

Jeffrey Dean, MD

Orthopedic Surgeon

ACL BTB RECONSTRUCTION (Rehabilitative Guidelines)

Revised January 2003

Post-op Days 1 – 14

Dressing – POD 1: Debulk dressing, TED Hose in place

– POD 2: Change dressing, keep wound covered, and continue TED Hose

– POD 7-10: Sutures out, D/C TED Hose when effusion resolved

Brace – locked in extension for ambulation

– open to available range when pt has good quad control (no extensor lag)

Crutches – WBAT in brace (D/C when gait is WNL – generally at 2 weeks)

Patellar mobilization (teach patient)

Calf pumping

PEAF (passive extension-active flexion), heel slides, 0-90 degrees

AAROM 0-90 degrees

Stationary bike for ROM – complete cycle as able

Passive extension with heel on bolster or prone hangs

Electrical stimulation in full extension with quad sets and SLR

Quad sets, Co-contractions quads/ham

SLR x 4 (parallel bars if poor quad control)

Mini squats, weight shifts – in parallel bars

Total Gym to start closed chain activity

– Mini squats (level 3-5) – No flexion > 45 degrees

– Passive flexion to tolerance (push up with opposite leg)

Leg press with light resistance

Hamstring curls – closed chain (carpet drags or rolling stool)

Parallel bar ambulation – forward/backward/lateral

Double leg heel raises

Ice Pack with knee in full extension after exercise

Goals

Full passive extension

Flexion to 90 degrees

Good quad control

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Weeks 2 – 4

Brace – lock during ambulation until positive quad control; open to available range

Crutches – WBAT, D/C when gait is WNL

Continue appropriate previous exercises

Scar massage when incision healed

PROM, AAROM, AROM as tolerated

Electrical stimulation (PRN) in full extension with quad sets and SLR

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SLR x 4 on mat – add light ankle weights if quad control is maintained

Partial wall squats – No knee flexion past 45 degrees

Total Gym – progress levels of mini-squats as tolerated

Leg Press with resistance no more than $\frac{1}{2}$ body weight

Forward, lateral, and retro step downs in parallel bars

– No knee flexion past 45 degrees

Single leg heel raises

Proprioceptive training – single leg standing in parallel bars

– double leg BAPS for weight shift

Stretches – HS, AT, Hip Flexors, ITB

Stationary bike for progressive resistance and time

Treadmill – backwards and forwards walking

Elliptical trainer

Goals

ROM 0-110 degrees

No effusion

No extensor lag

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Weeks 4 – 6

Brace – Open to available range, D/C at 8 weeks
Continue appropriate previous exercises
Mini squats, Wall squats – progress to single leg
Proprioceptive training – progress to single leg BAPS, ball toss and body blade
Standing SLR x 4 with Theraband bilaterally
HS curls – may begin open chain with light resistance
Pool – walking and jogging (no kicking)

Goals

Full ROM
Normal gait

Weeks 6 – 9

Continue appropriate previous exercises
Treadmill – forward walking, approaching 15 min/mile pace
Stationary bike – 15-20 minutes at a time, at least 70 rpm,
emphasis on endurance and affected leg

Goals - Full ROM if not already achieved
Walk 2 miles at 15 min/mile pace

Weeks 9 – 12

Continue appropriate previous exercises with progressive resistance
Functional activities – Fitter, slide board, figure 8s, gentle loops, large zigzags
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Treadmill – continue walking program
Begin gym program

Goal – Walk 3 miles at 15 min/mile pa

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Months 3 – 4

Continue appropriate previous exercises
Agility drills / Plyometrics
May begin incorporating open chain strengthening as tolerated
Treadmill – Begin running progression program if cleared
Pool therapy – begin swimming laps

Goal – Run 2 miles at normal pace

Months 4 – 6

Home/gym program
Continue strengthening, stretching, proprioceptive training,
and running/agility programs
Sit-up progression
Quad stretches
Functional test at 6 months to clear for sports and discharge –
Must have 90% of opposite leg

Goal

Return to all activities
Pass APFT at 6 months

No contact sports until 6 months post-op

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