## How to Use a Massage Gun on Shin Splints

Shin splints is sort of a garbage can term usually referring to pain on the front of your shin (anterior shin splints) or more to the inner side of your shin (posterior shin splints) (medial tibia stress syndrome).

To be more specific, in anterior shin splints the pain is usually felt high up on the shin and on the outside. The muscle involved is the anterior tibialis muscle.



Pain felt on the inside of your shin closer to the foot and slightly behind the ankle bone is characteristic of posterior shin splints. Usually involves the posterior tibialis muscle. In severe cases may also involve the flexor digitorum longus and the flexor hallicus longus muscle. One may feel increased pain with rising on your toes or everting your foot.



In both anterior and posterior shin splints, you may have microtears in the muscle along with periostitis- an inflammation of the periosteum, a layer of connective tissue that surrounds bone.

Both types of shin splints are exercise induced. Better with rest. Pain may involve cramping or burning. Worse with palpation. 2-3 inches of pain length can be palpated.

Also, in both cases if the tenderness is more focused (point tenderness) it could be a stress fracture. If you have the 5 Ps you could have compartment syndrome-pain, pallor (pale skin tone), paresthesia, (numbness) pulselessness (faint pulse) and paralysis (weakness with movements).

## If tolerable the massage should be done before and after exercise.

Before you begin the massage first palpate the calf muscle for a tender area. Once a tender area is discovered, begin to massage around the outer reaches of the pain and eventually begin to narrow in on the painful area.



Techniques can include stripping massage (parallel to the muscle fibers and cross fiber massage to any knots or trigger points. One can also move the foot up and down and side to side while applying massage (a type of flossing).



Massage should not make your pain worse although it may be somewhat uncomfortable. You should stay on an area until the pain decreases.

Head attachment choice can be based on the following:

a. *Big Round Head attachment:* Good for larger muscle groups like the glutes, quadriceps, or hamstrings. Allows you to cover more surface area. Moderate in aggressiveness.



b. *Small Round Head attachment:* Less aggressive to moderate. Great for tendonitis if used sideways.



(Big & Small Round Head

*C. Air-filled (Pneumatic) attachment:* Probably the least aggressive head. Great for use around bony surfaces and sensitive muscle groups. Good for relaxation.



d. *Bullet Head attachment:* Aggressive. We have found to be helpful with treating trigger points or knots.



e. *Plastic Flat Head attachment*: Moderate. Good on IT band, Pectoralis Major (with ribs underneath), or Plantar Fascia (bottom of foot).



f. *Steel Flat Head attachment:* (Can be heated up or cooled down prior to use). Moderate to Aggressive.



g. *Knobby attachments:* Generally, for larger muscles. More aggressive.



h. *Field Goal:* Can be used along both sides of the spine. Also, some have recommended its use on the Achilles tendon.

