

Robert Kollmorgen DO

ACL RECONSTRUCTION – BONE-TENDON-BONE

AUTO / ALLOGRAFT

Revised August 2008

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 for autograft, NWB for Allograft (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 quad sets and SLR

Quad sets, Co-contractions quads / Hamstring

Straight leg raise (SLR) x 4 on mat (in brace if poor quad 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 ¼ 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

Continued on following page

Robert Kollmorgen DO

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

Weeks 4 – 6

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

Robert Kollmorgen DO

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

Goals

Return to all activities

No contact sports until 9-12 months post-op