

居家步行運動對乳癌術後婦女化學治療期間身體活動量與症狀困擾之影響

Effects of a Home-Based Walking Program on Physical Activity and Symptom Distress in Post Operative Breast Cancer Women Undergoing Chemotherapy

中文摘要

惡性腫瘤位居國人十大死因之首，而乳癌為女性癌症死因之第四位，治療方式除了手術切除病灶之外，必須配合其他輔助性療法，化學治療為有效益的方式之一，但當患者接受化療時，不僅經歷治療所造成之症狀困擾感到不適，身體活動量也隨著減少。本研究目的主要探討乳癌術後婦女於化學治療期間身體活動量情形與症狀困擾之相關性，及比較是否因接受居家步行運動訓練而有所差異。

本研究採用實驗性研究設計方法，針對北部某醫學中心，第 I-III A 期接受手術並接受化學治療的乳癌婦女，採隨機方式分配實驗組 10 名及對照組 18 名。實驗組參與為期 12 週，每週 3 次、每次 30 分鐘的居家步行運動訓練，於運動期間配戴「手腕型心搏速率測量器」來記錄其心跳變化狀況。在訓練期間兩組個案皆維持日常飲食與藥物治療。並使用「基本資料問卷」、「台灣版安德森症狀量表」、「七日身體活動回憶量表」為研究工具，於個案接受手術後，預定接受第二次或第三次化療當天為資料收集的第一個觀察日、再分別於研究開始後的第六週及第十二週進行兩次的資料收集。分析研究結果以 SPSS 15.0 版套裝軟體處理資料，進行描述性及推論性統計進行資料處理，如百分比、平均值、標準差、卡方檢定、t 檢定、皮爾森相關檢定、單因子變異分析及二因子重複測量變異數分析。

研究結果：(1) 個案平均年齡 51.66 ± 7.72 歲。(2) 疾病分期以第二期患者為多；手術方式接受修正型乳房根除術(MRM) 84.4%居多；化學藥物治療方面以 Cyclophosphamide + Epirubicin + 5Fluorouracil (CEF) 佔 59.4%。(3) 實驗組經過 12 週的居家運動訓練，身體活動量較提高約 50.68 METs/週，對照組則下降 5.3 METs/週。(4) 實驗組症狀困擾嚴重程度於研究期間無顯著改變；而對照組症狀困擾情形於研究進行第六週最高 ($p < .01$)。(5) 乳癌術後婦女於化療期間身體活動量與症狀困擾得分無顯著相關性 ($p > .05$)。

居家步行運動是安全且具方便性的運動，對於手術後接受化療期間之個案應該能夠執行中度、每週三次、每次 30 分鐘的步行運動，並且能藉由運動來避免症狀困擾嚴重程度的增加。

英文摘要

Cancer has been the leading cause of death in Taiwan. The breast cancer has been listed as the 4th cause of cancer death among woman in Taiwan. Besides surgical intervention for breast cancer, the treatment should be included with some kind of adjuvant therapies. The chemotherapy is one of the beneficial remedies. However, during the course of the chemotherapy, the patient not only suffered from the symptoms caused by the therapy but also had decreased physical activities. The aim

of this study is to evaluate the association between physical activities and symptom-associated distress in post-operative breast cancer patients receiving chemotherapy and to compare the change of the symptom-associated distress with time and after receiving home-base walking program. An experimental study design was used in this study. The subjects were randomly assigned into the experimental group and the control group. The instrument used in the study included: demographic data collection form, M. D. Anderson Symptom Inventory-Taiwan Form (MDASI-Taiwan Form), and seven-day physical activity recall (7-day PAR). In addition, individual heart rate monitor was used in exercise group to analyze the subject's heart rate during exercise. A home-based walking exercise program was designed for the experimental group for 12 weeks (30 minutes a day, three days a week.) Data were collected on the day the patient was scheduled to received the second or third course of chemotherapy (as the first observation date) and on the sixth week and on the twelfth week of the study. The data were analyzed by percentage, mean, standard deviation, Chi-square, t-test, Person's correlation, one-way ANOVA, two-way ANOVA.

Thirty-two subjects was included this study (14 in the experimental group and 18 in control). The result of the study showed as followingt: (1) The mean age of the subject was 51.66 ± 7.72 years. (2) The majority of the patient was with stage II breast cancer and most of the majority of the patients received modified radical mastectomy operation (84.4%); the majority of the patient received chemotherapy of Cyclophosphamide + Epirubicin + 5Fluorouracil (CEF) (64.3%). (3) After 12 weeks of the home-based walking exercise program, experimental group increase physical activity 50.68 METs/week , control group decrease 5.3 METs/week. (4)The symptom-associated distress reached the highest level in the sixth week in control group($p < .01$). (5) The physical activity is not relevant to the score from the symptoms($p > .05$).

The home-based walking exercise is safe and convenient for post- operative breast cancer women. For the purpose to increase physical activity and to avoid increasing symptom distress, breast cancer patients receiving chemotherapy should be able to carry out moderate to heavy walking exercise 30 minutes a day and three days a week.