

# **Quad Tendon Repair**

# Post-op Program:

## POD 1

- 1. Ankle pumps: 20-25 per hour
- 2. Strict NWB. Brace locked in extension at all times unless performing exercises.
- 3. Gait with crutches
- 4. Patellar mobilizations
- 5. Polar care/ cryotherapy
- 6. Dressing change
- 7. Quad sets in brace

## **POW 1-6**

- 1. Continue as above
- 2. Start SLR's: start standing, then sitting, then supine in brace
- 3. May use e-stim to promote quad recruitment
- 4. Encourage full extension
- 5. Progress ROM 10 deg per week beginning week 4 to achieve 90 deg by 8 weeks
- 6. Gait training with assistive device
- 7. Begin **WBAT** with **brace locked in extension** at 4 weeks
- 8. Start the following open chain exercises
  - a. Side lying hip abduction and adduction
  - b. Sitting hip flexion
  - c. Ankle theraband
- 8. Encourage upper extremity strengthening for overall conditioning

## **POW 6-12**

- 1. Continue as above
- 2. Be sure to advance knee to full ROM starting at 8 weeks
- 3. Unlock brace at 8 weeks to ambulate
- 4. D/C brace at 10 weeks
- 5. Aquatic therapy may start at 8 weeks for LE strengthening
- 6. Stationary bike with low resistance and seat up high to avoid hyperflexion
- 7. Standing terminal knee extension with theraband.
- 8. May increase resistance on stationary bike at 10 week

## POW 12-16

1. Begin closed chain knee exercises

#### ENCOURAGE PROPER TECHNIQUE AT ALL TIMES.

- a. Single leg stance: level to unlevel surfaces
- b. Therakicks: progress resistance, speed, arc of motion
- c. Walking forward, retro, and sidestepping
- d. Standing calf raises, wobble board
- e. Wall slides
- f. Leg press with very light weights at 12 weeks
- g. Stationary bike
- 2. Jog Progression
  - a. Fast walk
  - a. High knee march
  - b. Figure 8
  - c. 4 way reaction drill
  - d. Jog
  - e. Continue modalities
  - f. Encourage upper extremity strengthening for overall conditioning

## **POW 16-20**

- 1. Continue as above
- 2. Progress exercises for building strength and endurance
  - 4-6 sets of 15-20 reps
  - Progress from double to single leg and concentric to eccentric
  - Emphasis on closed chain activities only
  - a. Squats, leg press
  - c. Lunges (front/side/back)
  - d. Step-ups
  - e. Leg curls
  - f. Hip strengthening
  - g. Resisted walking
- 3. Exercises for balance and proprioception
  - Progress from local to whole body
  - a. Mini-tramp
  - b. Sport cord
  - c. Slide board
  - d. Swiss ball
- 4. Exercises for endurance
  - a. Bike
  - b. Stairmaster
  - c. Elliptical trainer
  - d. Treadmill walking
  - e. Aquatic exercise

#### POW 20: Return to sport

1. Progress jump roping to line jumps, then box jumps, and then distance jumps

- 2. Begin sport specific drills
- 3. Progress speed and intensity of above activities

#### **Return to Athletics Criteria**

- 1. Satisfactory clinical exam
- 2. <10% isokinetic strength deficit (Leg Press)
- 3. Completion of sport replication activity
- 4. Single leg hop test