

Ankle Sprain Rehabilitation Protocol

Joseph D. Lamplot, M.D.
Referral for Rehabilitation Services

Patient Name: _____ Diagnosis: _____ PT Duration: _____ / Week _____ Weeks

Phase	Precautions	Treatment Recommendations	Emphasize
Phase 1: Acute/High Irritability Phase <i>Criteria for Advancement:</i> -Minimize antalgia and use of assistive devices during gait -Pain and swelling controlled	<ul style="list-style-type: none"> Screen patient for fractures with the Ottawa Ankle/Foot Rules Assess for severity of injury to supporting structures, e.g. peroneal tendon, flexor hallucis longus Maintain MD precautions if applicable 	<ul style="list-style-type: none"> Swelling management <ul style="list-style-type: none"> Protect, Rest, Ice, Compression, Elevation (PRICE), modalities Gait and stair training <ul style="list-style-type: none"> Focus on optimal loading and early weight bearing Encourage symmetrical gait pattern Train in use of assistive device if necessary Taping/bracing as needed A/AA/PROM of the ankle <ul style="list-style-type: none"> Do not overload involved tissues Focus on non-weight bearing (NWB)/limited weight bearing interventions Balance/proprioception <ul style="list-style-type: none"> Seated multi-directional rocker board minimizing stress to injured tissues Pain-free ankle/foot strengthening <ul style="list-style-type: none"> Isometrics progressing to isotonic Intrinsic strengthening Low-grade joint mobilizations focusing on the distal tibiofibular, talocrural and subtalar joints, e.g. posterior talar glides and mobilizations with movement Proximal LE and core strengthening, UE strengthening as needed 	<ul style="list-style-type: none"> Pain-free exercise Swelling management Limit motions which stress healing tissues <ul style="list-style-type: none"> Anterior talofibular ligament (ATFL) limit: Inversion (INV) and Plantarflexion (PF) Calcaneofibular ligament (CFL) and posterior talofibular ligament (PTFL) limit: INV Deltoid ligament limit: Eversion (EV) High ankle sprain limit: Weight-bearing (WB) INV/EV
Phase 2: Subacute/Moderate Irritability Phase <i>Criteria for Advancement:</i> -Gait normal without assistive device -Pain and swelling self-managed as activity increases	<ul style="list-style-type: none"> Premature return to activity Avoid stretching of injured ligaments 	<ul style="list-style-type: none"> Swelling management <ul style="list-style-type: none"> Consider compression sleeve Gait and stair training <ul style="list-style-type: none"> Encourage symmetrical gait pattern A/PROM of the ankle <ul style="list-style-type: none"> Address persisting deficits Neuromuscular training Weight bearing balance/proprioception <ul style="list-style-type: none"> Progression from bilateral to unilateral Progression from static to dynamic Sagittal progressing to multidirectional Progression from level ground to compliant surfaces <ul style="list-style-type: none"> Multi-directional rockerboard, proprioceptive foam, hemispheric balance trainer Weight bearing strengthening <ul style="list-style-type: none"> Heel rise progression <ul style="list-style-type: none"> Track directly to 1st/2nd metatarsals Progressive joint mobilizations targeting on distal tibiofibular, talocrural and subtalar joints ADL specific training <ul style="list-style-type: none"> Progressive community ambulation Heel and toe walking Negotiate down stairs Squats 	<ul style="list-style-type: none"> Pain-free exercise Swelling control Tripod contact pattern of foot to floor Limit motions which stress healing tissues <ul style="list-style-type: none"> ATFL: INV/PF CFL/PTFL: INV Deltoid: EV High Ankle: WB INV/EV

(continued)

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Phase 2: Subacute/Moderate Irritability Phase (continued)

- Transitions onto and off of the floor
 - o Front and side planks
 - o Kneeling/half kneeling exercises
- Resume cardio activities if not symptomatic

Phase 3: Chronic/Low Irritability Phase

Criteria for Discharge:
 -Full ankle ROM and strength
 -Heel rise strength 90-100% equal to the contralateral side and/or 20 heel rises on involved side (see Hebert-Losier reference for age specific norms)
 -Ability to perform task and sport specific interventions with no instability or increase in symptoms
 -Patient appropriate functional testing, e.g. drop vertical jump vs. 6-minute walk test

- Premature return to activity
- Swelling management
 - o Consider compression sleeve A/PROM of the ankle
 - o Address persisting deficits in range of motion and joint mobility
- Weight bearing balance/proprioception
 - o Progress to unilateral and dynamic stabilization
- Multi-directional rockerboard, foam, hemispheric balance trainer
- Sport specific balance/proprioception
- Perturbations
- Reactionary drills emphasizing directional and speed changes
- Weight bearing strengthening
 - o Heel rise progression
 - o Eccentric control
 - o Increase load (reintroduce previously symptomatic movements)
 - o Endurance training
- Incorporate instability into progression
- Work on inclines/declines/sport specific terrain
- Loaded squat variations
 - o Bilateral/unilateral
- Progress to single leg side planks
- Running, plyometrics, agilities, hopping
 - o Deceleration and cutting exercises
- Weight bearing stability
- Task specific training
- Gait duration/distance/s tep count
- Tripod contact pattern of foot to floor in high level activities

Protocol adapted from Hospital for Special Surgery Rehabilitation ankle sprain guidelines

I hereby certify these services as medically necessary for the patient's plan of care.

 Physician's Signature

Date_____