studies in this area in Brazil. In this way, the data are relevant for researchers to carry out future studies and analyze risk factors associated with their practice, through descriptive data on bodybuilding. And the data is relevant for clinicians to take into account in their rehabilitation plans.
Keywords: Resistance training, Bodybuilding, Injuries

Conflict of interest: The authors declare no conflict of interest.
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CHARACTERIZATION AND THERAPEUTIC APPROACHES TO URINATION DYSFUNCTIONS IN INDIVIDUALS WITH CEREBRAL PALSY

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Background: Individuals with cerebral palsy may be affected by motor, sensory, behavioral and/or autonomic dysfunctions. Among the autonomic dysfunctions, those that affect the urinary tract are very prevalent, with emphasis on the neurogenic bladder. Neurogenic bladder reflects findings of loss of inhibition of detrusor hyperactivity, generating voiding dysfunctions. Such dysfunctions are very frequent; however, their characteristics and approaches have been little systematized in the literature.
Objectives: To present the evidence from the literature that characterize voiding dysfunctions associated with cerebral palsy and the therapeutic approach.
Methods: A systematic review was performed following PRISMA recommendations with the research question structured according to population, intervention, control, and outcome. Two reviewers independently performed searches using the descriptors cerebral palsy' and 'neurogenic urinary bladder' in Portuguese, Spanish and English in Bireme (Lilacs, Medline, Scielo), Cinahl, Cochrane, Pubmed and Web databases of Science, no filters. Only published studies were included that included a sample of individuals diagnosed with cerebral palsy, with data on functional characteristics of the urinary tract and/or treatment. Studies that presented individuals with cerebral palsy and other associated diagnoses and studies with the design of reviews, letters or in the protocol phase were excluded.
Results: 1314 studies were found and 14 were selected (7 cross-sectional studies and 7 cohort studies). The total sample consisted of 1121 individuals with a mean age of 13.12 $\pm$ 8.91 years. The classification showed spastic quadriplegia (n=213), spastic diplegia (n=163), spastic hemiplegia (n=86) and 4 studies did not include classifications. The studies showed as main urinary tract symptoms urge incontinence (64.28%), daytime urinary incontinence (57.14%), stress urinary incontinence (35.71%), enuresis (35.71%), infection urinary tract (28.57%). There was also evidence of a reduction in urinary frequency, voiding fullness, voiding effort, voiding unpredictability, reduction of tension and force of voiding jet, inconstant jet. The therapeutic approach was always linked to the use of medication.
Conclusion: Voiding disorders in individuals with cerebral palsy are characterized by the association of symptoms related to failures in filling and/or emptying the bladder and have been therapeutically addressed only from a symptomatic point of view.
Implications: From a scientific point of view, considering the frequency of urinary dysfunctions, this review presents the urgent need to carry out studies with good methodological parameters that involve evaluation and, above all, other forms of treatment, such as, for example, pelvic physiotherapy. From a clinical point of view, this study directs the evaluative practice to conditions of hyperactivity of the detrusor musculature.
Keywords: Cerebral palsy, Neurogenic urinary bladder, Urinary incontinence

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RHEUMATOID ARTHRITIS: ASSESSMENT OF CARDIOPULMONARY FITNESS USING NEW SAMPLING TECHNOLOGY

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Background: Although maximum oxygen consumption (VO2peak) is one of the most important measurements in clinical practice, the high cost, time consumption and complications associated with the test have led to the search for simpler devices and the development of equations for estimating of cardiopulmonary fitness (eACP). Since the lungs are one of the sites most affected by rheumatoid arthritis (RA).
Objective: to create a predictive equation for VO2peak obtained by simple sampling technology in women with RA-associated interstitial lung disease (RA-ILD) considering the variables related to pulmonary involvement.
Methods: This cross-sectional study evaluated 47 women with RA-IPD. The participants were submitted to the following evaluations: dosage of autoantibodies; chest computed tomography (CT); assessment of disease activity through the Clinical Disease Activity Index (CDAI); measurement of physical function through the Health Assessment Questionnaire disability index (HAQ-DI); lung function tests including spirometry, carbon monoxide diffusing capacity (DLco) measurement, single-breath nitrogen washout test (N2SBW), impulse oscillometry (IOS) and cardiopulmonary exercise testing (CPET) using the FitMateTM®.
Results: VO2peak was significantly correlated with age (r=-0.550, $p<0.0001$), rheumatoid factor (r=-0.443, p=0.002), anti-cyclic citrullinated peptide antibodies (anti-CCP, r=-0.410 , p=0.004), CDAI (r=-0.462, p=0.001), HAD-DI (r=-0.486, p=0.0005), forced vital capacity (r=0.491, p=0.0004), DLco (r=0.621, $p<0.0001$), phase III slope of the N2SBW test (r=-0.647, $p<0.0001$), resonance frequency (Fres, r=-0.717, $p<0.0001$), respiratory system reactance (r=-0.535, p = 0.0001) , and inhomogeneity of respiratory system resistance between 4-20 Hz (r=-0.631, $p<0.0001$). On CT scan, patients with extensive ILD had significantly lower VO2peak than patients with limited ILD ($p<0.0001$). In the multivariate regression analysis, Fres, DLco and age explained 61% of the VO2peak variability.
Conclusion: As assessed by CPET, women with RA-ILD show reduced ACP, which can be explained at least in part by the presence of small