

## ANKLE SYNDESOSIS REPAIR REHABILITATION PROTOCOL

	<b>Weightbearing</b>	<b>Brace</b>	<b>Motion</b>	<b>Therapeutic Exercises</b>
<b>0 to 2 weeks</b>	No weight on the operative side (NWB)	Splint	None	No formal physical therapy.
<b>2 to 4 weeks</b>	50% Partial weightbearing (PWB)	CAM boot at all times	Gentle sagittal plane motion (dorsiflexion/ plantar flexion) to tolerance	Formal physical therapy when out of splint. Active plantarflexion progressing to sitting heel raises. Protected active dorsiflexion progressing to sitting forefoot raises—no stretching or forced motion. Plantigrade sustained isometrics (45-90 seconds). Protected foot intrinsic and long toe flexor/extensor muscle activation exercises. 4-way single-leg raise, nonweightbearing exercises for larger lower limb muscles (glutes, quads, hamstrings).
<b>4 to 6 weeks</b>	Weightbearing as tolerated (WBAT)	CAM boot when ambulating	Progress sagittal plane motion only; no dorsiflexion stretching	Plantigrade stationary biking without CAM boot—avoid ankle dorsiflexion. Initiate gait training. Progressive sitting heel/forefoot raises (20-30 rep max load to 15-20 rep max load). Introduce additional isotonic strengthening from plantigrade through plantar flexion. Initiate standing proprioceptive exercises. Continue 4-way single-leg raise, nonweightbearing exercises for larger lower limb muscles (glutes, quads, hamstrings).
<b>6 to 8 weeks</b>	WBAT	Wean from boot when ambulating normally without crutches	Progress sagittal plane motion; may initiate light dorsiflexion stretching week 7	Gait normalization. Increase stationary bike resistance intervals. Introduce and progress multiplanar active motion and open chain strengthening. Initiate Return to Running progression. Mobilizations to talocrural, subtalar, and mid-/forefoot joints—no distal tibiofibular mobilizations. Begin standing double- and single-leg heel raise program. Progressive standing proprioceptive exercises. No multiplanar plyometrics.
<b>8 to 10 weeks</b>	Full weightbearing (FWB)	None	Attain full, painless sagittal plane motion	Introduce dorsiflexion and eversion strengthening and plyometrics. May initiate gentle distal tibiofibular mobilizations as needed. Progress multiplanar active motion and resistance exercises. Continue Return to Running progression. Initiate light multiplanar plyometrics—no aggressive multiplanar plyometrics.
<b>10 to 12+ weeks</b>	FWB	None	Maintain full, active range of motion	Continue Return to Running progression, multiplanar active motion, and progressive resistance exercises. Increase intensity of multiplanar plyometrics. May initiate sport-specific return to activity progression.

**RETURN TO SPORT CRITERIA:** *Minimum* 8 to 12 weeks tissue healing time • Functional closed-chain dorsiflexion range of motion • adequate functional strength for joint protection and task performance • 90% limb symmetry index on hop testing for high-level athletes • Y-balance anterior reach within 4 to 6 cm • No effusion • Completion of 1- to 3-week return to activity functional progression • Approval of treating physician

## Alter-G/Treadmill Return to Running Progression

Week	Workout Plan		Walk-Run Protocol*	
	Equipment	Weightbearing	Interval	Duration
6	Alter-G	50%	2-minute walk, 1-minute jog at 50% to 60% effort	10 to 15 minutes
7	Alter-G	50% to 75%	1-minute walk, 2-minute jog at 50% to 60% effort	15 to 20 minutes
8	Alter-G	75% to 100%	1-minute walk, 3-minute jog at 60% to 70% effort	15 to 20 minutes
9	Treadmill	100%	1-minute walk, 3-minute jog at 60% to 70% effort	20 to 30 minutes
10	Treadmill	100%	1-minute walk, 4-minute jog at 60% to 80% effort	20 to 30 minutes
11+	Treadmill	100%	Progress towards continuous 80% effort jog	20 to 30 minutes

\*Allow 1 to 2 days of rest between running progression workouts and reduce volume and/or intensity if pain/effusion present.