Nonoperative ankle sprain protocol

Ankle Sprain Classifications **Approximate Time to Return to Full Activity**

Grade I……1 – 2 Weeks
Grade II……..……..…2 – 4 Weeks
Grade III……...……....8 – 10 Weeks
Grade IV (high)……..…12 – 16 Weeks

ANKLE SPRAIN NONOPERATIVE PROTOCOL

	WEIGHT BEARING	FOCUS	EXERCISES	PRECAUTIONS
PHASE I Acute Phase	PWB + ASO ankle brace	*Control pain and swelling *Restore pain free ROM *Normal gait pattern	• RICE, ESTIM Massage for edema control • Pain-free active ROM in all planes • Towel scrunch and/or marble pick up • Isometric ankle strengthening • Open chain hip strengthening	*Minimize joint effusion and edema *Avoid forceful DF and rotation to protect healing structures
PHASE II Strengthening	WBAT + ASO brace	* Full AROM * Normal gait at higher speeds	-Bicycle without resistance -Ankle isotonics with Theraband, seated heel raises, seated toe raises (pain free ROM), body weight squat -Double-limb standing activities on foam, standing hip isotonics	*Minimal pain with activity • Minimal swelling • Pain free AROM and higher level gait
PHASE III Functional Strengthening	WBAT + ASO brace	Pain free functional weightbearing activity • Advance strengthening • Initiate sport specific exercise/ agility	- continue LE strengthening -begin plyometric training -progress proprioception exercise -Begin running and functional training	***• D/C to HEP if:** • Full functional strength, balance and proprioception • Painfree return to sports • Knowledge of injury prevention/use of functional brace as needed

HIGH ANKLE SPRAIN/SYNDESMOSIS NONOPERATIVE PROTOCOL

	WEIGHT BEARING	FOCUS	EXERCISES	PRECAUTIONS

PHASE I Acute Phase	NWB in CAM boot	*Control pain and swelling *Restore pain free ROM	RICE, ESTIM ROM-Ankle pumps, ankle circles, toe curls Strengthenig- Ankle isometrics, hip AB/Ext/ER isotonics	*Minimize joint effusion and edema *Avoid forceful DF and rotation to protect healing structures
PHASE II Sub-Acute Phase	WBAT with CAM boot	* *Maintain ROM and flexibility *Progress WB and normalize gait mechanics *Improve strength and initiate double-limb balance exercises	-Gastroc/soleus towel stretch, tilt board/wobble board ROM -Bicycle without resistance -Ankle isotonics with Theraband, seated heel raises, seated toe raises (pain free ROM), body weight squat -Double-limb standing activities on foam, standing hip isotonics	*Avoid forceful DF and rotation to protect healing structures
PHASE III Strengthening Phase	FWB in shoes + ASO ankle brace	*Maximize strength, initiate CKC exercises *Maximize neuromuscular control, initiate single-limb exercises *Initiate treadmill walking	- Gastroc/soleus wall stretch, ROM/Stretching standing tilt board/wobble board ROM - Bicycle/elliptical/treadmill -single-limb heel raises, forward lunges, lateral lunges, resisted hip AB walks, plank and side plank, single-limb bridge -Single-limb standing activities	*Avoid forceful DF and rotation to protect healing structures *Caution pivoting or lateral movements *Not cleared to return sports
PHASE IV Return to sports	FWB in shoes	*Continue dynamic strengthening and proprioceptive exercises *Initiate jog-to-run progression *Initiate cutting, pivoting and sport specific drills	- Gastroc/soleus wall stretch, standing tilt board/wobble board ROM -jogging -continue single-limb squat and dead lift -single-limb balance with step-up on uneven surfaces -wall jump, double-leg vertical jumps -initiate sports-specific drills	*Cleared for return to sport per physician

Flexor Hallucis Longus Tendonitis/Posterior Impingement Non-Operative Physical Therapy Protocol

General Rehabilitation Guidelines

Treatment is usually conservative. Initially:

- NSAIDS
- Ice
- Active rest
- Avoidance of excessive plantarflexion, heel lifts or heel raise exercise
- Achilles stretches (address tightness at ITB, HS and Piriformis as well)
- Ultrasound, phonophoresis, iontophoresis
- Soft tissue mobilization to stress the posterior capsule

- Subtalar joint mobilizations (also to stress posterior capsule)

As symptoms decrease:

- Progress with above as necessary
- Initiate open and closed chain exercises (theraband, cuff weights, weight shifts to lunging sequence, sportcord etc)
- Proprioception exercises (diagonal doming, SLB sequence, BAPS, rockerboard with and without perturbations etc.)
- Training modification (avoid excessive pronation, "rolling in")
- Include hip and buttock strengthening to progression (Piriformis/ITB important to train)
- Orthotics to prevent excessive pronation

***Stress proper foot mechanics with all closed chain activities!**

Plantar Fascia Nonoperative physical therapy

Treatment Options

Due to the multi-factorial nature of plantar fasciitis, the treatment options will vary and are very much patient specific after an evaluation by a medical professional. This treatment may include a course of physical therapy, anti-inflammatory medications, ice, night splints, rest and activity modification, change in foot wear and over the counter or custom orthotics. If symptoms do not resolve, then your physician may decide to give you a corticosteroid injection.

Your therapist will give you a home exercise program which may include the stretching, strengthening and self-massage techniques. You should attempt to limit any activity that makes your pain worse and use ice to help with any pain/inflammation that you may experience from everyday activity. Symptoms can take up to six months to improve once nonoperative modalities are initiated. About 80- 90% of all people who experience plantar fasciitis will have complete resolution of their symptoms.

With more chronic cases, a treatment called extracorporeal shockwave therapy may be recommended by your physician. In more extreme cases where all conservative treatment fails, surgery to release the tight fascia can be performed.

Rehabilitation Philosophy

Your physical therapist will perform a detailed examination to assess the strength and flexibility of your legs. The goal of rehabilitation of plantar fasciitis is to decrease the stress on the tissues by restoring the normal mechanics of the foot and leg. This is key for a full return to function and to minimize the chances of your symptoms returning. Treatment may include (this list is not meant to be all inclusive or exclusive. Your treating physical therapist will set an appropriate treatment plan based on your specific impairments/findings):

Rest/Activity Modification: Your therapist may ask you to stop or modify any activity that is causing you pain or discomfort. This may require the use of a pneumatic walking boot. This is to allow the irritated tissues to heal and to stop further aggravation of the tissue.

Change in Footwear/Orthotics: Depending on your foot posture, your therapist may have you try a different type of shoe (motion control vs shock absorption) to improve the mechanics in your foot. If the mechanics cannot be controlled with a change in footwear, orthotics may be recommended. Due to cost, it is typical to try over the counter orthotics prior to having custom orthotics made (if symptoms continue).

Stretching: Stretching the lower extremity muscles with a focus on the gastrocnemius/soleus (calf

muscle) complex.

Strengthening: You will be instructed in a personalized exercise program based on the initial evaluation findings. Strengthening typically is focused on the ankle/foot muscles (posterior tibialis and foot intrinsic) and the core musculature (abdominals, low back and hip muscles).

Massage: Massaging of the plantar fascia can be performed to help lengthen the tissue and to help break up any scar tissue that may have formed.

Taping: Different taping techniques could be utilized to assist in restoring normal mechanics in the foot and to help prevent new inflammation from occurring.

Night Splints: Night splints are either a hard or soft splint that is worn during the night while sleeping to keep the calf muscles stretched out and to limit the amount of muscle tightening that occurs from the foot being held in a shortened position at night.

Modalities: Several adjunctive therapies could be used during your treatment by the physical therapist for the active patient. These include graston technique, ultrasound, laser therapy or iontophoresis.