

Postoperative Rehabilitation Following Endoscopic Compartment Syndrome Release

Phase I – Immediate Postoperative Phase (Day 1 to Week 2)

Goals: Control weight bearing forces
Gradually restore ankle and knee ROM
Diminish pain and inflammation
Restore normal painfree gait

Weeks 1-2:

- Weight Bearing as tolerated with crutches for 1-2 weeks
- Ice/elevation/compression
- Exercises
 - Ankle AROM
 - DF, PF, inv, ev
 - Theraband at week 3
 - Ankle PROM
 - Joint mobilizations as necessary
 - Gastroc/soleus stretching
 - Knee AROM
 - Quad sets
 - SLR's
 - Ankle pumps with leg elevated 3-6 times/day

Phase II – Intermediate Phase: Light Strengthening Phase (Weeks 3-4)

Goals: Normalize gait without assistive device
Full gastroc/soleus flexibility
Maintain motion/strength of uninvolved muscle groups
Improve balance/proprioception

Week 3-4:

- Scar mobility/massage(once incision is healed)
- Continue to progress 4-way ankle theraband resistance
 - Eccentric strengthening, especially DF
- Continue all ROM, flexibility & stretching exercises
- Nerve glides common peroneal tract
 - SLR position supine, alternatively PF(with inversion) and DF ankle
- Balance and proprioceptive exercises
 - Level surface, progressing to unstable surface
 - Bilateral, progressing to unilateral activities
- Stationary bike
 - Gradually increase time & resistance on stationary bicycle
- Gait training
 - Treadmill walking
 - Cone walk forward/lateral

Phase III – Advanced Exercise Phase (Weeks 4-7)

Goals: Maintain full ROM
Full ankle strength
Gradually initiate functional activities

Weeks 4-7:

- Continue exercises listed above
- Continue all stretching & flexibility exercises
- Soft tissue massage as needed
- Progress CKC strengthening exercises
 - Leg Press
 - Wall squats
 - Step downs
 - Lunges
 - Single leg heel raises
- Initiate light plyometric exercises week 6
 - Double leg, progressing to single leg
- Elliptical machine
- Light jogging 6-8 weeks

Phase IV – Return to Activity Phase (Weeks 8-12)

Goals: Enhanced muscular strength, power, and endurance
Progress functional activities

Weeks 8-12:

- Continue all exercises listed in previous phase
- Continue stretching & flexibility program
- Continue isotonic strengthening
- Functional agility drills
- Progress plyometrics
- Progress running program
- Progress agility drills
- Initiate Sport Specific drills
- May initiate interval sport programs

Criteria to Return to Competition:

- Full painfree ROM, flexibility, and strength
- Ability to perform sport specific drills at satisfactory level & without pain
- Satisfactory Clinical Exam
- Approval by Physician