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ACL RECONSTRUCTION - BONE-TENDON-BONE

General Guidelines

- Obtain full extension within 2 weeks after surgery
- Crutches until patient can ambulate with normal gait (around 2 weeks typically)
- Long leg brace locked in extension until patient can demonstrate quad control (around 3-4 weeks typically). Brace can then be unlocked during ambulation and continued for 6 weeks after surgery
- Run straight ahead on even ground at 3 months
- Return to sports at 6-9 months

Post-op Days 1 – 14

Goals: Full passive extension and flexion to 90 degrees, obtain good quad control

- POD 2: Change dressing, keep wound covered, continue TED Hose
- POD 10-14: Sutures out, D/C TED Hose when effusion resolved
- Brace Locked in extension for ambulation until quad control established (generally 2-4 weeks). Open to available range when pt has good quad control (no extensor lag)
- Crutches weight bearing as tolerated (WBAT) in brace (D/C crutches when gait is normal)

Therapy:

Patellar mobilization, 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, Cocontractions 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 1/4 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

Weeks 2 – 4

Goals: ROM 0-110 degrees No effusion, No extensor lag

Therapy:

Brace x 6 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 1/2 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

Weeks 4 – 6

Goals: Full ROM normal gait, DC Brace at 6 weeks

Therapy:

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 1/2 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)

Weeks 6 – 9

Goal: Walk 2 miles at 15 min/mile pace

Therapy:

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

Weeks 9 - 12

Goal: Walk 3 miles at 15 min/mile pace

Therapy:

Continue appropriate previous exercises with progressive resistance Fitter Slide board

Functional activities – Figure 8s, gentle loops, large zigzags Stairmaster – Small stens

Pool therapy – No swimming laps

Quad stretches

Months 3-4

Goal: Run 2 miles at easy pace

Therapy:

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

Months 4 – 6

Goals: Return to all activities, no contact sports until 6 months post-op

Therapy:

Repeat Isokinetic testing as needed Continue appropriate previous exercises Situp progression

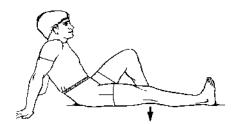
Running progression to track

Transition to home / gym program

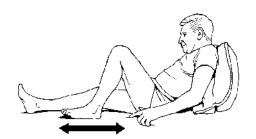
Knee Post Op Phase 1

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

