

cerebral infarction were randomly divided into treatment group and control group. The changes of serum hs-CRP and IL-6 were measured. Results before and after treatment, the neurological deficit score of the treatment group was improved, and the score was significantly improved compared with the control group ($P < 0.05$). There was no significant difference between the two groups of patients with serum high sensitivity C reactive protein (hs-CRP) and interleukin-6 ($P > 0.05$), hs-CRP and IL-6 in treatment group were lower than those in control group ($P < 0.05$) at day 3 and day 7 after treatment. There was no significant difference between the two groups of hs-CRP and IL-6 at the end of fourteenth. The results indicated that Baihu Decoction could obviously improve the treatment of acute cerebral infarction.

4 Conclusion Study on the hypoglycemic effect of the White Tiger Decoction, mainly focus on the research of ginseng white tiger decoction. Most of the experiments were carried out to study the effects of White Tiger Decoction on Antipyretic, anti-inflammatory, hypoglycemic and immune regulation. The aim of this study was to provide the basis and reference for exploring the mechanism and clinical application of the new drug.

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SYNERGISTIC ANTIHYPERTENSIVE EFFECT OF NIFEDIPINE AND CAPTOPRIL IN L-NAME-INDUCED HYPERTENSIVE RATS

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Abstract This study examined the effect of nifedipine plus captopril treatment on blood pressure in Nw-Nitro-L-arginine methylester (L-NAME) an inhibitor of endothelial nitric oxide synthase (eNOS), L-NAME-induced high systolic blood pressure (SBP) and increased heart rate (HR). Male Sprague-Dawley rats were treated with L-NAME (40 mg/kg/day) for three weeks and given nifedipine (2.7 mg/kg/day): captopril (1.125 mg/kg/day) or nifedipine (2.7 mg/kg/day) plus captopril (1.125 mg/kg/day) for two consecutive weeks. Combination treatment of nifedipine and captopril normalized all the abnormalities found in hypertensive rats. These data indicate that there are synergistic antihypertensive effects of nifedipine and captopril.

Key words: L-NAME-induced hypertension; Nifedipine; Captopril.

1. Introduction Hypertension remains one of the leading causes of morbidity and mortality in most of the developed countries [1]. Recently combinations of drugs with complementary or synergistic effects have shown favorable effects on the hypertension, these combinations may contribute to risk reduction and improve outcomes in the future.

In the vasculature, NO is synthesized from the amino acid L-arginine using an endothelial nitric oxide synthase (eNOS). Chronic inhibition of continuous NO release by L-NAME, produces systemic vasoconstriction and high blood pressure [2].

Captopril, an angiotensin converting enzyme (ACE) inhibitor [3]. Nifedipine is a potent, representative Calcium-channel blocker (CCB) [4].

Objective To explore synergistic effect between CCBs and ACE inhibitors on L-NAME-induced hypertensive rats.

2. Materials and methods Nifedipine and captopril were purchased from DASF Chemical Industries, Ltd. (Nanjing, China), L-NAME was obtained from Sigma-Aldrich Corp. (St. Louis, MO, USA). All chemicals used in this study were obtained from standard companies and were of analytical grade quality.

The experimental groups were designed as five groups comprised of seven rats each: (Group 1) sham-operated (control), (Group 2) L-NAME group, (Group 3) L-NAME + nifedipine group, (Group 4) L-NAME + captopril group, (Group 5) L-NAME + nifedipine + captopril group. The control group received normal saline gavage for 21 days. The L-NAME group received L-NAME (40 mg/kg, gavage) for 21 day. The L-NAME + nifedipine group received both L-NAME (40 mg/kg, gavage) for 21 days and nifedipine (2.7 mg/kg, gavage) for the last 14 days. The L-NAME + captopril group received both L-NAME (40 mg/kg, gavage) for 21 days and captopril (1.125 mg/kg, gavage) for the last 14 days. The L-NAME + captopril+ nifedipine group received both L-NAME (40 mg/kg, gavage) for 21 days and captopril (1.125 mg/kg, gavage) + nifedipine (2.7 mg/kg, gavage) for the last 14 days. The L-NAME was dissolved in normal saline (0.09% NaCl w/v). Tablets were crushed then dissolved in distilled water.

3. Results and discussion Effects of nifedipine and Captopril Supplementation on Systolic Blood Pressure in Conscious Rats

At baseline, there was no significant difference in SBP among experimental groups. Daily administration of L-NAME for three weeks caused significant increase in SBP (184.6 ± 3.06 mmHg) and HR (392.7 ± 7.85 bpm), comparing to those of control group (119.7 ± 3.51 mmHg) and (357 ± 3.35 bpm) ($p < 0.01$). Treatment with captopril (1.125 mg/kg/day) for the last two weeks significantly decreased SP in hypertensive rats (149.71 ± 2.99 mmHg) and (369.6 ± 1.31 bpm) compared to the untreated rats ($p < 0.01$). Treatment with nifedipine (2.7 mg/kg/day) for the last two weeks significantly decreased SP in hypertensive rats (134.5 ± 4.56 mmHg) and (367.1 ± 1.91 mmHg) compared to the untreated rats ($p < 0.01$). L-NAME hypertensive rats treated with nifedipine (2.7 mg/kg/day) plus captopril (1.125 mg/kg/day) restored SBP back to the control level (117.4 ± 7.32 mmHg and 352.6 ± 4.00 bpm; $p < 0.01$).

Conclusions These findings demonstrated that the development of hypertension in L-NAME treated rats. Combined therapy with nifedipine and captopril were more effective than nifedipine or captopril alone in L-NAME-induced hypertension.

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THE OVERVIEW OF THE PREVENTION AND TREATMENT OF PARKINSON'S DISEASE

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Abstract:With the aging of the world's population, the incidence of Parkinson's disease (PD) is increasing year by year, which brings a overwhelming force to patients, relatives,even the whole society. However, the pathogenesis of Traditional Chinese medicine (TCM) as a effective treatment for the PD,which is not yet fully clear.This overview spread out the mechanisms of TCM in the prevention and treatment of PD.

Parkinson's disease (PD), the second most common neurodegenerative disorder of aging after Alzheimer disease, is characterized by a combination of typical motor symptoms that include akinesia, rigidity, bradykinesia, and often resting tremor. The pathological changes in several areas of the brain are mainly marked by the degeneration of dopaminergic neurons. The disease is one of the most common, difficult and complicated diseases of neurology identified by WHO. With the global trends in aging, the incidence of PD has increased year by year.

Currently, PD is regarded as a complex disease caused by interaction among environmental factors, genetic factors and various mechanisms. Considering curative effect and symptom control, in short term, western medicine is superior to TCM. However, the long-term effect of treatment is debilitated and a series of side effects are produced. In contrast, TCM has become a research hotspot in recent years due to its the advantages of multiple components and holistic regulation.

PD is the result of the interaction of many neuroendocrine factors in the aging state. The use of TCM alone can effectively control the early signs of PD, avoid toxic side effects of western medicine and enhance the compliance of patients with medication greatly. Although TCM have showed the magic effect for the disease, it is difficult to ignore the problem that the composition of the TCM is complex and the mechanism of action is not completely clear. The following suggestions should be particularly considered: more active components should be isolated and screened from TCM, as TCM compound, therapeutic material basis will continue to be searched for the fight against PD. The compound of active ingredients of TCM, whose material base is relatively clear, adheres to the concept and advantages of formula compatibility of TCM. Thus, it is one of the most important approach to modern TCM research.

Keywords:Parkinson's disease, oxidative stress, TCM

RESEARCH PROGRESS ON ANTIPYRETIC EFFECT OF BAIHU DECOCTION

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Abstract: The Baihu Decoction is a classical prescription which are applied widely in clinical. It is importance of study the effect of the Baihu Decoction and the principle preliminarily, This paper summarizes the experimental research progress of the Baihu Decoction of antipyretic. This study provides basis and reference for exploring the action of the Baihu Decoction and developing clinical application.