



The Orthopaedic & Fracture Clinic

Syndesmosis Fixation with Tight Rope Rehabilitation Protocol

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General Rehabilitation Principles

- 6-week period of protected and progressive weightbearing.
- Focus on swelling reduction with elevation and ice.
- Progressive loading into dorsiflexion and multidirectional movements.
- Gradual return to functional strength and conditioning.
- Criteria-based return to cutting/pivoting activities after 8-10 weeks.

Weeks 0 – 6

Precautions:

- Limited weightbearing with use of crutches and cast for weeks 0-2.
- Transition to Aircast boot at 2 weeks postop through 6 weeks postop.
- Aircast boot removed for showering or when at rest.
- Continued reduction in swelling and pain.
- May begin stationary biking with boot on. (Little to no resistance).

Week 6

Precautions:

- Continued use of Aircast boot for standing exercises/ambulation.
- Avoiding isotonic strengthening into dorsiflexion.

Treatment plan:

- Plantigrade stationary biking without Aircast boot (No resistance).
- Progressive sitting heel/forefoot raises, 20-30 reps. (No strengthening into dorsiflexion).
- Isotonic strengthening from plantigrade through plantarflexion.
- Standing proprioceptive exercises.
- Hip and knee strengthening exercises.

Week 7

Precautions:

- Wean from Aircast boot per pain.
- Gradually progress dorsiflexion active range of motion.
- Progression of exercises per tissue tolerance.

Treatment plan:

- Stationary bike without Aircast boot. (Gradual progression of resistance intervals).
- Begin controlled walking program.
- Progress seated heel/forefoot raises.
- Isotonic strengthening from limited dorsiflexion through plantarflexion. (No stretching).
- Shallow double leg squatting progression.
- Static, double and single leg, standing proprioceptive exercises.
- Continued hip and knee strengthening non-weight-bearing exercises.

Week 8

Precautions:

- Avoid combined dorsiflexion-eversion active range of motion and strengthening.
- Gradually progress multiplanar active range of motion.
- Progression of exercises per tissue tolerance.
- No distal tib/fib mobilization.

Treatment plan:

- Increasing intensity of stationary biking.
- Introduce multiplanar active range of motion, open chain strengthening. (No dorsiflexion-eversion).
- Continue gait program.
- Isotonic strengthening from limited dorsiflexion through plantarflexion.
- Begin standing double and single leg heel raise program.
- Progress standing proprioceptive exercises.

Week 9

Precautions:

- Initiate light dorsiflexion stretching. (No aggressive stretching).
- Gradually progressive weight-bearing strengthening into dorsiflexion.
- Avoid tissue irritability/increasing effusion with return to running program.
- Avoid tissue irritability/increasing effusion with multiplanar weight-bearing exercise.
- No distal tib/fib mobilization.

Treatment plan:

- Increase intensity of stationary biking.
- Progress return-to-walk/run program.
- Progressive multiplanar active range of motion/open chain strengthening.
- Progressive closed kinetic chain, multiplanar, resistance exercises.
- Progressive multiplanar standing proprioception exercises. (No dorsiflexion-eversion).
- Begin sport-specific return to activity progression per tolerance.

Week 10**Precautions:**

- No aggressive dorsiflexion-eversion strengthening plyometrics.
- Avoid aggressive distal tib/fib mobilization.

Treatment plan:

- Progressive multiplanar active range of motion/progressive resistance exercises (protected dorsiflexion-eversion).
- Continued return-to-run program.
- Initiate light multiplanar plyometric exercises/drills. (No aggressive multiplanar plyometrics).
- Continue multiplanar standing proprioceptive exercises.

Week 11+**Precautions:**

- Protected return to play progression per tissue irritability.
- Progressive increase in plyometric exercises per pain monitoring.

Treatment plan:

- Continued multiplanar active range of motion/progressive resistance exercises. (Protected dorsiflexion-eversion).
- Continued return-to-run program.
- Increase intensity of multiplanar plyometrics exercises/drills.
- Continue multiplanar standing proprioceptive exercises.

Return to activity criteria:

- A minimum of 8-12 weeks of tissue healing time from surgery.
- No soft tissue edema or pain in the ankle or foot.
- Full functional/closed-chain dorsiflexion range of motion.
- Adequate functional strength for joint protection and task performance.