Objectives: The aim of study is to investigate the prevalence of neck and shoulder pain and the impact on running performance.
Methods: This prospective open survey study was conducted in accordance with the CHERRIES guideline recommendation. The study was conducted across the entire Brazilian territory using the Google Forms platform. Demographic data were collected, along with questions regarding the presence of cervical and shoulder pain. Among those who reported experiencing cervical and shoulder pain, they were also asked whether these pains limited their running performance. Finally, they completed two questionnaires to assess the levels of disability in the shoulder and cervical regions (SPADI and NBQ, respectively).
Results: 392 runners in all Brazilian territory answered this open survey which two-hundred ninety-one (58,16%) was women and one-hundred eighty-four (41,83%) was men. A total of 174 participants reported experiencing cervical and/or shoulder pain. Among them, 82 had cervical pain, corresponding to a prevalence of 20.92% (NBQ score = 20.65). Of these, 4 participants (4.88%) reported that cervical pain limited their running practice (NBQ score = 32.5). Additionally, 92 participants (23.47%) reported shoulder pain (SPADI score = 19.03), and among them, 5 (5.43%) stated that shoulder pain limited their running practice (SPADI score = 36.6). These preliminary findings suggest a moderate prevalence of cervical and shoulder pain among runners, with approximately 9% of affected individuals experiencing running limitations due to pain. Further studies are needed to better understand the relationship between cervical and shoulder pain and its impact on running performance.
Conclusion: These partial results suggest that the prevalence of neck and shoulder pain is 20.92% and 23.47%, respectively. However, only a small percentage of runners with cervical and/or shoulder pain experience limitations in running performance. Further studies are needed to identify the factors associated with the development of cervical and shoulder pain that may restrict running practice.
Implications: Understanding the impact of neck and shoulder pain on running performance can contribute to the development of preventive and rehabilitative strategies tailored to runners. Coaches, physiotherapists, and healthcare professionals should consider incorporating upper limb assessments and interventions into training programs to minimize potential biomechanical compensations and prevent further injuries. Future research should explore the underlying biomechanical and physiological mechanisms linking upper limb dysfunctions to running performance and injury risk. Additionally, longitudinal studies are needed to assess causality and the long-term effects of cervical and shoulder pain on runners' health and performance.
Keywords: Pain, running, prevalence

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ASSOCIATION BETWEEN UPPER LIMB ROTATION TEST AND ISOMETRIC MUSCLE STRENGTH IN SWIMMERS

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Background: Functional tests are widely used in the assessment of sports injuries to analyze aspects such as muscle strength, power, and athlete agility, being routinely applied in clinical practice for the prevention and rehabilitation of these injuries. The Upper Limb Rotation Test (ULRT) are frequently used for the evaluation of the upper limb functional status of athletes. However, the association between ULRT scores and isometric muscle strength of the kinetic chain muscles in swimmers is not completely understood.
Objectives: To evaluate the correlation between the isometric muscle strength of the kinetic chain muscles and the ULRT in swimmers.
Methods: This is a cross-sectional study that includes swimmers of both sexes, aged between 12 and 60 years, with at least 1 year of competitive practice, and a minimum of two training sessions per week. This study was approved by Ethics Research Committee. The ULRT was performed with the swimmers in a modified flexion position (on their elbows), close to a wall. They performed trunk rotation and external shoulder rotation at 90° of abduction and external rotation, touching a tape on the wall as quickly as possible for 15 seconds. The athletes performed three trials, and the mean was considered for the analysis. The peak isometric muscle strength of the shoulder elevators (scaption), shoulder internal and external rotators, lower trapezius (LT), serratus anterior (SA), trunk extensors and flexors, hip abductors and rotators (HIPSIT), hip flexors (HF), and knee extensors (KE) were measured using a handheld isometric dynamometer. The association between ULRT and muscle strength was assessed with Pearson Correlation Coefficient, which was classified as weak (0—0.39), moderate (0.40—0.69), and strong (0.70—1.00). A significance level of $p < 0.05$ was adopted. The data were analyzed with SPSS software version 23.0.
Results: A total of 50 athletes participated in the study, with mean age of 30.46 ± 14.27 and 27 (54%) were male. The ULRT showed a weak positive correlation with internal shoulder rotators ($r = 0.36$; $p = 0.008$) and moderate positive correlation with shoulder elevators ($r = 0.40$; $p = 0.004$), external shoulder rotators ($r = 0.41$; $p = 0.002$), LT ($r = 0.43$; $p = 0.001$), SA ($r = 0.42$; $p = 0.002$), trunk flexors ($r = 0.57$; $p < 0.000$), trunk extensors ($r = 0.43$; $p = 0.001$), HIPSIT ($r = 0.44$; $p = 0.001$), HF ($r = 0.43$; $p < 0.000$) and KE ($r = 0.44$; $p = 0.001$).
Conclusion: The study showed that performance in the ULRT is associated with muscle strength of shoulder elevators (scaption), external shoulder rotators, LT, SA, trunk extensors and flexors, HIPSIT, HF and KE. The results demonstrate that higher muscle strength in these muscles is associated with better performance in the test, highlighting the importance of the kinetic chain.
Implications: These findings can help clinicians to identify which components of the kinetic chain might affect ULRT performance.
Keywords: Physical Performance Test, Functional Test, Kinetic Chain

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DOES ANKLE AND HIP JOINT MOBILITY AND STRENGTH ASYMMETRY CORRELATES WITH THE PERFORMANCE OF HOP TEST IN PHYSICALLY ACTIVE INDIVIDUALS?

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