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# ORIGINAL RESEARCH

## COMPARISON OF DRY NEEDLING VS. SHAM ON THE PERFORMANCE OF VERTICAL JUMP

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### ABSTRACT

**Introduction:** Dry needling has been reported to decrease pain in subjects having myofascial trigger points, as well as pain in muscle and connective tissue.

**Objective:** The purpose of the study was to compare the effects on the ability to perform a two-legged vertical jump between a group who received one bout of dry needling and a group who received one bout of a sham treatment.

**Methods:** Thirty-five healthy students (19 males, 16 females) were recruited to participate in this study (mean age 22.7 +/- 2.4 years). The subjects were randomly divided into two groups- dry needling (n=18) vs sham (n=17). The dry needling group received needling to four sites on bilateral gastrocnemius muscles; two at the medial head and two at the lateral head. The sham group had the four areas of the gastrocnemius muscle pressed with the tube housing the needle, but the needle was never inserted into the skin. Two-legged vertical jump was measured with chalk marks on the wall before and after the dry needling and sham treatments.

**Results:** Analysis with a t-test indicated that the dry needling group significantly increased vertical jump height 1.2 inches over the sham group.

**Conclusion:** One bout of dry needling showed an immediate effect at significantly increasing vertical jump height in healthy, young adults. Future research is needed to determine if dry needling has any long-term effects.

**Level of Evidence:** 2b

**Key Words:** dry needling, trigger points, vertical jump

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#### Acknowledgements

The authors wish to thank Hannah Nelson, Halah Nelson, and Melissa Carter for their assistance with data collections.