

The effects of exercise training on walking function and perception of health status in elderly patients with peripheral arterial occlusive disease

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摘要

Abstract

OBJECTIVE: To determine the effects of 12-week exercise programme on ambulatory function, free-living daily physical activity and health-related quality of life in disabled older patients with intermittent claudication. DESIGN: Prospective, randomized controlled trial. SETTING: University Medical Center and Veterans Affairs Medical Center, Taipei, Taiwan. SUBJECTS: Thirty-two of 64 patients with Fontaine stage II peripheral arterial occlusive disease (PAOD) were randomized to exercise training and 32 to usual care control. Five patients from the exercise group and six patients from the control group dropped out, leaving 27 and 26 patients, respectively, completing the study in each group. INTERVENTIONS: Twelve weeks of treadmill exercise training. MAIN OUTCOME MEASURES: Treadmill walking time to onset of claudication pain and to maximal claudication pain, 6-min walk distance, self-reported ambulatory ability and perceived health-related quality of life (QOL). RESULTS: Compliance of exercise programme was 83% of the possible sessions. Exercise training increased treadmill walking time to onset of claudication pain by 88% ($P < 0.001$), time to maximal pain by 70% ($P < 0.001$), and 6-min walk distance by 21% ($P < 0.001$). SUBJECTS: Perception of health-related QOL improved from 12% to 178% in the exercise group. These improvements were significantly better than the changes in the control group ($P < 0.05$). CONCLUSIONS: Significant improvements in claudication following 12-week exercise training in elderly PAOD patients were observed. Increase in treadmill walking time to maximal claudication pain in these patients translated into the improvement of perceived physical health, which enabled the patients to become more functionally independent.