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Effects of a multicomponent exercise program with duration of 12 weeks on the quality of life in breast cancer survivors

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Resumo / Abstract / Resumen

The exercise program had a duration of 12 consecutive weeks and a weekly frequency of three days. The variables of healthy-related quality of life questionnaire EORTC QLQ-C30 and QLQ-BR23 were evaluated on the baseline and after 12 weeks. The data followed a descriptive and statistical analysis related to the results obtained in the various subscales of the EORTC QLQ-C30 and QLQ-BR23 on the baseline and 12 weeks. From baseline to 12 weeks, the most increased values were 24 (± 16.5) points in the role function; 11 (± 5.3) in the emotional function. In the symptomatic scales, the most improved symptoms were fatigue with a reduction of 20 (± 3.5) points; 14 (± 3.8) in the pain scale, 16 (± 4.8) on breast symptoms, and 19 (± 10.9) points on arm symptoms. The results suggest that the multicomponent exercise program in this study didn´t have significant differences on the health-related quality of life subscales in breast cancer survivors.

Palavras-chave / Key-words / Palabras-clabe

Breast Cancer; Quality of Life; Exercise.

Introdução / Introduction / Introducción

The classification of "cancer survivor" indicates any person who had or has cancer from the time of diagnosis (Marzorati et al., 2017). The treatment is essentially centered on the objective of curing the disease and in the prevention of its metastic reappearance (Devin et al., 2019). This evidence emphasizes the importance of research on the development of strategies to improve quality of life, reduce the risk of recurrence, probability of contracting other diseases and prolong the survival of this population (Lee et al., 2016).

Métodos / Methods / Métodos

The sample of this study consisted of 7 female subjects with an average of 64 (± 8.6) years who volunteered for this investigation and presented breast cancer pathology diagnosed in the clinical history. The exercise program had a duration of 12 consecutive weeks and a weekly frequency of three days. The duration of the exercise was 60 continuous minutes and the exercise used were from the multicomponent method, combining aerobic, resistance, flexibility and balance training. The variables of healthy-related quality of life questionnaire EORTC QLQ-C30 and QLQ-BR23 were evaluated on the baseline and after 12 weeks.

Resultados / Results / Resultados

The most increased values were 24 (± 16.5) points in the role function; 11 (± 5.3) in the emotional function. In the symptomatic scales, the most improved symptoms were fatigue with a reduction of 20 (± 3.5) points; 14 (± 3.8) in the pain scale, 16 (± 4.8) on breast symptoms, and 19 (± 10.9) points on arm symptoms. However, we didn´t found significant differences on the variables of this study.

Variables QLQ-C30	Baseline (n=7) M (±SD)	12 weeks (n=7) M (±SD)	U	P
Global Health Status (QOL)	60,71 (±17,8)	57,1 (± 11,1)	20,500	0,620
Physical Function (PF)	83,8 (± 9,3)	84,7 (± 11,9)	29,500	0,535
Role Function (RF)	59,5 (± 33,1)	83,3 (± 16,6)	35,500	0,165
Emotional Function (EF)	67,8 (± 23,2)	78,5 (± 17,9)	31,000	0,456
Cognitive Function (CF)	76,1 (± 18,8)	80,9 (± 11,5)	29,000	0,620
Social Function (SF)	83,2 (± 21,6)	71,3 (± 34,3)	20,000	0,620
Fatigue (FA)	46 (± 24,3)	26,9 (± 27,8)	14,500	0,209
Pain (PA)	46,2 (± 24,4)	32,1 (± 28,2)	17,000	0,383
Variables QLQ-BR23				
Breast Symptoms (BRBS)	23,8 (± 17,9)	7,14 (± 13,1)	9,500	0,053
Arm Symptoms (BRAS)	32,9 (± 27,6)	13,88 (± 16,7)	13,500	0,165

Conclusions

The results of the present study suggest that supervised multicomponent exercise program for 12 weeks didn´t have significant differences on the health-related quality of life subscales in breast cancer survivors.

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