine, 0-60 degrees (up to ¼ body weight)
• Hip weight machine x 4 bilaterally
• LAQ 0-60 degrees over bolster or side of mat with ankle weights
• Proprioceptive training – Single leg BAPS, ball toss and body blade
• Stationary bike for ROM – No resistance
• Treadmill – Forwards and backwards walking
• Elliptical Trainer with minimal resistance
• Pool therapy – Walking / running (no kicking)

GOALS

• AROM 0-110 degrees
• Normal Gait

MONTHS 3 - 4

• D/C ROM brace
• Functional brace per surgeon
• Continue appropriate previous exercises with progressive resistance
• PROM, AAROM, AROM to regain full motion
• Leg press 0-90 degrees with resistance as tolerated
• Hamstring curl weight machine 0-90 degrees with low weight and high reps
• Knee extension weight machine through full range with resistance as tolerated
• Fitter
• Slide board
• Stationary bike – Progressive resistance and time
• Elliptical trainer for progressive resistance and time
• Treadmill – Walking progression program
• Pool therapy – Swimming laps

GOALS
• Full ROM
• Walk 2 miles at 15 min/mile pace

MONTHS 4 - 6
• Biodex at 6 months depending on patient progress and surgeon request
• Continue appropriate previous exercises
• Agility drills / Plyometrics
• Sit-up progression
• Treadmill – Running progression program
• Quad stretches
• Transition to home / gym program

GOALS
• Run 2 miles at easy pace
• Return to all activities

*NO CONTACT SPORTS UNTIL 9 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