



Rehabilitation Following Distal Semitendinosus Tendon Debridement

PHASE I: MAXIMUM PROTECTION PHASE (Weeks 1-4)

Goals: Reduce inflammation/effusion
Allow early healing
Full passive knee extension
Gradually increase knee flexion
Restore quadriceps voluntary activation

Restrictions: No Active knee flexion for 4 weeks
No passive hamstring stretching for 3 weeks

Stage 1: Immediate post-surgery days 1 through 10

- Ice, compression, elevation
- Compression wrap dressing
- Crutches as needed
- ROM (passive 0-90) to tolerance
- Patellar mobilizations
- Stretch calf, hip flexors, lumbopelvic musculature
- Strengthening exercises (neuro-muscular electrical stimulation to quads):
 - Quad sets
 - SLR flexion
 - Hip Abd/Adduction
 - Knee extension 90-40 degrees
- Mini Squats 0-50/60 degrees
- Avoid active resisted knee flexion

Stage 2: Weeks 2 through 4

- Discontinue crutches when able
- Continue use of ice and compression
- Continue compression wrap
- ROM guidelines
 - Gradually increase PROM as tolerated
 - Week 2: 0-125 degrees

- Week 3: 0-135 degrees
- Week 4: 0-145 degrees

*Discontinue crutches when safe and proper gait (usually during week 2)

- Continue PROM exercises and stretching
- Strengthening exercises (see attached sheet Phase I exercises)
 - SLR (all 4 planes)
 - Knee extension 90-0 degrees
 - CKC mini-squats 0-45 degrees
 - CKC wall squats 0-60 degrees
 - Initiate CKC exercises
 - Lateral and front step overs (week 4-6)
 - Lateral lunges (week 4-6)
 - Step downs (lateral)
 - Step downs (front)
- Bicycle
- Pool exercises (once incision is fully healed)

PHASE II: INTERMEDIATE PHASE (Weeks 4-6)

Goals: Full PROM
 Minimal to no swelling/inflammation
 Restore quadriceps strength
 Gradually increase functional activities
 Initiate light active hamstring strengthening

- Continue use of ice and compression as needed
- Continue ROM and stretching to maintain 0-135 degrees
- Progress strengthening exercises
 - Leg press 70-0 degrees
 - Knee extension 90-40 degrees
 - Hip Abd/Adduction
 - Wall squats 0-70 degrees
 - Vertical squats 0-60 degrees
 - Lateral step-ups
 - Front and lateral lunges
 - Hamstring curls
- Balance/proprioception training
 - Biodex stability
 - Squats rocker board
 - Cup walking (step overs)
 - Standing on foam single leg

- Bicycle (if ROM permits)
 - Pool program (may begin running in pool)
 - Elliptical
- May be able to begin running if cleared by physician or medical team
 - Can initiate 45-60 ft phase of Interval Throwing Program

PHASE III: ADVANCED ACTIVITY PHASE (Weeks 6-8)

Goals: Improve strength and endurance
 Maintain full ROM
 Gradually increase applied stress
 Progress to 90" phase of ITP

Week 6

- Continue all strengthening exercises listed above (Phase II and III activities) see attached sheet
- May initiate stair stepper if appropriate
- Treadmill walk/run program

Week 7

- Continue strengthening and stretching program

PHASE IV: RETURN TO ACTIVITY PHASE (Week 8 and beyond)

Goals: Improve strength and endurance
 Prepare for unrestricted activities
 Prepare for flat ground throwing

Criteria to progress to Phase IV

- Full non-painful ROM
- No pain or tenderness
- Satisfactory clinical exam
- Satisfactory isokinetic test

Exercises

- Continue and progress all strengthening exercises and stretching drills

- Deep squatting permitted at 3-4 months
- Initiate straight line running: 12 weeks
- Initiate pivoting and cutting: 4 months
- Initiate agility training: 4 months
- Gradually return to sports: 4-6 months

Revised AJY/KW/CSA/JRA.