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Effects of dry needling on muscle strength in healthy individuals

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The practice of physical activity can contribute to the increase of muscle strength, but it can also generate the appearance of muscle injuries. Physiotherapy can be used as a therapeutic means with several techniques, among them Dry Needling (DN). This study aims to assess muscle strength before and after intervention with DN in the ischiosural muscles. A randomized cross-over clinical trial will be carried out, with 20 healthy individuals, male, aged between 20 and 30 years. The intervention member (MI) will be drawn by being the control (CTRL) the contralateral. Individuals who use analgesics, anti-inflammatory, muscle relaxants, with viral or hyperthermia will be excluded. Participants will be submitted to an identification questionnaire containing name, age, and anthropometric measurements and later dynamometry before and after intervention in both segments. After the evaluation, the static piston technique will be applied with the needle maintained for three minutes in the ischiossural muscles, verifying the rapid contraction response (RCR) or the appearance of pain. It is expected that the limb that received the DN technique will present greater muscle strength after the intervention when compared to the control limb. With the present study, through the expected results according to the literature, it is concluded that the performance of the DN technique has a fundamental role in the increase of muscular strength, being, therefore, indicated as a pre-kinetic technique in the treatment of musculoskeletal injuries.

Keywords: Dry needling. Myofascial pain. Hamstrings. Muscle strength.

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