

**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. muscle mass. 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 ( $p = 0.255$ ;  $\beta = 0.050$ ), female gender ( $p = -0.191$ ;  $\beta = 0.048$ ) and pain catastrophizing ( $p = 0.350$ ;  $\beta = 0.010$ ).

**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 NULLIPAROUS 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  $22.18 \pm 3.15$  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