Unraveling the Mystery of Ankle Pain #1: Anterior Ankle Ligament Sprain

Instructor: Ben Benjamin, Ph.D.

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Webinar Goals

- Explore the assessment and treatment of the most common ankle injury.

Logistics

- Time: 60 minutes
- Schedule:
  - Presentation 30-40 minutes
  - Questions 15–20 minutes
- Ongoing questions: Use Question box. If I don't get to your question, ask me on my Dr Ben Benjamin Facebook page after the webinar.
- Get a pen and paper please

Pretest

1. The most commonly injured structure on the lateral aspect of the ankle is the: a.) Calcaneo fibular ligament, b.) Deltoid ligament, c.) Spring ligament, or d.) Anterior talofibular ligament.
2. Medial ankle sprains: a.) are as common as lateral ankle sprains, b.) primarily occur in the elderly, c.) include the cuboid ligament, or d.) are less common than lateral ankle sprains.
3. Chronic ankle sprains are usually due to: a.) tight fibularis/peroneus muscles, b.) laxity in the ligaments, c.) lack of flexibility in the anterior tibialis muscle, or d.) poor form.
4. What degree of severity is most common for ankle sprains? a.) Grade 1, b.) Grade 2, c.) Grade 3, or d.) Grade 4.
5. Which test is the major indicator for anterior talofibular ligament injury? a.) Passive Supination, b.) Passive Inversion, c.) Resisted Inversion, or d.) Passive Dorsiflexion.
6. When an anterior talofibular ligament is sprained, it is usually injured at the attachment to the: a.) lateral malleolus, b.) talus, c.) medial malleolus, or d.) head of the fibula.
Anatomy

The Primary Ankle Ligaments

Anterior Talofibular Ligament
Posterior Talofibular Ligament
Deltoid Ligaments

The Talus

Cross Section Ankle Joint
Tibia
Fibula
Articular cartilages

Talus
The Anterior Talofibular Ligament (ATFL)

3 Categories of Sprains

- Grade 1 = Mild
- Grade 2 = Moderate to Severe
- Grade 3 = Rupture
Taking an Ankle History

Did you see a doctor or therapist?
If so, Who? And What was the diagnosis?
Did you have an x-ray? And if so, What was the result?

Taking an Ankle History

Did you have an accident?
If it was an accident can you describe how it happened?
If it was not an accident do you have any idea how you injured yourself?

Taking an Ankle History

When did the pain come on?
Taking an Ankle History

Was this the first time you had a pain in the ankle?
If not, when was the first time?
How many times have you sprained your ankle?

Taking an Ankle History

Did you get any treatment?
Did treatment help?

Taking an Ankle History

Did you have surgery on this ankle or anywhere in the foot?
Taking an Ankle History

Did your foot or ankle swell?

Taking an Ankle History

Did your foot and ankle turn black and blue or become discolored anyway?

Taking an Ankle History

Could you walk soon after the sprain?
Taking an Ankle History

Are there any things that you do that will bring on the pain?

Taking an Ankle History

Do you ever get sudden sharp pains?

Taking an Ankle History

Point to exactly where it hurts you.
Taking an Ankle History

Do you have any other pain or injuries in your foot or lower leg?

Taking an Ankle History

Did you hear or feel a popping sound or sensation when the injury occurred?

Assessment Tests
Assessment Tests

1. Passive supination
2. Passive dorsiflexion
3. Passive plantar flexion
4. Anterior draw test
5. Heat test

Passive Supination

Passive Dorsiflexion
Passive Plantar Flexion

Anterior Draw Test

Heat Test
Finding the ATFL

Anterior Talofibular Ligament Sprain

Positive Tests

MI: Passive Supination painful (this is the major indicator)

AUX: Passive Dorsiflexion of the ankle is painful and often limited

AUX: Passive Plantarflexion of the ankle is painful and often limited

AUX: Heat Test is positive. The injured ankle is often hot or at least warmer than the other one
Anterior Draw Test

Anterior Talofibular Ligament
At the fibula attachment

ATFL in Two Varieties
How it Happens

- Jumping
- Running
- Dancing
- Soccer
- Basketball
- Football
- Poor knee alignment

Treatment

Anterior Talofibular Ligament Friction Therapy
Questions

Facebook.com/DrBenBenjamin

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Post-test

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