Conclusion: This initial evidence involving a small sample size suggests that properly applied, designed, and supervised resistance exercise may be safe and well tolerated by patients with prostate cancer and may lead to improvements in physical function, physical activity levels, and weight gain. Future trials involving larger samples are needed to expand on these preliminary findings. Implications: Future trials involving larger samples are needed to expand on these preliminary findings. Knowing that the planned exercise has benefits in the quality of life of these patients.

Keywords: Resistance exercise, Cancer, Electrostimulation

Conflict of interest: The authors declare no conflict of interest.

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IDENTIFICATION OF DEMOGRAPHIC, CLINICAL AND PSYCHOLOGICAL PREDICTORS IN RELATION TO KINESIOPHOBIA OF PATIENTS IN THE POST-OPERATIVE MUSCULOSKELETAL TRAUMA

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Background: Musculoskeletal injuries affect a large part of the population and result from numerous causes. These individuals may develop kinesiophobia, leading to avoidance of body movements and physical activities because of pain, believing that this behavior can prevent the worsening of their condition or cause a new problem. Kinesiophobia can have a significant impact on an individual's quality of life, both physical and mental health.

Objectives: Investigate the demographic, clinical and psychological predictors of kinesiophobia in patients after musculoskeletal trauma to the upper and lower limbs.

Methods: The study carried out with individuals after immediate musculoskeletal traumatic injuries in the Orthopedics and Traumatology Ward of HC/UFTM. We collect demographic data such as: age, gender, dominance and profession; clinical data, such as: pain intensity, pain categorization, type of surgical treatment, cause of injury, side of injury and body segment; and psychological data, such as: depression, anxiety, pain catastrophizing and kinesiophobia. Variables associated with kinesiophobia were analyzed using a multivariate linear regression model.

Results: 88 individuals were included, 73.9% male and 26.1% female. The multivariate linear regression model that showed statistical significance with the highest R² value (R² = 0.383; adjusted R² = 0.312) considering kinesiophobia as a dependent variable included nine independent variables: surgical treatment, affected side, dominance, anxiety and depression, affected segment, gender, pain intensity, cause of injury and pain catastrophizing. In this model, the predictive variables that showed statistical significance were: anxiety and depression (p = 0.025; β = 0.050), female gender (p = 0.191; β = 0.048) and pain catastrophizing (p = 0.350; β = 0.010).

Conclusion: Among the studied predictors, we believe that female gender, pain catastrophizing and higher levels of anxiety and depression are important predictors of kinesiophobia in patients after musculoskeletal trauma in the upper and lower limbs.

Implications: We believe that health professionals who deal with musculoskeletal trauma patients are aware of the variables that can predict kinesiophobia, as well as use these assessment tools to help patients with their fear and movement avoidance behaviors.

Keywords: Predictors, Kinesiophobia, Musculoskeletal trauma

Conflict of interest: The authors declare no conflict of interest.

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CORRELATION BETWEEN SENSORY AND MUSCULAR FUNCTIONS OF THE PELVIC FLOOR AND URINARY INCONTINENCE IN YOUNG NULIPAROUS WOMEN

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Background: The functionality of the pelvic floor musculature (PFM) assists in the support of pelvic organs as well as provides urinary, fecal continence and sexual functions within normal limits. For the PFM to be considered functional, it is necessary that strength, resistance, relaxation capacity, superficial sensitivity, tonus, and proprioception are present in a harmonious way. Changes in one or more of these components can trigger, for example, urinary incontinence (UI).

Objectives: To identify the sensory and muscle functions of the pelvic floor and UI and their correlations in young nulliparous women.

Methods: A descriptive, observational, and cross-sectional study was carried out. The sampling process was of the convenience type, with women aged between 18 and 30 years old, nulliparous, who had never been pregnant and who were not menstruating on the day of the assessment selected. The evaluation was carried out through the application of questionnaires (socio-clinical questionnaire, International Consultation on Incontinence Questionnaire-Short Form) and, later, by physical examination evaluating the superficial sensitivity, the tonus of the perineal body, tonus of the external anal sphincter and strength of MAP through the Perfect scheme. Data were analyzed using the Statistical Program for Social Sciences (version 23) considering a significance level of 5%.

Results: The sample consisted of 45 women with a mean age of 22.18 ± 3.15 years. The prevalence of UI was 31.11%, with the majority referring a feeling of incomplete emptying and 17.77% referring a situation of urinary urgency. The entire sample showed normal sensitivity. Changes in perineal body and external anal sphincter tone were observed in 26.6% and 15.5%, respectively. The group with UI showed more muscle weakness (p = 0.04) and less ability to repeat PFM contractions (p = 0.02). There was a correlation between PFM functions and the presence of UI in the components of muscle strength (R = 0.78), maintenance of muscle contraction capacity (R = 0.60), repetition potential (R = 0.65) and presence of contraction of the lower abdominal muscles (R = 0.55).

Conclusion: UI is directly related to muscle weakness, difficulty maintaining the contraction, lack of ability to repeat PFM
contractions and the presence of co-contraction of lower abdominal muscles.

Implications: In scientific terms, it was shown that, in terms of MAP, for the development of UI, muscle strength is not a single factor to be considered, considering the importance of other parameters. In clinical terms, this study underscores the importance of considering motor, but also sensory, aspects when evaluating PFM functionality.

Keywords: Women's health, Pelvic diaphragm, Urinary incontinence

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Ethics committee approval: (CMEP/ UNICENTRO) under opinion n°. 5.299.509.

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ASSOCIATION BETWEEN BASELINE DYSPNEA AND PHYSICAL ACTIVITY LEVEL IN COPD PATIENTS AFTER A PULMONARY REHABILITATION PROGRAM

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Background: Pulmonary rehabilitation (PR) programs play a key role in reducing the sensation of dyspnea, improving exercise capacity, physical activity level and quality of life in patients with different severity of COPD. However, it is still uncertain whether there is an association between dyspnea and the level of physical activity in these individuals, as patients with different pre-RP baseline dyspnea scores may have different responses in the level of physical activity after PR.

Objective: To verify whether there is an association between the sensation of dyspnea and the level of physical activity in response to a PR program in patients with COPD.

Methods: This is a retrospective observational study, which evaluated 22 patients diagnosed with COPD, who participated in a PR program for 8 weeks, and had an FEV1/FVC ratio <70%, both genders, mean age of 67 ±5 years, post-bronchodilator FEV1 (48±12%). For pre- and post-PR evaluation of dyspnea sensation, the mMRC scale (Medical Research Council), distance covered by the 6-minute walk test (DPTC6) and the level of physical activity through the activPAL3TM actigraph (Pal technologies Ltd. United Kingdom), for 7 consecutive days. The physical activity level variables analyzed were time in lying/sitting, standing, and walking positions; number of steps, and time spent at certain exercise intensities (sedentary, when METS<1.5 and light exercise, when MET<1.5 but >3). Those patients who could not perform the proposed tests and/or had difficulty understanding the scale were excluded. For correlation analysis and linear regression of the data, the statistical software SPSS v21(2012) was used, with significance of p<0.05.

Results: A high negative correlation was found between mMRCpre and DPTC6 (r=0.769; p<0.000), as well as a moderate negative correlation with the number of steps (r=0.678; p<0.001), walking time (r=0.663; p<0.001) and METS(>1.5 to 3.0). Regarding mMRC and sitting/lying time, there was a moderate positive correlation (r=0.546; p=0.009). It was found in the simple linear regression analysis between mMRC with 6MWT (r²=0.529), the number of steps (r²=0.451), with walking time (r²=0.463) and with MET >1.5 to 3.0 (r²=0.519).

Conclusion: It is concluded that the pre-intervention mMRC can explain the exercise capacity and the level of physical activity after PR, and more symptomatic patients reached lower exercise capacity and less time in light and moderate physical activity intensities.

Implications: This study has the clinical implications that when prescribing a PR program for patients with more symptomatic COPD, greater attention is given to these patients so that there is an improvement in exercise capacity and physical activity level.

Keywords: COPD, Physical activity, Physiotherapy

Conflict of interest: The authors declare no conflict of interest.

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Ethics committee approval: The study was approved by the Ethics Committee of the Federal University of São Carlos (CAAE: 85901318.00000.5504).

QUALITY OF LIFE OF WOMEN IN THE THIRD TRIMESTER OF PREGNANCY

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Background: Quality of life is closely related to sociodemographic and environmental factors, living conditions and social relationships. Pregnancy is a period of adaptations and physical and emotional changes for women, which can affect their quality of life, especially in the third trimester of pregnancy, when most of the physical changes occur and delivery is approaching. The evaluation of this health indicator is important so that the physiotherapist can know where to act and what to offer for the health of the pregnant woman.

Objectives: To describe the quality of life of pregnant women in the third trimester of pregnancy.

Methods: This work comprises preliminary data from a cross-sectional observational study, with a sample composed of 24 women in the third trimester of normal-risk pregnancy, with a mean age of 29.33±3.897 years and who had lower limb edema. Quality of life was assessed using the Ferrans and Powers Quality of Life Index, adapted for pregnant women by Fernandes, Narchi and Cianciarullo. This instrument consists of 36 items divided into four domains, namely: health and functioning (16 items); family (4 items); social and economic (9 items); and psychological/spiritual (7 items). The score can vary between 0 and 30 points, with higher scores indicating better quality of life.

Results: The sample was characterized by being mostly married (79.2%), primiparous (70.8%), with planned pregnancy (47.1%) and complaint of lower limb edema (100%). The mean score for overall quality of life was 21.70±3.627, with a minimum score of 14.79 and a maximum score of 28.76. Only one of the pregnant women scored less than 15 points in quality of life, showing that most have a quality of life ranging from fair to good. The family domain obtained the highest average score (25.37±3.59), followed by the psychological/spiritual (23.25±4.56) and social/economic (22.30±4.00) domains.

Health and functioning had the lowest score among the four (19.07±4.34), which points to how much physical changes during pregnancy can affect quality of life in the third trimester. Another piece of data that corroborates this observation is that item 7 (energy for everyday activities), within that same domain, had the lowest score in the sample.

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