

maintaining heel contact with the ground. An inclinometer was positioned 15 cm below the tibial tuberosity to record measurements. The test was performed three times with 30-second intervals, and the average dorsiflexion of both limbs was used for analysis. Jump performance was assessed using a bilateral countermovement jump, measured with a Baiobit® inertial sensor placed at the S1-S2 vertebral level. Three jumps were performed with 30-second intervals, and the highest recorded value was used for analysis. Data normality was verified using the Kolmogorov-Smirnov test, and the correlation between variables was analyzed using Pearson's correlation coefficient. Statistical analysis was performed using SPSS 20.7.

Results: The study included 51 athletes (age: 20.7 ± 0.4 years; body mass: 78.1 ± 1.94 kg; height: 1.8 ± 0.1 m; BMI: 23.5 ± 0.4 kg/m²; basketball experience: 5.9 ± 0.3 years). A strong, significant positive correlation was observed between dorsiflexion and jump height ($r = 0.81$; $P < 0.001$).

Conclusion: Ankle mobility positively influences jump height in basketball athletes.

Implications: These findings suggest that physiotherapists working with basketball players should assess ankle mobility and incorporate strategies to enhance dorsiflexion in training and injury prevention programs.

Keywords: Physical Functional Performance, Ankle Joint, Correlation Measures

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EFFECT OF ISCHEMIC PRECONDITIONING ON THE SUBJECTIVE PERCEPTION OF EFFORT DURING VELOCITY-BASED TRAINING IN BASKETBALL ATHLETES

Wanessa Kelly Vieira de Vasconcelos^a,
Maria Heloisa De Queiroz Silva^b, Vinicius Da Silva Saraiva^b,
Caroline Lincoln Carneiro de Melo^a,
Heleodorio Honorato dos Santos^{b,c}

^a Programa Associado de Pós-Graduação em Educação Física, Universidade Federal de Pernambuco (UFPE), Recife, PE, Brazil

^b Graduação em Fisioterapia, Universidade Federal da Paraíba (UFPB), João Pessoa, PB, Brazil

^c Universidade Federal da Paraíba (UFPB), João Pessoa, PB, Brazil

Background: Velocity-based training (VBT) is a precise approach that, by measuring movement velocity, allows for the precise prescription and monitoring of training volume and intensity. In this context, ischemic preconditioning (IPC) stands out as a non-invasive ergogenic method associated with improved sports performance. Studies indicate that IPC can influence neuromuscular and physiological variables, affecting the rating of perceived exertion (RPE). Given the role of RPE in regulating training load and physiological response, investigating its relationship with IPC in the context of VBT may provide valuable insights for optimizing sports performance.

Objectives: To analyze the acute effect of IPC on the RPE of basketball athletes during a training session using VBT.

Methods: This is an experimental, cross-over-designed study. The sample consisted of 24 junior basketball athletes (18.2 ± 0.4 years) randomly subjected to four experimental conditions with a wash-out period of 48–72 hours. IPC was applied bilaterally to the lower

limbs (four cycles of 5 minutes of total occlusion alternated with four cycles of 5 minutes of reperfusion) with varying rest periods, all followed by Smith machine squats (3 sets to failure at 50% 1RM): 1) CR15: 15-minute rest; 2) CR30: 30-minute rest; 3) CR45: 45-minute rest; 4) CC: IPC session (20 mmHg) without rest time. The Borg CR-10 rating of perceived exertion (RPE) scale was used to assess athletes' perceived effort. Data were analyzed using the Statistical Package for the Social Sciences (SPSS – 26.0), with a significance level of $P = 0.05$.

Results: The Friedman test identified significant differences in RPE between conditions and overtime ($P < 0.001$). Post hoc analysis with Bonferroni correction revealed significant differences between the first set of CR15 vs. the third set of CR45 ($P = 0.035$) and the third set of CR45 vs. the first set of CR30 ($P = 0.013$). Compared to the control condition, differences were also found between the first and third sets ($P = 0.044$) and between the first set of CC vs. the third set of CR45 ($P = 0.001$).

Conclusion: The CR45 condition elicited significantly higher perceived exertion compared to CC, CR15, and CR30. Additionally, in the CC condition, a progressive increase in RPE was observed throughout the experimental session, highlighting the significant impact of IPC on effort perception regulation during resistance training.

Implications: The rest period after IPC may directly influence RPE, affecting training load regulation and effort tolerance. These findings suggest that adjusting post-IPC recovery time can be a valuable strategy to optimize sports performance, prevent excessive fatigue, and enhance physiological adaptations, benefiting athletes and coaches in velocity-based training prescription.

Keywords: Velocity-based training, Ischemic preconditioning, Basketball athletes

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DIAGNOSIS AND RISK FACTORS OF INJURIES IN WHEELCHAIR FENCING PARATHLETES DURING A NATIONAL CHAMPIONSHIP

Carlos Aguiar Ferreira da Silva Neto, Eunice Kelly Costa da Cunha, Marília Passos Magno e Silva

Programa de Pós-Graduação em Ciências do Movimento Humano, Universidade Federal do Pará (UFPA), Belém, PA, Brazil

Background: Wheelchair fencing is a sport for para-athletes with physical disabilities. To minimize the impacts of disability, para-athletes are divided into three functional categories: A (highest functionality), B and C (lowest functionality). The sport emerged as a rehabilitation process but has evolved into a high-performance sport. With this evolution, para-athletes have begun to face a greater training load, which can increase the incidence of injuries. In this context, accurate identification of diagnoses and analysis of risk factors are essential for the implementation of preventive strategies.

Objectives: To identify the diagnosis and risk factors of sports injuries in wheelchair fencing para-athletes during a national championship.

Methods: This is a prospective, descriptive, cross-sectional study conducted with male and female wheelchair fencing para-athletes during the Brazilian Para-fencing Championship. The Sports Injury