

Physical Therapy Program Ankle Injury, 15-Feb-97

This page summarizes the professional advice provided by emergency room physicians as well as the physical therapy staff.

In the emergency room on 15-Feb, the doctor said the following: The ankle was not broken, but the X-Rays showed it was “a pretty ratty-looking ankle for someone my age.” He mentioned that I should talk to my doctor first thing on Monday (17-Feb-97). He said I should ask her to send me to physical therapy starting right away, rather than waiting a couple of weeks which he thought she might suggest. I was given an AIRCAST Air-Stirrup Ankle Brace, which I continued to wear throughout the first four weeks – to provide compression and support.

I went in for my PT evaluation that Thursday. The following schedule describes the progression of exercises and treatments provided during my physical therapy sessions.

Thursday, 20-Feb

At my evaluation, Randy (the PT) had Ryan begin by taking some benchmark measurements of my range of motion, comparing the bad (right) ankle with the good (left) one. They also examined the injury, swelling, and level of pain in each direction of motion.

I was given the following **initial exercises** to do:

- Lying down or sitting, push foot as far forward and then pull it as far back as it will go, at least without significant pain. [30 reps]
- Lying down or sitting, move toes as far in (toward other leg) and as far out (away from other leg) as they will go without significant pain. [30 reps]
- Use ice to keep down the swelling. Ryan suggested using a bag of frozen peas, and this has proven to work very well.

I was also told how to climb stairs. Keep your injured foot down while climbing or descending. (“The good go to heaven, the bad go to hell.”) I was also shown the right way to use a single crutch, which I started to do by the beginning of the next week. You use the crutch on the opposite side from the injured foot. The reason is that this causes you to walk in a more natural position, and prevents you from bearing straight down on the foot while leaning on a same-side crutch.

Note: The brochure that came with the ankle brace is quite good. It described the forward and back range of motion exercise as well, but it mentioned to do it after numbing with ice, and it mentioned to do 10 reps, holding for 10 seconds forward and back.

As did all subsequent sessions, this session ended by icing down my ankle.

Tuesday, 25-Feb

By this point, I was walking on both feet, still using both crutches.

I was given **two new exercises**:

- Sitting, with legs outstretched, reach forward “like Superman” over my toes, and hold that position for 30 seconds.
- Using a hand towel, sit upright with legs outstretched. Circle towel around ball of foot and gently pull foot back through the full range of motion. Hold at the extreme for 30 seconds.
- Alternate between these two exercises, doing each 3 times.

In order to help with the swelling and discoloration (the later of which was quite dramatic at this point), I was also given a contrast bath – and told to repeat these at home.

Contrast Bath:

Sit in a chair or stool with easy access to two pans of water (or a pan and a bathtub). One should be filled with cold water (ice added, but almost all melted) – the other with warm water, 98 degrees F. Alternate between the two (starting with either), keeping foot submerged for 3 minutes each immersion. Three of each is good if there’s enough time. Finish with warm if you’ll be doing exercises or with cold if you’re finished the session.

Thursday, 27-Feb

Started with contrast bath. Fairly short session.

By this point, I was walking with one crutch occasionally. I told Ryan that the exercise with the towel caused a burning sensation in my Achilles tendon and that there was some swelling (almost a bulge) and pain in my Achilles tendon now. As a result, he did not present any new exercises.

At the end, Randy came over to look at it and talk to me. They both believed that the soreness in my Achilles and pain in my calf were indications that I had (slightly) over-stretched the Achilles. They told me to stop short of a point of burning or pain, but to keep doing the same exercises.

Tuesday, 4-Mar

By this point, I was walking with one crutch normally. I had also gone one day where I did not wear the air cast (but wore high-tops) as well as using only one crutch. Randy cautioned me to be careful. The swelling was noticeably worse than it had been a day before.

Foot rotations, performed with a circular ____ board:

- Obtain a ____ board, fit this with a ball on the bottom – the larger the ball, the more difficult the exercise.
- Place foot on the board and do the following exercises
 - Rock foot all the way forward – far enough to touch the front surface of the board to the floor. Rock foot back to touch the floor on the back side. Repeat 30 times.
 - Rock foot to the left, touching the floor. Return and rock foot to the right side, again touching the floor. Repeat 30 times.
 - Move foot in a circle, keeping the board on the floor throughout. Repeat 30 times counter-clockwise and 30 times clockwise.

Note: I initially had a very hard time moving my foot to the left side, both rocking and circling. By the next session, this was far easier.

Rather than using a contrast bath, Ryan performed massage with an ultrasound transducer. He mentioned that it should be set low enough that I wouldn't feel any sensation like tingling or heat. He performed a 10-15 minute massage.

At the end of the session, I was given a yellow bungee ribbon with a loop tied in the end for my foot.

Bungie (“Theraband”) Strengthening Exercise:

- Tie the band to a bedpost (or find a way to hold it) and let it apply resistance while moving through the range of motion in each direction.
- Perform this exercise 10 times in each of the four directions of range of motion (forward, back, left, right) and repeat the entire series – a total of 3 times.

Thursday, 6-Mar

Skipped this session, due to work schedule.

Tuesday, 11-March

I was showing much improvement at this session. Walking without the use of a crutch (but still wearing the AIRCAST). Ryan **increased the strength of the theraband** (from yellow to green) and had me do the exercises with that.

Ryan had me walk to see how it looked, and said it looked like I was walking normally. I was given the following **new exercises**:

Rocking Back and Forth

- Stand with both feet in line, left in front of right.
 - Shift weight forward onto the left foot, while keeping the right flat on the ground. Hold for 10 seconds
 - Shift weight backward onto the right foot, rocking the left foot back on the heel. Hold for 10 seconds.
 - Repeat the sequence three or four times.

Since this caused some pain, Ryan said not to spread feet so far apart and not to rock so far forward.

Balancing on Right Foot

- Stand on right foot, and attempt to retain balance. Hold for 30 seconds and repeat for a total of about two minutes.
- This is intended to help regain proprioception, automatic muscle response to changes in location / position. Regain general balance and coordination.

Towel Rolling

- Lay a towel flat on a wooden floor beneath a chair.
- Place bare foot on towel, and use toes to grab the fabric, pulling it toward the heel.
- Repeat, gathering the towel up beneath the foot.
- Repeat this exercise about six times, or until muscles are tired.

Thursday, 13-March

Walking normally and fairly confidently, still wearing air cast. Did rocking and theraband exercises. Did towel rolling exercise.

Added two new exercises.

Toe-Raises

- Stand with left foot on a footstool, using it as necessary to assist the other foot.
- Raise up onto right toe and down again.
- Repeat 10 times.
- Repeat 3 sets.

Balancing on Right Foot

- Same as described above, but using a rail with one (or two) hands if you start to lose balance.
- Balance for 30 seconds.
- Do these for three or four minutes total.

Note: I significantly improved my balance by (and during) this session, and was able to do these until I was tired.

Ryan repeated his range-of-motion measurements, and told me that the full range of motion was recovered. When I asked about resuming some exercise, he told me that I could now bike. He thinks I should hold off on running until I can raise up on my right toes 10 times in a row for three sets. Since there is still some swelling (front of ankle), he recommended that I resume the ice treatments at home.