

太极心康方案的研发及在冠心病人群中的实证研究

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摘要: 当前, 心血管疾病已成为危害人类健康的主要疾病, 其中冠心病已成为导致人类死亡的首要原因。如何防治心血管疾病的发生, 提高患者的生活质量, 已成为一项重大的公共卫生任务。**目的:** 研究的主要目的是研发太极心康方案, 探讨其在冠心病人群中应用的有效性, 为提出心脏康复运动处方体系的“中国方案”提供科学依据。**方法:** 采用多中心、随机对照实验研究方案, 运用组别×时间的混合实验设计。共招募冠心病患者 56 例, 按照 1:1 比例随机分为两组, 每组各 28 例, 实验组采取太极心康方案干预; 对照组采取常规运动康复方案干预, 两组患者均给予药物治疗。干预周期共计 11 个月, 其中包括 2 个月的院内康复与 9 个月的居家康复, 居家康复采用腾讯会议远程监控形式。数据分析采用 SPSS21.0 统计软件, 不同时间节点指标比较采用重复测量方差分析。本研究以生活质量 (SF-36) 作为主要结局指标, 以心肺功能、超声心动图、运动能力、身体成分、血脂代谢、焦虑抑郁情绪及运动依从性作为次要结局指标。**结果:** ①经检验, 两组被试在一般人口学信息、患病情况及基础用药等方面无显著性差异, $P>0.05$, 说明基线水平均衡具有可比性。②主要结局指标组内比较: 太极心康方案干预后生活质量总分 (Tot) 提高 88.00, $P<0.01$, 生理健康 (PHC) 层面提高 33.11, $P<0.05$, 心理健康 (MHC) 层面提高 63.770, $P<0.01$, 其中生理职能 (RP)、一般健康状况 (GH)、社会功能 (SF) 以及情感职能 (RE) 显著性提高, 且具有远期疗效, $P<0.01$ 。③主要结局指标组间比较, 干预后太极心康方案在 RE 维度及 MHC 层面显著性高于常规运动康复方案, 且具有远期疗效, $P<0.05$ 。两组患者均未出现不良反应及不良事件。**结论:** 太极心康方案在提高冠心病患者生活质量、增强运动能力、改善焦虑抑郁情绪等方面取得了显著性疗效, 而常规运动康复方案在改善冠心病患者心肺功能、身体成分两方面具有显著性疗效。两种运动康复方案均具有较高的安全性, 但太极心康方案的运动依从性相对较高。建议今后可将太极心康方案更多地应用于临床实践中, 不断完善心脏康复运动处方体系, 为国际心脏康复发展贡献“中国智慧”。

关键词: 太极心康方案; 冠心病; 心脏康复; 生活质量; 中国方案

The R&D (research and development) of Tai Chi cardiac rehabilitation programme and empirical research in coronary heart disease population

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Abstract: Objective: At present, cardiovascular disease has become a major disease endangering human health, and coronary heart disease has become the leading cause of human death. How to prevent the occurrence of cardiovascular diseases and improve the quality of life of patients has become a major public health task. The main purpose of this research is to develop the TCCRP, explore its effectiveness in the

coronary heart disease population, and provide a scientific basis for proposing the "China's programme" of the cardiac rehabilitation exercise prescription system. **Methods:** A multi-center, randomized controlled experimental research program was used, and the group \times time two-way analysis of variance was used to test the difference of the research variables. A total of 56 patients with coronary heart disease were recruited and randomly divided into two groups according to a 1:1 ratio, with 28 cases in each group. The experimental group was treated with TCCRP; the control group was treated with conventional exercise rehabilitation program, and both groups were given medication. The total intervention period is 11 months, including 2 months of in-hospital rehabilitation and 9 months of home rehabilitation. The home rehabilitation adopts the form of Tencent conference remote monitoring. In this study, quality of life was used as the main outcome index, and cardiopulmonary function, echocardiography, exercise capacity, body composition, lipid metabolism, anxiety, depression, and exercise compliance were used as secondary outcome indicators. **Results:**

① After testing, there is no significant difference between the two groups of subjects in general demographic information, prevalence and basic medications, $P > 0.05$, indicating that the baseline level is balanced and comparable. ② Comparison of the main outcome indicators within the group: The total score of quality of life (ToI) increased by 88.00 after the intervention of TCCRP, $P < 0.01$, the level of physical health (PH) increased by 33.11, $P < 0.05$, and the level of mental health (MH) increased by 63.770. $P < 0.01$, among which physiological function (PF), general health (GH), social function (SF) and emotional function (RE) are significantly improved, and have long-term curative effects, $P < 0.01$. **Conclusion:** Clinical experimental studies have found that the TCCRP has achieved significant effects in improving the quality of life of patients with coronary heart disease, enhancing exercise capacity, and improving anxiety and depression, while CECRP can improve the cardiopulmonary function and body composition of patients with coronary heart disease and has a significant effect. Both exercise rehabilitation programs have high safety, but the TCCRP has relatively high exercise compliance. It is suggested that the TCCRP can be used more in clinical practice in the future to continuously improve the cardiac exercise rehabilitation system and contribute Chinese wisdom to the development of international cardiac rehabilitation.

Key Words: Tai Chi cardiac rehabilitation programme, Coronary heart disease, Cardiac rehabilitation, Quality of life, China's programme