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 markedbythedegeneration 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 amongenvironmental 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 applicated 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.

Key words: BaiHu Decoction, The experimental progress, Antipyretic

1 Antipyretic effect of Baihu Decoction Baihu Rensheng Decoction decoction combined with compound Xiebai Capsule in the treatment of exogenous high fever (severe pulmonary infection) the molecular mechanism of the curative effect and prognosis evaluation system and effect. The clinical choice of 60 patients, randomly divided into two groups, including the basis of 30 cases in the treatment group, combined treatment group (basic treatment + Baihu Rensheng decoction combined with compound Xiebai Capsule) 30 cases, control group using antibiotics and the necessary adjuvant therapy, Chinese medicine treatment group ginseng decoction combined with compound Xiebai with the white tiger with capsule on the basis of the basic treatment, the experimental results show that the combined treatment group significantly inhibited fever patients (P<0.01), decreased peripheral white blood cell and neutrophil count; significantly inhibited IL-6, TNF-α alpha, IL-1β function (P<0.01); and Staphylococcus aureus, Streptococcus pneumoniae, Haemophilus influenzae, Escherichia coli was significantly inhibited, indicating the drug has obvious antibacterial effect: miR-146a in peripheral blood before and after infection, the most significant changes in miR-125b and miR-155. That Baihu Rensheng decoction combined with compound Xiebai Capsule has Qingrejiedu, anti-inflammatory and antibacterial effects.

2 Conclusion Pharmacological study on Baihu Decoction in the antipyretic effect of the patients for clinical study, showed good curative effect of Baihu Decoction, experimental study on the object of the animal, by comparing the different compatibility and Baihu Decoction effect, proved scientific Baihu Decoction compatibility, and further reveal mechanism.The purpose of this study was to provide the basis and reference for exploring the mechanism of action and clinical application.

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STUDY ON THE ACTION TARGETS FOR ANTI-INFLAMMATORY BIOACTIVE COMPONENTS OF PHYSALIS ALKEKENGI L. VAR.FRANCHETII (MAST.) MAKINO BASED ON NETWORK PHARMACOLOGY

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Abstract: Objective:To predict the molecular mechanism of anti-inflammatory effect of active ingredients in Physalis alkekengi L. var.franchetii (Mast.) Makino(PAFM).Methods:The reverse molecular docking method was used to compare the active ingredients of the selected PAFM with the anti-inflammatory targets searched.Cytoscape3.4.0 software was used to construct the active ingredient-target-pathway-disease network and analyzed.Results:54 active components act on 12 inflammatory targets and 16 metabolic pathways related to biological processes.Conclusion:The method of network pharmacology is used to predict the active components of PAFM.The mechanism of the anti-inflammatory effect is explained from the molecular level.

Key words: PAFM; Network Pharmacology;Anti-inflammatory; Target

PAFM is commonly used heat clearing and detoxifying drugs.Modern pharmacological test results show that PAFM has anti-inflammatory effects [1].Through the network pharmacology research concept,the active ingredients in PAFM were screened with the network analysis method to construct the active ingredient - target - pathway - disease network.

1 Methods and Results

1.1 Screening of Active Ingredients of PAFM

Through TcmSP,TCM-PTD and TCM Database@Taiwan Database,the chemical composition were searched respectively,according to the Rinbinski five principles combined with oral absorption and utilization OB≥30%, similar to the drug DL≥0.18 combined with the reported ingredients in the literature,54 active ingredients were filtered out.

1.2 Potential targets reverse prediction

Log in PharmMapper server,using reverse molecular docking technology to search for its active ingredients potential (10%), and the protein names were corrected using the Uniprot database.The results were compared with the z'-score. In the database of TTD and DrugBank,the relevant targets of inflammation were screened.It is concluded that 12 potential targets that may be related to the anti-inflammatory effect of PAFM.

1.3 Analysis of target path annotation

The 12 target information for the prediction of the active ingredients of the PAFM were introduced into the MAS.3.0.KEGG analysis was used to investigate the distribution of the anti-inflammatory effect of the PAFM on the target pathway.12 targets were involved in 16 pathways,forecast for anti-inflammatory components of potential metabolic pathways.