



## **Syndesmosis Rehab Protocol: Grade 3 with Tight Rope fixation**

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If you have any questions about this protocol or about the patient, do not hesitate to email Dr. Metzler at: [ametzler@orthonky.com](mailto:ametzler@orthonky.com)

#### **Post-Operative Rehabilitation Protocol**

Grade III recovery: 4-8 Months  
Non-Weight Bearing: 4-6 Weeks  
Follow-up x-rays:

#### **Phase I: (1-3 Weeks)**

Goals of this stage are to protect injury, decrease pain, decrease inflammation, increase ROM, and maintain flexibility.

**Immobilize:** (NWB) Cam-Walker, Casting, Splint, Crutches  
Bulky Dressing (wound protection)

**Cryotherapy:** Reduce pain, and inflammation  
Game Ready  
Cryocuff,  
Whirlpool, Ice Bag (use compression/elevation)

**Modality:** Sensory E-Stim (20-30min)  
Effleurage Massage

**ROM:** Manual PF 30 degrees (30sec)  
Ankle Pumps  
Toe Curls

**PNF:** Ankle Circumduction/Alphabet ROM (Cold Whirlpool)  
Baps Board (seated and no sides touching on Baps Board)

**Flexibility:** Towel Stretch (seated/as tolerated & caution early DF)

#### **Phase II: (3-8 Weeks)**

Goals of this stage are to protect injury, decrease pain, decrease inflammation, increase ROM, increase flexibility, increase strength, and reduce deconditioning.

**Immobilize:** (NWB to PWB) Cam-Walker, Single Crutch at 3 weeks

Don Joy Brace or Stirrup Brace

**Cryotherapy:** Reduce pain, and inflammation  
 Game Ready  
 Cryocuff,  
 Whirlpool, Ice Bag (use compression/elevation)

**Modality:** Sensory E-Stim (20-30min)  
 Mild-Moderate Thermal US (@6 weeks)

**ROM:** Manual PF/DF stretch (30sec)  
 Weighted Ankle Pumps (seated)  
 Ankle Circumduction/Alphabet ROM (Cold Whirlpool)  
 Aquatic Therapy (submerge to ASIS)  
 Restore Gait (heel to toe)

**PNF:** Baps Board (progress from seated to standing)  
 Perimeter Circumduction (10 left, 10 right)  
 DF/PF Tilts, INV/EV Tilts (10 reps each)  
 Double/Single Leg Standing (soft surface/progress eyes open/closed)  
 Progress to Balance Pads (single leg, eyes open/closed)  
 Mini Tramp (progress double/single leg, eyes open/closed)  
 Single Leg Cups Drill  
 Rhythmic Stabilization (45&90 degrees, progress eyes open/closed)  
 PNF Stretching (Hold relax, Contract relax, Slow reversal)

**Flexibility:** Towel Stretch or Slant Board

**Exercises:**  
 (3-5sets, 10-12 reps)  
 Manual Isometric DF/PF, INV, EV (5-6sec hold)  
 Resistance Bands DF/PF, INV, EV  
 Manual PNF Patterns D1: (DF/INV, PF/EV) D2: (PF/INV, DF/EV)  
 Toe Raises (progress double leg/single leg)  
 Heel Raises DF (progress to walking on heels 15ft)  
 Wall Squats (60 degrees/progress double, single leg)  
 Bosu Ball (lateral step ups, lunges)  
 Balance Pads Lunges  
 Treadmill-Walk (heel to toe/5-10 min)  
 Jog-Run (progress straight line/curves @ 8 weeks)  
 Light Plyometrics @ 8 weeks  
 Carioca  
 Cycle Ergometer (20-30min/ progress to bike or elliptical)

### **Phase III: (8-12 Weeks)**

Goals of this stage are to protect injury, increase pain-free activity, increase flexibility, increase strength, increase sports specific activity, reduce deconditioning.

**Immobilize:** Don Joy Brace, Stirrup Brace, Syndesmosis Taping Technique

**Cryotherapy:** Reduce pain  
Game Ready  
Cryocuff,  
Whirlpool, Ice Bag (use compression/elevation)

**Modality:** Sensory E-Stim (20-30min)  
Mild-Moderate Thermal US

**PNF:** Bosu Ball (single leg, eyes open/closed)  
Mini Tramp Cup Drill (single leg)  
Balance Pad with resistance band (Hip Ext, Flx, Abd, Add)  
PNF Stretching (Hold relax, Contract relax, Slow reversal)

**ROM:** Joint Mobilization (Grade I &II/progress to III&IV)  
(Contraindicated Post-op 3 months)

**Flexibility:** Slant Board

**Exercises:**  
(3-5sets, 10-12 reps)  
Manual PNF Patterns D1: (DF/INV, PF/EV) D2: (PF/INV, DF/EV)  
Wall Squats (60 degrees/progress to single leg)  
Straight Leg Raises  
Bosu Ball (lateral step ups, lunges)  
Ladder Drills (in-out, two feet in-out, lateral shuffle)  
Dumbbell Lunges (progress to weights)  
Carioca  
Figure 8 Drills

#### **Phase IV: (4-8 Months)**

Goals of this stage are to protect injury, increase pain-free activity, increase flexibility, increase strength, increase sports specific activity, reduce deconditioning, return to pre-injury levels

**Immobilize:** Don Joy Brace, Stirrup Brace, Syndesmosis Taping Technique

**Cryotherapy:** Reduce pain  
Game Ready  
Cryocuff,  
Whirlpool, Ice Bag (use compression/elevation)

**Modality:** Sensory E-Stim (20-30min)  
Vigorous Thermal US

**PNF:** Bosu Ball (single leg, eyes open/closed)  
Mini Tramp Cup Drill (single leg)  
PNF Stretching (Hold relax, Contract relax, Slow reversal)

**ROM:** Joint Mobilization (Grade I &II/progress to III&IV)

**Flexibility:** Slant Board

**Exercises:**

(3-5sets, 10-12 reps)

Manual PNF Patterns D1: (DF/INV, PF/EV) D2: (PF/INV, DF/EV)

Wall Squats (60 degrees/progress to single leg)

Bosu Ball (lateral step ups, lunges)

Ladder Drills (in-out, two feet in-out, lateral shuffle)

Dumbbell Lunges (progress to weights)

Carioca

Figure 8 Drills

**Use Single leg hop (15 reps) for progression to advance activities**

Advance Plyometrics (Box jumps, Depth jumps, Cone Drills)

Sports Specific Activity (modify practice)

Sprint Program (Elliptical 30min/1min jog, 30-45sec sprint)

**Return to play criteria**

Full Strength

Full ROM

Pass Functional Test (including single leg hop)

Physician clearance

Protect Injury up to 1yr (Bracing and/or Tape)