https://doi.org/10.29289/259453942025V35S1106

Evaluation of shoulder joint complex, kinesiophobia, quality of life, lymphedema, and physical activity level of women with breast cancer undergoing surgical treatment

Flávia Batista Gomes Noleto[1], Vitor Alves Marques[1], Tatiane Nunes da Silva Rodarte[1], João Batista Ferreira Júnior[2], Carlos Alexandre Vieira[1], Ellen Gomes de Oliveira[1], Rafael Ribeiro Alves[1], Anderson Garcia Silva[1]

[1]Universidade Federal de Goiás – Goiânia (GO), Brazil.
[2]Instituto Federal do Sudeste de Minas Gerais – Juiz de Fora (MG), Brazil.

Objective: To evaluate the range of motion, muscle strength, and functional performance of the shoulder joint complex, levels of shoulder pain and disability, kinesiophobia, quality of life, level of physical activity, and lymphedema in women with breast cancer undergoing surgical treatment, at two time points, before and after surgery. **Methods:** Eleven volunteers participated in the study (aged 53.7 standard deviation ±10.8 years; weight 73.10±17.9 kg, height 1.55±0.05 m). Anthropometric measurements, evaluation of shoulder range of motion (ROM), handgrip strength (HGS), evaluation of upper limb functional performance (disabilities of the arm, shoulder, and hand; DASH), evaluation of shoulder pain and disability level (SPADI), assessment of kinesiophobia (TAMPA), quality of life assessment (SF-36), level of physical activity (metabolic equivalent of task; MET), and evaluation of lymphedema (perimetry) were performed. The study was approved by the ethics committee of the Federal University of Goiás. **Results:** There was no interaction between condition and time for HGS (p=0.80) and ROM of the movements evaluated. In addition, there was no effect of the condition factor for HGS (p=0.41) and ROM on the movements evaluated. There was also no effect of the time factor for HGS (p=0.56) and ROM on the movements of the axis of lateral rotation and medial rotation. However, there was a reduction in abduction ROM (p=0.002) and shoulder flexion (p=0.002) after surgery on both sides. There was no change in kinesiophobia (p=0.12), quality of life (p=0.09), level of physical activity, and lymphedema after surgery. However, there was a worsening of functional performance (p=0.005) and of the level of pain and disability in the shoulder (p=0.02) after surgery. **Conclusion:** ROM was reduced after surgery for abduction movements and shoulder flexion. Functional performance and the level of shoulder pain and disability deteriorated after surgery.

Keywords: women's health; surgery; breast cancer; upper limbs.