# GALLAND/KIRBY ACL RECONSTRUCTION: BONE-TENDON-BONE AUTO / 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 4 weeks Locked in extension for ambulation
  - Open to available range when pt has good quad control (no extensor lag)
- Crutches weight bearing as tolerated (WBAT) in brace (D/C when gait is normal generally at 2 weeks)
- Patellar mobilization (teach patient)
- Calf pumping
- AAROM 0-90 degrees (passive extension, active flexion, heel slides)
- Passive extension with heel on bolster or prone hangs
- Electrical stimulation in full extension with guad sets and SLR
- Quad sets, Co-contractions guads / Hamstring
- Straight leg raise (SLR) x 4 on mat (in brace if poor guad control)
- Mini squats 0-45 degrees in parallel bars
- Weight shifts
- 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 ½ body weight)
- Hamstring curls Carpet drags or rolling stool (closed chain)
- Double leg heel raises
- Parallel bar ambulation Forwards / backwards / lateral
- Stationary bike for ROM 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 4 weeks Open to available range
- Crutches WBAT, D/C when gait is WNL
- Continue appropriate previous exercises and following ex without brace
- Scar massage when incision healed
- AAROM, AROM through full range as tolerated
- Electrical stimulation Continue as needed
- SLR x 4 on mat Add light ankle weights if quad control is maintained
- Wall squats No knee flexion past 45 degrees
- Total Gym Progress levels of Mini-squats, 0-45 degrees
- Leg Press 0-45 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
- Stationary bike Progressive resistance and time
- Treadmill Forwards and backwards walking
- Stretches Hamstring, Hip Flexors, ITB

#### GOALS

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

#### <u>WEEKS 4 - 6</u>

- D/C Brace
- Continue appropriate previous exercises
- PROM, AAROM, AROM to regain full motion
- Standing SLR x 4 with Theraband bilaterally
- Mini squats, Wall squats 0-60 degrees Progress to single leg
- Leg press 0-60 degrees with resistance no more than ½ body weight
- Forward, lateral and retro step downs 0-60 degrees (medium step)

- Proprioceptive training Single leg BAPS, ball toss and body blade
- Elliptical trainer
- Pool therapy Walking / running (no kicking)

#### **GOALS**

- Full ROM
- Normal gait

#### **WEEKS 6 - 9**

- 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 0-90 degrees (large step)
- Hip weight machine x 4 bilaterally
- Proprioceptive training Grid exercises
- Stationary bike 15-20 minutes at a time, at least 70 rpm
- Treadmill Walking progression program

#### **GOAL**

Walk 2 miles at 15 min/mile pace

#### **WEEKS 9 - 12**

- Continue appropriate previous exercises with progressive resistance
- Fitter
- Slide board
- 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

