

Jeffrey Dean, MD
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ACL HAMSTRING RECONSTRUCTION (Rehabilitative Guidelines)
Revised January 2003

Post-op Days 1 - 14

No HS Ex 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 – locked in extension for ambulation
 – open to available range when pt has good quad control (no extensor
lag)
Crutches – PWB in brace (D/C at 8 weeks if gait is WNL)
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)
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
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 – open to available range when positive quad control
Crutches – PWB
Continue appropriate previous exercises
Scar massage when incision healed
PROM, AAROM, AROM as tolerated
SLR x 4 on mat – add light ankle weights (above knee) if quad control is
Maintained (NOTE: use light or no weight with ADD)
Total Gym – progress levels of mini-squats as tolerated
Hamstring curls – closed chain (carpet drags, rolling stool)
Stretches – HS, AT, Hip Flexors, ITB
Stationary bike

Goals

ROM 0-110 degrees
No effusion

Weeks 4 – 6

Brace – open to available range, D/C at 8 weeks
Crutches – WBAT in brace, D/C when gait is WNL
Continue appropriate previous exercises
Partial wall squats – No knee flexion past 45 degrees
Mini squats, weight shifts – in parallel bars
Leg press with resistance no more than $\frac{1}{2}$ body weight
HS curls – may begin open chain with light resistance
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

Progress to single leg BAPS, ball toss, and body blade
Standing SLR x 4 with Theraband bilaterally
Stationary bike for progressive resistance and time
Treadmill – backwards and forwards walking
Elliptical trainer
Pool – walking and jogging (no kicking)
Goals – Full ROM, Normal Gait

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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
Treadmill – continue walking program
Begin gym program

Goal – Walk 3 miles at 15 min/mile pace

Months 3 – 4

Continue appropriate previous exercises
Agility drills / Plyometrics
May begin incorporating open chain strengthening as tolerated
Pool therapy – begin swimming laps
Sports brace to 10 months

Goal – Run 2 miles at normal pace

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Months 4 – 6

Home/gym program
Treadmill- begin running progression
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

Goals

Return to all activities
Pass APFT at 6 months post-op

No contact sports until 6 months post-op

References:

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