

ANKLE REHABILITATION PROTOCOL

		<ul style="list-style-type: none"> ▪ Tandem stance ▪ Single leg balance ▪ Rocker board ▪ Foam or Waffles single leg balance ▪ Wobble board ▪ Mini-trampoline ▪ Bosu ball ▪ Balance beam <p>- Cardiovascular exercise (ie. biking) - Core strengthening</p>	<ul style="list-style-type: none"> ▪ Tandem stance ▪ Single leg balance ▪ Rocker board ▪ Foam or Waffles single leg balance ▪ Wobble board ▪ Mini-trampoline ▪ Bosu ball ▪ Balance beam <p>- Cardiovascular exercise (ie. biking) - Core strengthening</p>
	PRECAUTIONS	No passive end-range INV or PF	No passive end-range DF No passive end-range ER / EV
	CRITERIA FOR PROGRESSION TO PHASE 3	<ol style="list-style-type: none"> 1. Full ROM 2. Minimal pain 3. 70-80% strength compared to unaffected 4. Able to do single-leg balance test for 30 sec, eyes closed 	<ol style="list-style-type: none"> 1. Full ROM 2. Minimal pain 3. 70-80% strength compared to unaffected 4. Able to do single-leg balance test for 30 sec, eyes closed
PHASE 3 (> 3 WEEKS up to > 12 MONTHS)	GOALS	<ol style="list-style-type: none"> 1. More aggressive strengthening 2. More aggressive proprioceptive training 3. Sport-specific / Work-specific functional and agility training 	<ol style="list-style-type: none"> 1. More aggressive strengthening 2. More aggressive proprioceptive training 3. Sport-specific / Work-specific functional and agility training
	REHABILITATION GUIDE	<ul style="list-style-type: none"> - Continue to progress strengthening in all planes <ul style="list-style-type: none"> ▪ Standing calf raises double leg → single leg - Cardiovascular exercise (ie. biking) - Progress proprioceptive training with perturbations - Begin running as tolerated - Functional activities <ul style="list-style-type: none"> ▪ Skipping, jumping, hopping, twisting, figure-8 running, stair climbing, lifting, carrying, pushing, pulling, squat, crouching - Begin sport- and work-specific activities <ul style="list-style-type: none"> ▪ Sport-specific skills and drills ▪ Work circuits (include material and non-material handling abilities) - Begin plyometrics and agility training late in program as tolerated - Incorporate core strengthening and stability into functional activities - Progress to independent Home Exercise Program 	<ul style="list-style-type: none"> - Continue to progress strengthening in all planes <ul style="list-style-type: none"> ▪ Standing calf raises double leg → single leg - Cardiovascular exercise (ie. biking) - Progress proprioceptive training with perturbations - Begin running as tolerated - Functional activities <ul style="list-style-type: none"> ▪ Skipping, jumping, hopping, twisting, figure-8 running, stair climbing, lifting, carrying, pushing, pulling, squat, crouching - Begin sport- and work-specific activities <ul style="list-style-type: none"> ▪ Sport-specific skills and drills ▪ Work circuits (include material and non-material handling abilities) - Begin plyometrics and agility training late in program as tolerated - Incorporate core strengthening and stability into functional activities - Progress to independent Home Exercise Program
	PRECAUTIONS	Careful with dynamic activities in lateral planes	Careful with dynamic activities involving end-range DF (ie. plyometrics) or pivoting
	CRITERIA FOR RETURN TO SPORT/ RETURN TO WORK	<ol style="list-style-type: none"> 1. Pain free 2. 85-90% strength compared to unaffected 3. Able to complete sport-specific / work-specific testing 4. Bracing and/or taping during athletics for at least 1 year post-injury 	<ol style="list-style-type: none"> 1. Pain free 2. 85-90% strength compared to unaffected 3. Able to complete sport-specific / work-specific testing

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Lateral Ligaments

Syndesmotic Ligaments

PHASE 1 CONSERVATIVE Rx (0-4 DAYS) NOTE: Rehab Phases may be 2x the length for Syndesmosis Injuries	GOALS	<ol style="list-style-type: none"> 1. Protection of injured joint 2. Pain management 3. Control inflammation 4. Progress WB as tolerated 	<ol style="list-style-type: none"> 1. Protection of injured joint 2. Pain management 3. Control inflammation 4. Progress WB as tolerated
	REHABILITATION GUIDE	<ul style="list-style-type: none"> - Protection with ankle brace (if ++ pain, severe injury, or poor muscle activation) - May be NWB with crutches for 24 hours, but should progress WB as tolerated immediately - NSAIDS, RICE, electrical stimulation short-term for pain, cryotherapy - Start gentle ROM exercises as tolerated immediately - AROM of the toes - Strengthening and ROM for the knee and hip (quads, hamstrings, gluteus medius and maximus, hip adductors) - Manual mobilizations - Biking 	<ul style="list-style-type: none"> - Protection with ankle brace or air cast boot - Often require crutches for ambulation until normal gait pattern achieved; progress WB as tolerated immediately - NSAIDS, RICE, electrical stimulation short-term for pain, cryotherapy - Start ROM exercises as tolerated immediately (may take 1-2 weeks for more severe injuries) - AROM of the toes - Strengthening and ROM for the knee and hip (quads, hamstrings, gluteus medius and maximus, hip adductors) - Biking
	PRECAUTIONS	<p>No active or passive inversion (INV) past neutral</p> <p>No active or passive plantar flexion (PF) past resting position</p> <p>No forceful eversion (EV)</p>	<p>No active or passive end-range dorsiflexion (DF)</p> <p>No active or passive external rotation (ER) / eversion (EV)</p>
	CRITERIA FOR PROGRESSION TO PHASE 2	<ol style="list-style-type: none"> 1. Pain and inflammation controlled 2. Near normal gait pattern 	<ol style="list-style-type: none"> 1. Pain and inflammation controlled 2. Near normal gait pattern with crutches
PHASE 2 (2-4 DAYS up to 6 WEEKS)	GOALS	<ol style="list-style-type: none"> 1. Full ROM 2. Normal mobility 3. Increase strength 4. Improve neuromuscular control and proprioception 5. Promote function 	<ol style="list-style-type: none"> 1. Full ROM 2. Normal mobility 3. Increase strength 4. Improve neuromuscular control and proprioception 5. Promote function
	REHABILITATION GUIDE	<ul style="list-style-type: none"> - AROM exercises - PROM with towel or stretching of gastroc / soleus in WB position - Gait training, encouraging normal gait pattern - Manual mobilizations - Begin strengthening: <ul style="list-style-type: none"> ▪ Isometric → CON/ECC with theraband, towel slides, and seated heel-toe raises → CKC exercises (ie. standing calf raises, squats, lunges) ▪ ** CON Peroneals <u>and</u> ECC Tibialis Posterior ▪ NMES may be used initially over peroneals or tibialis posterior for muscle re-education - Begin proprioception: <ul style="list-style-type: none"> ▪ BAPS board 	<ul style="list-style-type: none"> - AROM exercises - PROM with towel or stretching of gastroc / soleus in WB position - Gait training, encouraging normal gait pattern - Manual mobilizations - Begin strengthening: <ul style="list-style-type: none"> ▪ Isometric → CON/ECC with theraband, towel slides, and seated heel-toe raises → CKC exercises (ie. standing calf raises, squats, lunges) ▪ ** CON Peroneals <u>and</u> ECC Tibialis Posterior ▪ NMES may be used initially over peroneals or tibialis posterior for muscle re-education - Begin proprioception: <ul style="list-style-type: none"> ▪ BAPS board