ORIGINAL ARTICLE

Effect of Traditional and Integrative Regimens on Quality of Life and Early Renal Impairment in Elderly Patients with Isolated Systolic Hypertension

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ABSTRACT Objective: To observe the effect of Chinese medical regimen and integrative medical regimen on quality of life and early renal impairment in elderly patients with isolated systolic hypertension (EISH). Methods: A multi-center, randomized, double-blinded controlled trial was adopted. A total of 270 cases of EISH were randomly divided into 3 groups: Chinese medicine group (CM), combination group and Western medicine group (WM). The course of treatment was 4 weeks. The clinical blood pressure, integral of quality of life (SF-36 scale), immunoglobulin G (IgG), microalbumin (mALB), β2-microglobulin (β2-MG), transferrin (TRF) and N-acetyl-β-D-glucosa-minidase (NAG) in urine were determined before and after the treatment. Results: After treatment, systolic blood pressure depressed significantly in each group (P < 0.05), and the combination group was superior to CM or WM group in depressing SBP (P < 0.05); in each group, integral of quality of life improved in different degree, and combination group was superior to WM group in all 8 dimensions (P < 0.05). The level of mALB and β2-MG in urine decreased in all groups (P < 0.05), and the combination group was superior to CM group or WM group in decreasing mALB (P < 0.05). Conclusions: Chinese medical regimen has affirmative effect in treating EISH patients, and could lower the systolic blood pressure, improve quality of life and early renal impairment of the patients, and integrative medical regimen has superiority on account of cooperation, and deserves further study.

KEYWORDS hypertension, elderly, Chinese medicine, integrative medicine, quality of life, early renal impairment

As the most common type of senile hypertension, elderly isolated systolic hypertension (EISH), affects the health and the quality of life of the elderly seriously. As the transform of biology-psychology-social medical mode, assuring and improving the quality of life and prolonging life, has become one of the strategies in treating hypertension at present. The renal damage of hypertensive patients is a continuous process, and the renal dysfunction is one of three hypertensive complications. Hypertension could cause renal damage in early stage13), and the renal damage often happens insidiously and persists many years without any typical clinical manifestations. But if it can be detected and treated in time, the renal damage could be decreased. Therefore, more and more attentions are paid to the hypertension-induced target organ damage. Early detection and prevention are necessary for delaying or reducing the probability of renal disease. In this study, with multi-center, randomized, double-blind, positive controlled clinical design, we had observed the effect of Chinese medicine (CM, Jiangya Capsules, 降压胶囊) and the combination of CM and Western medicine (WM, Jiangya Capsules and Nimodipine) on the blood pressure level, the quality of life and the early renal impairment of the EISH patients, expecting to provide evidence-based proof for the two different treatment modes.

METHODS

Criteria of Diagnostics

Diagnostic criteria for hypertension was from Seventh Report of the Joint National Committee

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Criteria of Inclusion
(1) Consistent with diagnostic criteria of grade 1 or 2 isolated systolic hypertension; (2) after 1 week run-in and washout period, sitting systolic blood pressure was 140 mmHg-180 mmHg, and sitting diastolic blood pressure was below 90 mmHg, measuring blood pressure on different days; (3) the age was from 60 to 80 years old; (4) patients accepted this study voluntarily and signed informed consent form.

Criteria of Exclusion
Patients in the following conditions were excluded: (1) patients had myocardial infarction or apparent stroke in the past six months; (2) patients had severe heart disease such as cardiac function grade III, IV, or serious arrhythmia, etc; (3) patients with secondary hypertension; (4) patients complicated with serious diseases such as liver, kidney, and hematopoietic system diseases, etc; (5) patients complicated with mental illness; (6) patients who were attending other clinical trials; (7) patients that were allergic to multiple drugs.

Elimination and Drop-out Criteria
Patients including the misuse, misdiagnosis, haven't taken study drugs or without any test record should be rejected; patients that had been enrolled but did not finish normatively according to the program, such as patients quitted on their own, lost to follow-up, poor compliance, and the ones had obvious side effects quitted by doctors. The cases' removal and drop-out must be explained in detail, and record at full length for future reference.

Clinical Data
A total of 270 outpatients and inpatients according with inclusive criteria in Xiyuan Hospital of China Academy of Chinese Medical Sciences, Traditional Chinese Medicine Hospital of Yanqing County, and Community Health Service Centers of Yanqing County (including Xiangying Community Hospital, Jiuxian Community Hospital, and Dayushu Community Hospital) were collected from June 2007 to January 2008. Twenty-nine cases of patients were withdrawn and 241 patients finished the trial, including 98 male patients and 143 female patients with ranging in age from 60 to 80 years, and the average age was 66.91 ± 5.84 years.