Resistance Training and Quality of Life in Breast Cancer Survivors

Vitor Marques¹, Rafael Alves¹, Rafael Felipe Moraes¹ Thaynã Guimarães¹, Weder Silva¹, Claudio Lira¹, Mario Hebling¹, João Ferreira-Junior², Paulo Gentil¹, Maria Sebastiana Silva¹ Carlos Vieira¹

¹Federal University of Goiás, UFG, Brazil.

²Federal Institute of Minas Gerais, Rio Pombas, Brazil

The number of studies involving patients with breast cancer and physical activity has increased in recent years. The Resistance Training (RT) has shown to be effective in improving. Objective: To compare quality of life between women breast cancer survivors (BCS) with apparently healthy women. Methods: This study analyses the effects of once weekly RT on fatigue levels among BCS. Randomized controlled trial. The 25 women included were randomized into RT or control group. The RT group performed eight weeks of RT (once per week). Quality of life was evaluated using the SF-36 questionnaire. The final score can vary between 0 (worse general health) and 100 (better health status). The SF-36 questionnaire consists of 8 domains: General Health Status, Vitality, Pain, Emotional Aspects, Social Aspects, Mental Health, Functional Capacity and Physical Limitations. Data normality was verified by the Shapiro-Wilk test, and the data were compared between groups by Student's t test. For independent samples, the significance level adopted was $p < 0.05$. A two-way repeated measures analysis of variance was used to test for significant main effects and interactions for these data. The level of significance was set at $p < 0.05$. The results show resistance training improved the following subscales of SF-36: aspects of physical functioning (+27%, $p = 0.027$), physical role functioning (+54%, $p = 0.008$), emotional role functioning (+42%, $p = 0.027$) and mental health (+16%, $p = 0.032$). Resistance training seemed a positive nonpharmacological tool for the improved of quality of life.

Keywords: breast cancer; Psychobiological aspects; physical exercise

Biography:

Vitor Alves Marques is physical education by profession, is master in Health Science at the Federal University of Goiás, and its dissertation is about the effects of chemotherapy treatment on muscle performance in women with breast cancer in the year 2018. He is member the Laboratory of Physiology of the Exercise and Nutrition and Healthy at the Federal University of Goiás (LAFINS/UFG) and also is member the Laboratory of Analyzes of Human Moviment (LAMOVIH/UFG).