increased length of hospital stay, morbidity and mortality, and costs associated with long hospital stays.
Objectives: To evaluate the impact of automatic rotational therapy on length of stay in the intensive care unit (ICU) in mechanically ventilated patients.
Methods: Systematic review conducted from December to January 2023 with randomized clinical trials, following criteria reported in PRISMA (Preferred Reporting Items for Systematic Review and Meta-Analysis) registered in PROSPERO (CRD42022384258). The search strategy was built based on health sciences descriptors (DeCS), Medical Subject Headings (MeSH), keywords and synonyms most found in the literature. The search was carried out in seven databases: MEDLINE/PubMed, EMBASE, Scopus, Science Direct, Cochrane Library, CINAHL, and Web of Science. The eligibility criteria involved studies that evaluated automatic rotational therapy compared with changing the manual decubitus position during the length of stay in the ICU in individuals of both genders aged 18 years or older using invasive mechanical ventilation for a period. greater than 24 hours. There was no restriction on language or year of publication. The risk of bias was assessed using the Cochrane collaboration tool.
Results: 118 articles were identified, after excluding duplicates and reading in full, 9 were eligible, involving 679 participants. The number of individuals evaluated per article ranged from 27 to 124 in the control and intervention groups. For meta-analysis, four studies were included, totaling 323 participants. The standardized mean (SMD) difference was -0.03 days (95% CI -0.40, 0.35, p=0.90) between automatic rotational therapy and conventional recumbency, with no significant difference between groups with high evidence of overall heterogeneity (χ2 8.26, p= 0.04, I2 = 64%).
Conclusion: Automatic rotational therapy did not have a significant impact on the length of stay in the ICU in mechanically ventilated critical patients. Therefore, it is not possible to make definitive recommendations on this therapy, reinforcing the need for new randomized clinical trials to better answer the research question.
Implications: The development of this systematic review and meta-analysis enabled the expansion of knowledge about the possible benefits of automatic rotational therapy in critically ill patients, for future contributions to the scientific community and, due to the high heterogeneity between studies, it is shown as a field to be explored in future studies.
Keywords: Patient positioning, Ventilators, Mechanical, Intensive Care Units

Conflict of interest: The authors declare no conflict of interest.
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ACUTE EFFECTS OF DIFFERENT ISCHEMIC PRECONDITIONING PROTOCOLS ON NEUROMUSCULAR PERFORMANCE IN CROSSFIT PRACTITIONERS: "CROSSOVER STUDY"

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Background: CrossFit is a modality that is characterized by high-intensity intervals, providing practitioners with the development of skills that promote improved sports performance. Similarly, ischemic preconditioning (ICP) is a form of training that aims to optimize muscle performance by increasing tissue tolerance to episodes of ischemia followed by reperfusion.
Objective: To compare the acute effects of different PCI protocols on muscle performance and superficial thermal response in amateur CrossFit athletes.
Methods: This is a crossover study. The participants were 15 subjects (10 men and 5 women) of both genders, aged between 18 and 35 years, with no history of metabolic, cardiovascular, or locomotor system diseases with an Ankle Brachial Index (ABI) between 0.91 and 1.30 and who responded negatively to all items of the Physical Activity Readiness Questionnaire/PAR-Q. After selection, they randomly performed one of the following three protocols: 1) ischemic preconditioning with 2 limb ischemia cycles (PCI-2C); 2) ischemic preconditioning with 4 cycles of limb ischemia (PCI-4C); 3) control ischemic preconditioning (PCI-CONT). Isometric strength measurements of elbow and knee extensors were performed before and after (WOD) and infrared thermography, at baseline, after PCI and WOD. Data were analyzed using SPSS software (v. 20.0), adopting a $P \leq 0,05$. ANOVA (one way) was used to analyze the time of execution of the WOD and to analyze the isometric strength of the elbow and knee extensors, in addition to repeated measures ANOVA to compare the averages, normalized, of the temperatures throughout the moments of evaluation.
Results: No significant differences were found between the protocols regarding the WOD execution time (F:2;12=0.09; P=0.916), as well as for the isometric strength of elbow extensors (F:2; 12=0.248; P=0.781) and knee (F:2;12=0.827; P=0.439). For the upper, lower and facial ROI thermograms, no significant differences were observed between the protocols ($P>0.05$); however, there were significant differences between assessments ($P<0.05$).
Conclusion: The protocols behaved similarly in terms of execution time and isometric strength of elbow and knee extensors. However, the normalized temperature means decreased over the course of the evaluations.
Implications: Contribute to an improvement in neuromuscular performance in CrossFit practitioners, in addition to showing a greater understanding of the surface temperature of the skin after application of ischemic preconditioning and training.
Keywords: Blood flow restriction, Performance, Thermography

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TRANSCRANIAL DIRECT CURRENT STIMULATION AND NEURAL MOBILIZATION IN INDIVIDUALS WITH SCIATICA: RANDOMIZED CONTROLLED TRIAL PROTOCOL

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Background: Low back pain is the leading global cause of disability and Years of Life lived with Disability. About 10% of these episodes are classified as specific, with an identified cause, and may be related to discopathies with neurological deficits, including low