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# Ankle Injury Rehabilitation Protocol

The following exercises may be used to rehab ankle ligament injuries and fractures. The protocol may be advanced according to the severity of the injury. For fractures in which weight bearing is prohibited until the bone heals, perform steps 1-5 while out of the AirCast walker between 2-6 weeks after surgery. When weight bearing is allowed, advance steps 6-16 as symptoms prohibit.

1. Ankle Pump: Point toe, then pull back toward you as hard as possible.

2. Towel Gather: Spread out towel on floor. Pull toward you with toes until towel is fully gathered around foot. Repeat 10-15 times.

3. **Ball Pick-up:** Grasp ball between 1st and 2nd toes; pick up and transfer to opposite pile. Repeat 15 times.

4. Towel Stretches: Sit on a hard surface with your injured leg stretched out in front of you.

(a). Loop towel around foot and pull back to get a good stretch for 20 seconds and relax for 20 seconds

(b). Pull towel so that foot turns to side; hold for 20 seconds, then pull to the other side; hold for 20 seconds.

(c). Bend leg at 90 degree angle and loop towel around forefoot. With leg bent pull foot back for 20 seconds and relax for 20 seconds.

5. **Ankle range of motion**: You can do this exercise sitting or lying down. Pretend you are writing each of the letters of the alphabet with your foot. This will move your ankle in all directions. Do this twice.

# 6. Slantboard Stretch:

- (a). Stand with heels on board and lean forward
- (b). Turn toes in with heels on board and lean forward
- (c). Stand with knees bent and heels down

(d). Stand with knees bent, point toes inward and keep heels down on board.

7. **Wall Stretch**: Facing a wall, put your hands against the wall at about eye level. Keep the injured leg back, the uninjured leg forward, and the heel of your injured leg on the floor. Lean into wall and hold for 15-20 seconds. Repeat 3 times.

- (a). Knee straight; toes straight ahead
- (b). Knee straight; toes pointed in

8. **Soleus Stretch**: Stand facing a wall with your hands at about chest level. With both knees slightly bent and the injured foot back, gently lean into the wall until you feel a stretch in your lower calf. Once again, angle the toes of your injured foot slightly inward and keep your heel down on the floor. Lean into wall and hold for 15-20 seconds. Repeat 3 times.

(a). Knees bent; toes straight ahead

(b). Knees bent; toes pointed in

## 9. Theraband:

(a). Dorsiflexion - Sitting with your leg out straight and your foot near a door, wrap the tubing around the ball of your foot. Anchor the other end of the tubing to the door by tying a knot in the tubing, slipping it between the door and the frame, and closing the door. Pull your toes toward your face. Return slowly to the starting position. Repeat 10 times. Do 3 sets of 10.

(b). Plantarflexion - Sitting with your leg outstretched, loop the middle section of the tubing around the ball of your foot. Hold the ends of the tubing in both hands. Gently press the ball of your own foot down and point your toes, stretching the Thera-Band. Return to the starting position. Repeat 10 times. Do 3 sets of 10.

(c). Inversion - Sit with your legs out straight and cross your uninjured leg over your injured ankle. Wrap the tubing around the ball of your injured foot and then loop it around your uninjured foot so that the Thera-Band is anchored at one end. Hold the other end of the Thera-Band in your hand. Turn you injured foot inward and upward. This will stretch the tubing. Return to the starting position. Repeat 10 times. Do 3 set of 10.

(d). Eversion - Sitting with both legs outstretched and the tubing looped around both feet, slowly turn your injured foot upward and outward. Hold this position for 5 seconds. Repeat 10 times. Do 3 sets of 10.

10. Heel raises: Standing, balance yourself on both feet behind a chair. Rise up on your toes, hold for 5 seconds and then lower yourself down. Repeat 10 times. Do 3 sets of 10.

## 11. Heel/Toe Walking:

(a). Walk on heels only, for 30 steps.

(b). Walk on toes only, for 30 steps

12. Toe Raises: Stand in a normal weight-bearing position. Rock back on your heels so that your toes come off the ground. Hold this position for 5 seconds. Repeat 10 times. Do 3 sets of 10.

13. **Single leg balance**: Stand without any support and attempt to balance on your injured leg. Begin with your eyes open and then try to perform the exercise with your eyes closed. Then try it with your knee bent. Hold the single-leg position for 30 seconds. Repeat 3 times.

14. Tiltboard (if available):

Place foot in center of tilt board. Rotate foot so that the edge of the circle touches the floor in a constant motion.

(a). Seated (CW 10; CCW 10)

- (b). Standing, knees bent (CW 10; CCW 10)
- (c). Standing, knees straight (CW 10; CCW 10)

## 15. Ankle Weights:

Attach weight to forefoot.

(a). Lying on back, pull foot toward you; 3 sets 10 reps.

(b). Lying on injured ankle side, pull foot toward the ceiling, 3sets, 10 reps.

(c). Lying on stomach, point toe as hard as possible, 3 sets, 10 reps.

(d). Lying on uninjured side, pull foot toward the ceiling, 3 sets, 10 reps.

16. Jump rope: Jump rope landing on both legs for 5 minutes, then on only the injured leg for 5 minutes.