

Effect of Callisthenic Exercises on Shoulder Range of Motion, Pain and Quality of Life on Female Breast Cancer Survivals

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Abstract

Introduction: common treatments for breast cancer by followed symptoms such as restriction in shoulder motion of range, pain and quality of life reduction and the effect of rehabilitation intervention on these impairments is contradictory. therefore the aim of this study was to evaluate the effect of callisthenic exercises on shoulder range of motion, pain and quality of life (QOL) in female breast cancer survivals.

Methods: In this quasi-experimental research 24 women with breast cancer randomly divided in two experimental (n=12) and control (n=12) groups. Experiment group underwent callisthenic (aerobic) exercises for 6 weeks and three sessions weekly. This aerobic exercise includes rhythmic movement that was performed with 60 to 70 percent of maximum heart rate. In order to assess of shoulder range of motion, pain quality of life, the goniometer, BPI questionnaire and QOL questionnaire were used respectively. The and covariance of analysis levlt significant in anlysis statistical for used wre tests t pairedof 0.05.

Results: Results revealed that calisthenic exercises had significance effect on shoulder flexion and external rotation range of motion, pain and quality of life in women with breast cancer ($\alpha \leq 0.05$).

Conclusion: because these exercises improve shoulder range of motion, pain and quality of life of patients with breast cancer, the use of this exercises recommended in the process of rehabilitation of breast cancer survivals.

Keywords: Aerobic Exercise, Shoulder Disability, Cancer.