Ankle Sprain Treatment Protocol

Early Treatment (Week One Post-Injury)

Early treatment is directed at minimizing the swelling which will help decrease pain and speed up healing. R.I.C.E. therapy is the mainstay during this post-injury time. Recovering from an ankle sprain generally requires 4-6 weeks of treatment/rehabilitation.

**Rest**- A period of non-weight-bearing to the injured limb with crutches may be indicated if you have pain when applying weight to the injured ankle. You should remain non-weight-bearing until you are able to apply weight to the injured ankle without pain.

**Ice**- Put an ice bag or bag of frozen vegetables on the ankle for 20-30 minutes every 3-4 hours during the first 48 hours after the injury.

**Compression**- Keep an elastic bandage around the ankle (ie ACE wrap) to help minimize swelling. A cast or removable walking boot may also be applied to the injured leg to help compress and immobilize the injury to facilitate healing.

**Elevation**- Keep the ankle elevated with one or two pillows as much as possible to minimize swelling.

Rehabilitation (After Week One Post-Injury)

The key to returning to your daily activities as soon as possible is getting your ankle moving again. After you recover from the initial injury, you will begin to wean from crutches and a non-weight-bearing status to ambulating weight-bearing as tolerated (WBAT) with the protection of a walking boot. This protected weight-bearing in the boot is typically required during weeks 2-4 following injury. The advantage of the boot is that it is removable which will allow you to begin early range-of-motion (ROM) exercises as tolerated. As you rehabilitate your ankle using the home exercises on the following page, you will eventually wean from weight-bearing with the protection of a walking boot to unprotected weight-bearing in your normal shoe gear during weeks 4-6 depending on your progression. Certainly, if you begin to experience pain as you progress to the next stage of weight-bearing, you should consider returning to the prior stage (i.e Pain with WBAT in walking boot…return to crutches).
REHABILITATION EXERCISES FOR AN ANKLE SPRAIN

The correct exercises will help you to return to sports or normal activity faster after an ankle sprain. The steps in rehabilitation involve:

- Restoring the ankle’s range of motion (ROM)
- Building endurance
- Building strength
- Regaining normal proprioception (balancing ability)
- Returning to normal activity

The following exercises will help lead you through these steps:

1. **Range of motion**
   
   **Alphabet exercise:** Apply an ice pack to your ankle for 20 minutes, then trace the alphabet with your toe while hanging your foot over the edge of a couch or table. Do this three times per day. Discontinue this exercise when you have full range of motion.

2. **Endurance**
   
   Begin endurance exercises after you have regained full ankle motion. Use a 36-in.-long loop of elastic band (Theraband or bicycle inner tube). Do 30 repetitions of each of the following exercises three times per day:
a. **Plantar flexion:** Hold one end of the elastic band with your hands and loop the other end around the ball of your foot. Pull on the band while pushing the ball of your foot away from your body. Hold for three counts. Repeat.

b. **Dorsiflexion:** Loop one end of the elastic band around a secure object, such as a table leg, and the other end around your forefoot. Pull your forefoot back toward your trunk. Hold for three counts.

c. **Inversion:** With the band looped around a secure object, sit in a chair. With your heel on the floor, swing your forefoot inward. Hold for three counts.

d. **Eversion:** Start from the same position as in the inversion exercise but with the elastic band in the reverse direction, swinging your foot outward. Hold for three counts.

3. **Strengthening**
When these endurance exercises can be done easily and without discomfort, double the elastic band to make two loops and do 10 repetitions of the same exercises three times per day. Alternatively, do the exercises with a weight boot or tape a weight plate of brick to the sole of an old tennis shoe. In addition, do toe raise exercises:
Stand with the balls of your feet on a step, and rise and stand on your toes. Hold for three counts. Do this exercise with your feet pointed straight ahead, then inward, then outward. Gradually progress to standing on one foot at a time.

4. **Balance**
**Stork-leg exercise:** Raise your uninjured foot and stand on only the injured foot for 1 minute. Repeat for a total of 5 minutes, three times per day. Advance to standing on one leg with your eyes closed.

5. **Functional activities**
When you are able to walk without pain or a limp, proceed to straight-ahead jogging on a smooth surface, then to figure-eight running, and finally to zigzag running.