

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.

References:

1. Sládková M, Kojsová S, Jendeková L, et al. Chronic and acute effects of different antihypertensive drugs on femoral artery relaxation of L-NAME hypertensive rats.[J]. *Physiological Research*, 2007, 56 Suppl 2(2):S85-91.
2. Bunbupha S, Prachaney P, Kukongviriyapan U, et al. Asiatic acid alleviates cardiovascular remodelling in rats with L-NAME-induced hypertension.[J]. *Clinical & Experimental Pharmacology & Physiology*, 2015, 42(11):1189-1197.
3. Maneesai P, Prasarttong P, Bunbupha S, et al. Synergistic Antihypertensive Effect of *Carthamus tinctorius* L. Extract and Captopril in L-NAME-Induced Hypertensive Rats via Restoration of eNOS and AT1R Expression[J]. *Nutrients*, 2016, 8(3):1-14.
4. Shimamoto K, Kimoto M, Matsuda Y, et al. Long-term safety and efficacy of high-dose controlled-release nifedipine (80 mg per day) in Japanese patients with essential hypertension[J]. *Hypertension Research*, 2015, 38(10):695-700.

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.