GALLAND/KIRBY ACL RECONSTRUCTION: HAMSTRING AUTO / ALLOGRAFT OR POSTERIOR TIBIALIS ALLOGRAFT 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 6 weeks – Locked in extension for ambulation
  - Open to available range when pt has good quad control (no extensor lag)
- Crutches – Partial weight bearing (PWB) in brace
- Patellar mobilization (teach patient)
- Calf pumping
- AAROM 0-90 degrees (passive extension, heel slides with towel assist)
- Passive extension with heel on bolster or prone hangs
- No active Hamstring exercises
- Electrical stimulation in full extension with quad sets and SLR
- Quad sets
- Straight leg raise (SLR) x 4 directions on mat (in brace if poor quad control)
- Total Gym (level 3-5) – Mini squats 0-45 degrees
  - Passive flexion to 90 degrees max (push up with opposite leg)
- Leg press 0-45 degrees with light resistance (up to ¼ body weight)
- Stationary bike for range of motion – Complete cycle as able
- Ice Pack with knee in full extension after exercise

GOALS

- Full passive extension
- Flexion to 90 degrees
- Good quad control

Weeks 2 - 4

- Brace x 6 weeks – Open to available range
• Crutches – PWB in brace
• Continue appropriate previous exercises and following ex without brace
• Scar massage when incision healed
• AAROM, AROM through full range as tolerated
• Co-contractions quads / HS
• SLR x 4 on mat – Add light ankle weights if quad control is maintained
• Total Gym – Progress levels and ROM of mini-squats as tolerated
• Leg press 0-90 degrees with light resistance (up to ¼ body weight)
• Hamstring curls – Carpet drags or rolling stool (closed chain)
• Double leg heel raises
• Stationary bike – Progressive resistance and time
• Stretches – Hamstring, Hip Flexors, ITB

**GOALS**

• ROM 0-110 degrees
• No effusion
• No extensor lag

**WEEKS 4 - 6**

• Brace x 6 weeks – Open to available range
• Crutches – weight bearing as tolerated (WBAT) in brace, D/C when gait is normal
• Continue appropriate previous exercises
• PROM, AAROM, AROM to regain full motion
• Standing SLR x 4 with light Theraband bilaterally
• Mini squats, Wall squats 0-45 degrees
• Leg press 0-90 degrees with resistance no more than ½ body weight
• Hamstring curls on weight machine with light resistance
• Forward, lateral and retro step downs in parallel bars
  — No knee flexion past 45 degrees (small step)
• Single leg heel raises
• Proprioceptive training – Single leg standing in parallel bars
  — Double leg BAPS for weight shift
• Treadmill – Forwards and backwards walking

**GOALS**

• Full ROM
• Normal Gait
WEEKS 6 - 9
• D/C Brace
• Continue appropriate previous exercises
• Wall squats 0-90 degrees
• Leg press 0-90 degrees with resistance as tolerated
• Hamstring curls with resistance as tolerated
• Forward, lateral and retro step downs (medium to large step)
• Hip weight machine x 4 bilaterally
• Proprioceptive training – Single leg BAPS, ball toss and body blade
• Stationary bike – 15-20 minutes at a time, at least 70 rpm
• Treadmill – Walking progression program
• Elliptical trainer
• Pool therapy – Walking / running (no kicking)

GOAL
• Walk 2 miles at 15 min/mile pace

WEEKS 9 - 12
• Continue appropriate previous exercises with progressive resistance
• Fitter
• Slide board
• Proprioceptive training – Grid exercises
• Functional activities – Figure 8s, gentle loops, large zigzags
• Stairmaster – Small steps
• Pool therapy – No swimming laps
• Quad stretches

GOAL
• Walk 3 miles at 15 min/mile pace

MONTHS 3 - 4
• Isokinetic testing at 180 and 300 degrees/sec
  – Must have 80% of opposite leg to clear for straight line running
• Continue appropriate previous exercises
• Knee extension weight machine
• Short arc quads
• Agility drills / Plyometrics
• Treadmill – Running progression program if cleared
• Pool therapy – Swimming laps

**GOAL**
• Run 2 miles at easy pace

**MONTHS 4 - 6**
• Repeat Isokinetic testing as needed
• Continue appropriate previous exercises
• Sit-up progression
• Running progression to track
• Transition to home / gym program

**GOAL**
• Return to all activities

*NO CONTACT SPORTS UNTIL 6 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