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## 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 guad 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 guad sets and SLR Quad sets, Co-contractions guads / 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 <sup>1</sup>/<sub>4</sub> 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 guad control is maintained Continued on following page

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 lea 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 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) 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 guads 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 Pass APFT at 6 months post-op **No contact sports until 6-9 months post-op**