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Body composition in breast cancer survivors in Sonorenses women

ENA MONSERRAT ROMERO PÉREZ¹, JOSÉ ALDO HERNÁNDEZ MURÚA², CARLOS VERDUGO BALBUENA⁴, JOSÉ ANTONIO DE PAZ FERNÁNDEZ³.

¹Department of Physical Activity and Sport, University of Sonora, Hermosillo, México. ²Faculty of Physical Education and Sports, Autonomous University of Sinaloa, Culiacan, México.

³ Institute of Biomedicine, University of León, León, Spain.

⁴ Facultad de Deportes, Universidad Autónoma de Baja California, Ensenada, México.

Mentor/Advisor: aldohdez80@hotmail.com

ABSTRACT

INTRODUCTION: Breast cancer is the most common type of cancer in the worldwide. In the same sense, this disease is one of the most common cancers affecting Mexican women. In the year 2014 in México, there were 11,372 new cases of breast cancer with an incidence rate of 22.56 per 100,000 in habitants older than 10 years. Women with breast cancer are often subjected to an operation due to this affectation which decreases its functionality and body composition. PURPOSE: To examine the body composition in breast cancer survivors in a sample of women from Hermosillo, Sonora, México. METHODS: This study was a cross-sectional descriptive study design. 21 women with breast cancer who had been operated on left arm and had been recruited at one university-based exercise program for breast cancer survivors in Hermosillo, Sonora, México. Body composition (BC) was measured. The right arm non-operated was considered as control. Statistical difference between the operated versus non-operated arm were determined with t-student test for independent samples. RESULTS: In the present study, body fat (1719.1 ± 456.7 vs. 1819.8 ± 467.9 grams, $p \le 0.05$), lean mass $(1960.2 \pm 308.7 \text{ vs. } 2151.5 \pm 313.5 \text{ grams}, p \le 0.05)$ and total body mass $(3679.3 \pm 643.3 \text{ vs.})$ 3971.1 \pm 675.9 grams, p \leq 0.05) of the left operated arm of women who breast cancer survivors were significantly lower than the mean of the right non-operated arm. CONCLUSION: Breast cancer survivors' women who have underwent an operation on their left arm sowed a lower percentage of fat, fat mass and total mass compared to their non-operate arm. The present study underline the importance to apply rehabilitation or exercise program focused to reduce the changes in the body composition.