

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 , IL-1 β 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 ALKEKENGII 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. Cytoscape 3.4.0 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 $OB \geq 30\%$, similar to the drug $DL \geq 0.18$ 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.

1.4 Construction of the active component of PAFM-target-pathway - disease network

Cytoscape 3.4.0 software was used to introduce the target of the anti-inflammatory effect of PAFM, and the active compound-target-pathway-disease (CTPD) network was established. (Fig.1) Through the construction of the network, the paper analyzes the mechanism of multi - component, multi - target and multi - channel of anti - inflammatory effect.

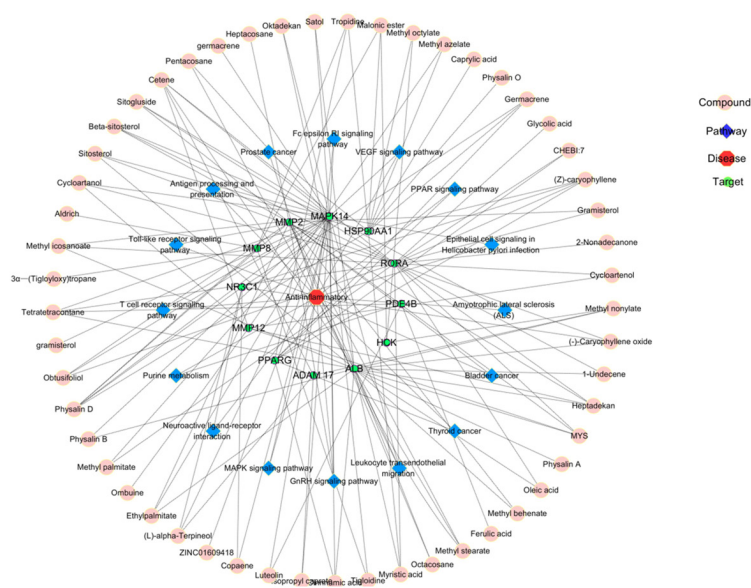


Figure 1 Compounds-Targets-Pathways-Disease network of active ingredients of PAFM

Discussion In this study, 12 inflammatory targets and 16 metabolic pathways are involved in transcription regulation, cell division, apoptosis and other biological processes. MAPK14 is an important protein that mediates signal transduction and transmission involved in the survival, apoptosis and proliferation of multiple types of cells [2]. In summary, the prediction of the anti-inflammatory effect of PAFM is consistent with the pharmacological effects reported in the literature.

References

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CLINICAL APPLICATION OF BUSHEN RECIPE

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Abstract: Bushen is one of the important rule of traditional Chinese medicine theory. It can protect the neurons by improving the microcirculation and protect neuronal disease to treat brain injury after ischemia [1]. This article summarizes its clinical application, in order to provide a useful reference for future clinical medication.

Key words: Bushen; Prescription; clinical application

1 Reproductive system Zuogui Wan treatment of semen abnormal male infertility can effectively improve the clinical efficacy and the quality of patients with semen [2]. Two pills on the treatment of gynecological diseases, can treat uterine bleeding, intermittent bleeding, menopausal syndrome, pubertal uterine blood [3].

2 Central nervous system According to improving HPAaxis function, rats' serum ACTH and blood plasma CORT concentrations were decreased and considered to be one of the mechanisms of Zuogui Wan on depression [4]. The results showed that Liuwei Dihuang Wan was able to enhance the learning ability of D-galactose-induced aging rats and reduce the brain tissue MAO and AchE to coordinate the function of central cholinergic system and adrenergic system [5] The treatment of liver and kidney yin deficiency Parkinson can Bushen Yanggan prescription as the preferred treatment program, this program can significantly reduce the amount of patients with levodopa to improve the clinical symptoms of patients with great clinical value [6].

3 Skeletal system Treatment of menopausal osteoporosis with Erzhi Wan. Chinese medicine that "kidney bone", kidney deficiency is osteoporosis (OP) an important reason for the incidence, so the treatment should pay attention to fill the essence of marrow. Jiang Tianjiao [7] the use of Zuogui Wan with D-D calcium phosphate treatment of OP patients. Li Di-jing [8] near the use of Zuogui Wan combined with lysine inositol vitamin B12 solution, the treatment of late youth short.