“Medial Tibial Stress Syndrome: Cadaveric Association with Symptoms and Treatment Options”

1. The musculature originating off of the tibia and traveling distally which was investigated for possible involvement with medial tibial stress syndrome (MTSS) signs and symptoms was the:
   a. Tibialis posterior, soleus, peroneus tertius, and flexor digitorum longus
   b. Tibialis posterior, flexor digitorum longus, soleus, flexor hallucis longus
   c. Tibialis posterior, extensor digitorum longus, soleus, extensor hallucis longus
   d. Tibialis anterior, flexor digitorum longus, soleus, flexor hallucis longus
   e. Tibialis anterior, extensor digitorum longus, soleus, extensor hallucis longus

2. The muscle currently thought to be associated with MTSS onset is the:
   a. Tibialis posterior
   b. Tibialis posterior
   c. Flexor digitorum longus
   d. Soleus
   e. Extensor hallucis longus

3. The muscle that originates on the lower third of the posterior medial tibial surface is:
   a. Tibialis posterior
   b. Soleus
   c. Flexor digitorum longus
   d. Extensor hallucis longus
   e. None of the above

4. Signs and symptoms of MTSS are located where?
   a. Distal third of the medial tibia
   b. Proximal third of the medial tibia
   c. Middle third of the medial tibia
   d. A or C
   e. B or C

5. Signs and symptoms of MTSS are thought to be the result of chronic bone remodeling, where bone remodeling cannot keep up with the stresses placed on it and microfissures result.
   a. True
   b. False

6. MTSS is thought to present through a continuum of injury, which may ultimately create tibial stress fractures if left untreated.
   a. True
   b. False
7. Current accepted etiological theories of MTSS include all of the following EXCEPT:
   a. Tibial bending
   b. Body mass index
   c. Traction from the soleus/deep crural fascia
   d. Navicular drop
   e. Over-pronation

8. Considering treatment options, which of the following modalities has proven better than just resting the tibia from impact loads:
   a. Pulsed ultrasound
   b. Continuous ultrasound
   c. Trigger point massage on the deep crural fascia
   d. Ice massage
   e. None of the above

9. Options needing focus during rehabilitation include all of the following EXCEPT:
   a. Heel-walking
   b. Stretching the plantar flexors to maintain dorsi-flexion ROM
   c. Improving endurance of the plantar flexors
   d. Resting the tibia from all impact loads during acute stages
   e. Using circumferential taping around the middle/lower thirds of the tibia
   f. 

10. General guidelines when designing a rehabilitation program include all of the following EXCEPT:
    a. Utilizing cross training to include pool workouts
    b. Support the arch in all athletes with a history of MTSS
    c. Train athletes with a history of MTSS to forefoot strike during running
    d. Return to running with slow, gradual increases in mileage
    e. Design as much of the rehabilitation to include non-impact loads as possible