運動訓練對老年周邊動脈阻塞患者行走功能與自覺健康狀態成效之探討

The Effects of Exercise Training on Walking Function and Percetion of Health Status in Elderly Patients with Peripheral Arterial Occlusive Disease

中文摘要

周邊動脈阻塞病患因爲下肢血管阻塞，使病患行走時有間歇性跛行的症狀及疼痛，因而在行走功能上與自覺健康狀態受到限制。然而目前國內對這類病患的運動訓練以改善行走功能與自覺健康狀態的相關研究相當有限，故本研究目的在探討周邊動脈阻塞病患經由運動訓練後對其行走功能及自覺健康狀態上之影響。本研究採類實驗設計法選取台北市北區某醫學中心，經由心臟血管外科專科醫師轉介周邊動脈阻塞病患爲研究對象，依隨機方式將個案分爲運動組及對照組，共有 22 位個案完成此研究，其中運動組 10 人，對照組 12 人。運動組參與爲期八週的跑步機運動訓練，對照組則保持其原本生活方式，八週前後經結構式問卷、六分鐘行走測試與跑步機運動測試進行資料收集。資料分析採百分比、平均值、標準差、Spearman correction、Mann-Whitney U test、 及 Wilcoxon Sign-Rank test，以探討跑步機運動訓練對周邊動脈阻塞病患對其自覺、實際行走功能與自覺健康狀態之成效。

研究結果發現：（一）周邊動脈阻塞病患在自覺健康狀態中得分屬於中等，身體功能層面得分較心理功能層面得分低。（二）基本屬性與病患自覺健康狀態並無顯著相關，年齡與病患實際六分鐘行走距離呈現負相關，收縮壓對於病患自覺行走距離亦呈現負相關。（三）運動訓練後，病患在自覺健康狀態中身體功能層面增加 50%，較心理功能層面增加來的顯著，各次概念增加程度則由 20%至 178%。（四）運動訓練後，病患自覺行走功能有顯著的改善，改善程度由 17%-36%。（五）運動訓練後，病患在實際行走功能有顯著的改善，其改善情形達 168.9%-187.5%。本研究結果顯示周邊動脈阻塞病患因行走功能受限，影響其自覺健康狀態，在經過八週的跑步機運動訓練後，對於周邊動脈阻塞病患在自覺行走功能、實際行走功能與自覺健康狀態皆達到顯著的成效。

英文摘要

There are great impact on the walking function and perception of health status due to limited arterial blood supply to lower extremities and intermittent claudication among patients with peripheral arterial occlusive disease. However, studies regarding the effects of exercise training on the patients'' walking function and perception of health status are very rare in Taiwan. The purpose of this study is to

explore the effects of exercise training on the walking function and perception of health status in elderly patients with peripheral arterial occlusive disease.
A quasi-experimental design was used to guide the study. Subjects who met the criteria were referred by a cardiovascular surgeon at a medical center in Taipei. Twenty two patients enrolled in our study who were randomly assigned into either exercise or conrtrol group. The exercise group was assigned to join an 8-week treadmill exercise program. The control group remained their living pattern. Data were collected by the structural questionnaires, 6-minute walking test and treadmill exercise test. Percentage, mean, standard deviation, Spearman correlation, Mann-Whitney U test and Wilcoxon Sign-Rank test were used for the data analysis. Research results were shown as follows: （1） Patients perceived moderate degree of health status and reported lower scores in physical function dimension than in psychological dimension.（2） Age was negatively correlated with 6-minute walking distance. Systolic blood pressure was negatively correlated with perceived walking function. （3） The perception of health status of patients was improved by 20%~178% after exercise training program. The physical function dimension of perceived of health status improved more significant than the psychological dimension. （4） Patients perceived better of walking function by 17%~36% after exercise training program.（5） The actual walking function by 168.9% to 157.5% of the patients was increased after exercise training.
Based on the results of this study, it was concluded that there was a great impact on patients'' perception of health status due to their limited walking function. After paticipating in an 8-week treadmill exercise training program, the patients indeed improved their perception of health status and walking function.