

Exercise Therapy in Rehabilitation of Women with Breast Cancer: An Insight

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Abstract

This short communication was aimed to throw light on rehabilitative role of exercise therapy in women with breast cancer. The evidence presented in this article enumerated the preventive and therapeutic role of exercises in rehabilitation of breast cancer survivors. Exercise given as a combination of aerobic and strength training in addition to routine antineoplastic treatments and chemo/radiotherapy was effective in not only producing symptom reduction, but also enhanced functional performance and perceived quality of life. More studies on multidisciplinary administration of exercises would confirm our findings more comprehensively in order to derive evidence-informed recommendations.

Keywords: exercise rehabilitation, cancer rehabilitation, women's health, gynecological oncology.

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Campbell et al¹ in their randomized controlled trial studied 22 breast cancer survivors who were receiving chemotherapy/radiotherapy for the effects of 12-week exercise intervention. The study found that 12 women who participated in the exercise programme had higher levels of physical functioning and higher QoL scores than the 10 controls.

Mehnert et al² investigated the impact of physical exercise program on physical fitness

and psychological well-being in 58 women with primary nonmetastatic breast cancer who were randomly assigned to either intervention group (IG) (n = 30) or waiting group (WG) (n = 28). The exercise program consisted of gymnastics, movement games, relaxation, walking, and jogging twice weekly for 10 weeks. Anxiety, depression, individual body image, and VO₂max/kg were improved in exercise group, whereas no improvements were observed in the WG.

Pace et al³ studied the effectiveness of manual therapy (MT) combined with upper limb (UL) exercises in 131 women with impaired shoulder range of motion (ROM) after axillary lymph node dissection (ALND) for breast cancer who were randomly assigned into 66 women who were allocated to group exercises and 65 who underwent the exercises followed by MT. No between-group difference in recovery of shoulder ROM as well as UL function was observed. MT with exercises did not enhance the outcomes than those obtained with exercises alone.

Petit et al⁴ performed a quasi-experimental study for evaluating the effectiveness of an exercise program for the recuperation of the range of motion (ROM) of the shoulder in 64 breast cancer patients undergoing surgery. ROM improvements were noted from 7th day until the 105th PO day, with minimum time for recovery as 105 days for the women undergoing mastectomy, and 75 days for those undergoing quadrantectomy.

Exercise as an adjunctive treatment help to attenuate the effects of long-term sequelae of breast cancer like psychological distress, fatigue, weight

gain, premature menopause and changes in body image.⁵

Volaklis et al emphasized that the relative risk reduction of breast cancer for women who engaged in moderate to vigorous physical activity for 3-5 days per week ranged between 20-40 %, with 50-53% reduction in the risk of breast cancer deaths in women. The numerous physiological and psychological benefits of participating in regular exercise and/or physical activity (combining both aerobic and strength training) include reductions in fatigue and improvements in immune function, physical functioning, body composition, and quality of life.

The evidence presented in this article enumerated the preventive and therapeutic role of exercises in rehabilitation of breast cancer survivors. Exercise given as a combination of aerobic and strength training in addition to routine antineoplastic treatments and chemo/radiotherapy was effective in not only producing symptom reduction, but also enhanced functional performance and perceived quality of life. More studies on multidisciplinary administration of exercises would confirm our findings more comprehensively in order to derive evidence-informed recommendations.

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