Journal of Athletic Training 2018;53(7):633–634
doi: 10.4085/1062-6050-53-01

www.natajournals.org

Dear Editor:

We are writing to express concern regarding an article[1] written for the *Journal of Athletic Training*. In addition, we hope to add clarity to further discussions relevant to the topic of instrument-assisted soft tissue mobilization (IASTM) and the Graston Technique (GT, an advanced intervention modality of IASTM; Graston Technique, LLC, Indianapolis, IN). In the article "Comparison of Compressive Myofascial Release and the Graston Technique for Improving Ankle-Dorsiflexion Range of Motion," the authors attempted to compare the effects of a single session of compressive myofascial release with the GT on closed chain ankle-dorsiflexion range of motion (ROM). Unfortunately, this study did not accomplish that goal.

When describing the GT, the authors stated that the technique "involves applying 6 stainless-steel instruments to localize, treat, and release soft tissue restrictions." They failed to include that the GT is a method of IASTM that is *combined with exercise*.[2] The GT is based on a specific sequential protocol that involves an active warm-up, assessment, and treatment of the soft tissue using unique strokes, followed by specific stretching and high-repetition, low-resistance strengthening exercises. The methods in this article did not remotely follow the GT protocol and therefore cannot be called the GT.

In the "Procedures" section of the article, the authors stated that participants assigned to the GT group were instructed to lie prone on the table after performing an active 5-minute warm-up. They were treated with GT instruments for a total of 5 minutes. According to the GT training manual,[2] the recommended treatment duration for the instrument component of the technique is 10 minutes. The article indicated that after the intervention, participants were remeasured without performing the stretching and high-repetition, low-load exercise components of the GT protocol. The authors failed to clarify in any way that the intervention they called the GT included only 1 limited portion of the entire GT protocol.

In the "Discussion" section, the authors commented that their findings conflicted with previous studies of ROM improvement after a GT treatment to improve knee-extension[3] and hip-adduction[4] angles. Both investigations demonstrated improvements in ROM after GT treatment, and both studies followed the GT protocol. In a more recent study,[5] the researchers examined the effect of the GT on ankle dorsiflexion compared with traditional static stretching among 50 healthy participants. These authors observed an improvement in dorsiflexion using the full GT protocol. It is plausible to assume that the authors of the current study failed to observe improvements in dorsiflexion ROM because they failed to use the entire GT protocol.

The importance of exercise in the GT protocol has been highlighted in 2 recent systematic reviews. In 2016, Cheatham et al[6] appraised the evidence assessing the effects of IASTM as a treatment or to enhance joint ROM. They identified 6 studies that met their defined criteria and reported using the GT; however, 5 of the 6 groups modified or excluded parts of the protocol. The authors also pointed out that the best evidence for the GT was the only study that did follow the complete protocol. In another systematic review,[7] the investigators concluded:

> There is insufficient evidence supporting the use of IASTM as a stand-alone treatment for all musculotendinous pathologies. Moderate evidence does exist to support the use of IASTM in combination with stretching and strengthening programs.[7]

It is common for researchers to limit variables in order to examine the effects of a specific intervention. In the current study,[1] the authors attempted to examine the effects of a manual technique compared with an instrument-assisted technique; however, they should not have labeled the intervention they examined the *GT*. The intervention was IASTM with GT-brand instruments. Therefore, the authors' statement that "a single treatment of compressive myofascial release may improve ankle dorsiflexion more than a single treatment of the Graston Technique" is not valid. In the future, researchers should clearly define the intervention and use the term *Graston Technique* only when the full protocol is followed.

Mike Ploski, PT, ATC, OCS, GTS
Clinical Advisor, Graston Technique, LLC
Indianapolis, IN

John W. Schrader, HSD, AT (Retired)
Clinical Professor Emeritus
School of Public Health
Indiana University, Bloomington

REFERENCES

1. Stanek J, Sullivan T, Davis S. Comparison of compressive myofascial release and the Graston Technique for improving ankle-dorsiflexion range of motion. *J Athl Train*. 2018;53(2):160–167.
2. Loghmani MT, Schrader JW, Hammer WI. *Graston Technique M1 Instruction Manual*. Indianapolis, IN: Graston Technique, LLC; 2017.

3. Toepper BW, Docherty CL, Donahue M, Kingma J, Schrader J. The effects of the Graston Technique on knee extension angle [abstract]. *J Athl Train*. 2013;48(suppl 3):S-128.
4. Heyer KM, Docherty CL, Donahue M, Schrader JW. Effect of implement assisted soft tissue mobilization on iliotibial band tightness [abstract]. *J Athl Train*. 2012;47(suppl 3):S-128.
5. Palmer TG, Wilson B, Kohn M, Miko S. The effect of Graston massage therapy on talocrural joint range of motion. *Int J Athl Ther Train*. 2017;22(3):66–75.
6. Cheatham SW, Lee M, Cain M, Baker R. The efficacy of instrument assisted soft tissue mobilization: a systematic review. *J Can Chiropr Assoc*. 2016;60(3):200–211.
7. Thompson JA, Crowder L, Le D, Roethele AJ. Efficacy of instrument-assisted soft tissue mobilization for the treatment of musculotendinous injuries: a systematic review [abstract]. *J Orthop Sports Phys Ther*. 2018;48(1):A187.

Editor's Note: John W. Schrader, HSD, AT (Retired), was a consultant for the Graston Technique, LLC.