



Rehabilitation Protocol

Ankle Sprain

Bryan D. Den Hartog, MD
BryanDenHartogMD.com

ANKLE SPRAIN REHABILITATION PROTOCOL

Conclude each therapy session with application of ice. Continue to use ACE wrap for compression if swelling persists. You may require an ankle brace to return to activity.

MOTION:

1. Active and passive range of motion (AROM and PROM)
2. Cycling with minimal resistance
3. Heel cord stretching

STRENGTHENING:

1. Peroneal (eversion) and dorsiflexion strengthening—primary emphasis
2. Inversion strengthening—secondary emphasis
3. Performing strengthening both isometrically and with elastic bands

PROPRIOCEPTION:

1. Balance board
2. Agility and quickness of motion
3. Static one-leg stance balance exercise

MOTION:

1. Active and Passive Range of Motion (AROM and PROM)
2. Cycling with Minimal Resistance
3. Heel Cord Stretching



Ankle Circles (AROM)

Help regain range of motion in your ankle. Simply circle your foot slowly, five times in each direction, making each circle as large as you can.

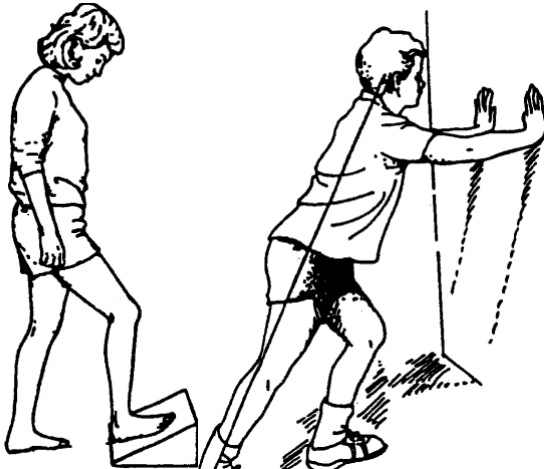


Range of Motion (AROM)

While sitting on a sturdy table, write the letters of the alphabet in the air, pretending your toes are the pencil.

Calf Stretch (PROM)

Begin by placing a towel around your foot and gently pull your toes toward you. Progress to standing stretch. With your back heel on the ground, bend your front knee and lean toward a wall.



Cycling

Adjust the seat so that your lower leg is only slightly bent. Pedal for 10 to 20 minutes. Start slowly, then gradually increase your speed. Keep the tension set to low.



STRENGTHENING:

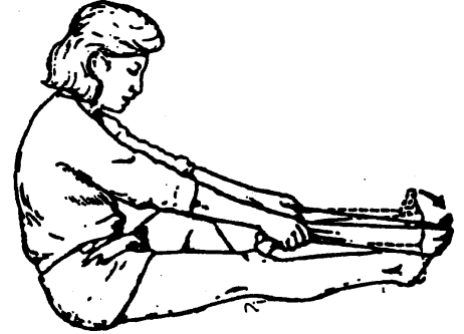
1. Peroneal (Eversion) and Dorsiflexion Strengthening—Primary Emphasis
2. Inversion Strengthening—Secondary Emphasis
3. Performing Strengthening Both Isometrically and with Elastic Bands

1. Elastic Bands

>> Eversion strengthening (outside)

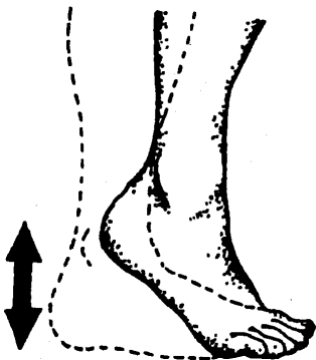
<< Inversion strengthening (inside)

A number of muscle-strengthening exercises employ a length of surgical elastic tubing that make the muscles tense when it's pulled. To strengthen the evertors or the ankle, for example, the patient (seated on a chair) places the affected foot inside a loop of tubing that has a long free end, passes the extra length of tubing under the other foot to secure it in place and, bringing up the free end of the elastic and bracing it against the opposite knee, pulls on it while attempting to move the affected foot against that resistance. This can also be done for inversion. Pull the tubing up the same leg and resist pulling the foot to the outside.



2. Ankle Curls

Sit on the side of a sturdy table. With a 5-10 lb. weight attached to your foot, alternately raise and extend the foot until tired. Do three times a day. Dorsiflexion strengthening.

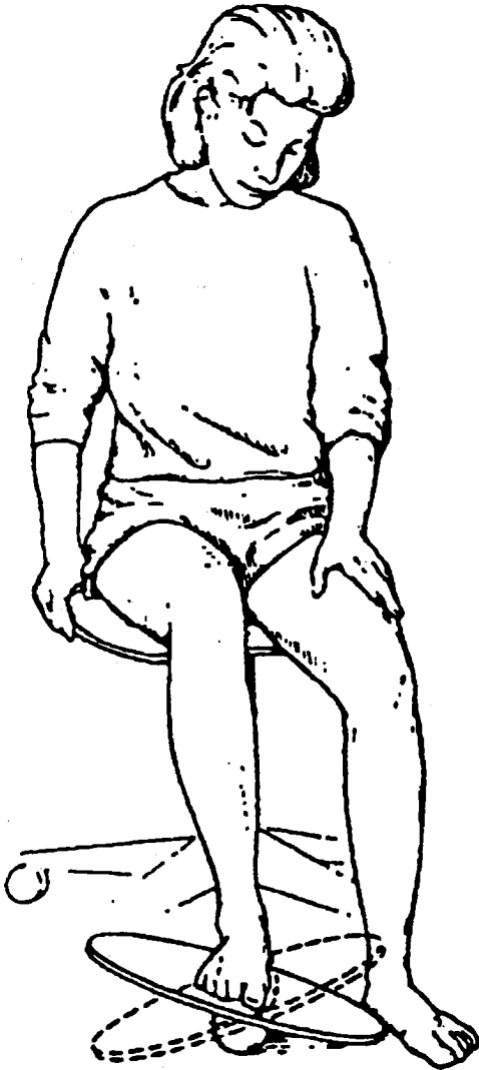


3. Calf Raises

Do as many as you are comfortable with; start with a few, then gradually work up to your maximum; repeat three times a day. Plantar flexion strengthening.

PROPRIOCEPTION:

1. Balance Board
2. Agility and Quickness Of Motion
3. Static One-Leg Stance Balance Exercise



1. Wobble Board

An additional aid is a patented disk-shaped board on a rocker, the multidirectional wobble board. The patient places the foot with the injured ankle on this board and performs ROM exercises (again first seated, then standing when comfortable). Work with this aid is valuable for muscle strengthening and proprioception, as well as for developing ROM.

2. Begin walking forward and backward. Progress to "S," "Z" then "8" patterns. Progress by increasing from walk-jog to run. Also work on double leg hopping, hop over obstacle, up and down step. Progress to single leg hopping.
3. Begin double leg standing feet apart with equal weight on each foot. Move feet together. Work with eyes open and eyes closed. Stand on a line, 2" x 4", uneven surface. Progress stand, walk, lunge.

Name _____ Date _____

1. A surgical procedure has just been performed on your foot. The amount of discomfort will vary from one patient to another. The following instructions are for your benefit in order to help minimize swelling and pain and insure good healing. Please follow them.
2. Go directly home, and if possible, elevate feet on the way. Do not sit with your feet down or crossed for any length of time. This causes the feet to swell and become painful.
3. A limited amount of swelling is expected. In some cases, the skin may take on a bruised appearance. This is no cause for alarm.
4. Elevate your feet about 6 inches above hip level by supporting feet and legs with pillows.
5. Keep your bandages clean and dry. Do not remove the bandages or inspect the wound. A small amount of blood on the bandages is normal.
6. Cover the foot with a plastic bag and hang outside the tub while bathing. NO SHOWERS unless dressing is covered by a plastic bag. A standing sponge bath is acceptable.
7. Exercise your legs frequently by bending your knees and ankles to stimulate circulation and speed healing.
8. Take your medication(s) as directed. If they cause upset stomach, headache, rash or other abnormal reactions, discontinue their use and call the doctor.
9. Crutches or walkers can be useful at times to take the weight off the foot when walking or standing.
10. Curtail alcohol consumption and smoking.
11. You should get plenty of rest with the foot elevated, drink plenty of fluid and eat your regular, well-balanced diet.
12. If your bandages become tight and/or your toes become numb, have tingling or turn blue, call your doctor.
13. CALL YOUR DOCTOR IMMEDIATELY IF:
 - The bandages become overly stained.
 - Your medication does not stop the discomfort.
 - You should bump or injure your foot.
 - You develop a fever.

Your next appointment is

Bryan D. Den Hartog, MD
(651) 439-8807