

Orthopedic Associates of Hartford, P.C.
J. Kristopher Ware, M.D/ Nicole Lavette, APRN
31 Seymour St #100
Hartford, CT 06106
Phone: 860-244-1017, Fax: 860-524-8965
www.oahct.com

Date of Surgery:

Post-Operative Rehabilitation Protocol:

Tibial Tubercle Transfer

PHASE I: IMMEDIATE POST-OPERATIVE PHASE (WEEKS 0-4)

GOALS: Decrease swelling, pain control, prevent quad atrophy, Protect healing osteotomy.

I. Immediate Post-Operative to Week 3:

A. General:

- * Brace locked in full extension. Set brace allowable flexion to 60°
- * May remove for shower/bathing.
- * Elevate knee above heart level often
- * Cryotherapy unit or ice 20 minutes/hour

B. Weight Bearing:

- * Foot-flat touch down (15%) weight bearing for 2 weeks, then partial (50%) weight bearing in brace in extension

C. Range of Motion Goals:

- * PROM, AAROM 0°-60°, 4-5 times per day

D. Treatment / Exercises:

- * Ankle pumps, Theraband ankle exercises
- * VMO quad sets with biofeedback
- * Multi-angle quad isometrics (60°, 40°, 20°)
- * EMS especially important if patient unable to initiate quad sets or independent SLR
- * Straight leg raises – 4 directions in brace
- * Gastroc/hamstring stretching

PHASE II – CONTROLLED AMBULATION PHASE (WEEKS 4-8)

GOALS: Protect healing tissue, improve motion, decrease swelling, pain control, prevent muscle atrophy, improve ambulation.

Enter Phase II if:

- ✓ Active ROM 0°-60°

- ✓ Minimal pain/swelling

II. Weeks 4-8:

A. General:

- * Hinged brace open 0°-60°
- * Remove brace for sleep
- * Cryotherapy unit or ice 20 minutes/hour at patient's discretion

B. Weight Bearing:

- * WBAT in brace. Discontinue crutch as tolerated (preferably by Week 6)

C. Range of Motion Goals:

- * PROM, AROM 0°-90° without brace for Weeks 4-5
- * PROM, AROM 0°-120° without brace for Weeks 5-8

D. Treatment / Exercises:

- * Continue previous treatment / exercises
- * Isotonic program hip abduction/adduction
- * Knee extension 90°-40°
- * Standing weight shifts
- * Mini squats 0°-30°
- * Wall slides 0°-30°
- * Leg press 0°-30°
- * Pool exercises
- * Bicycle for ROM – ½ arcs progressing to full ROM
- * SLR in 4 planes with 1 lb. Increase lb per week
- * Gentle patella and soft tissue mobilization

PHASE III: STRENGTHENING PHASE (WEEKS 8-16)

GOALS: Increase strength, improve motion, progress functional activities.

Enter Phase III if:

- ✓ Minimal pain/swelling
- ✓ ROM goals met
- ✓ Strength at least 70% of uninvolved leg

III. Weeks 8-16:

A. General:

- * Ice 20 minutes/hour at patient's discretion

B. Weight bearing:

- * WBAT

C. ROM goals:

- * PROM/AROM 0°-135° (or match uninvolved knee)

D. Treatment / Exercises:

- * Continue with previous treatment
- * Isotonic program (hips, hamstrings, leg press)
- * Heel walking/toe walking
- * Leg curls
- * Chair squats
- * Leg press
- * Bicycle, Elliptical
- * Sit-up
- * Hip abductors/adductors

PHASE IV: RETURN TO ACTIVITY PHASE (Months 4-5)

GOALS: Increase strength and endurance. Return to functional activities, Progress functional activities gradually.

Enter Phase IV if:

- ✓ Minimal pain/swelling
- ✓ Full ROM
- ✓ Strength at least 80% of uninvolved leg

IV. Months 4-5:

A., B., C. As Above

D. Treatment / Exercises:

- * Continue with previous treatment
- * Progress all training programs
- * Gradual return to full activity with MD clearance

*** Addendum**

This protocol provides general rehabilitation guidelines following Tibial Tubercle Transfer, VMO Advancement, and Lateral Release. It is subject to modification depending on the degree of injury, the type and extent of associated surgical intervention, as well as your individual progress post-operatively. For any questions, please call my office at 860-244-1017.