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.

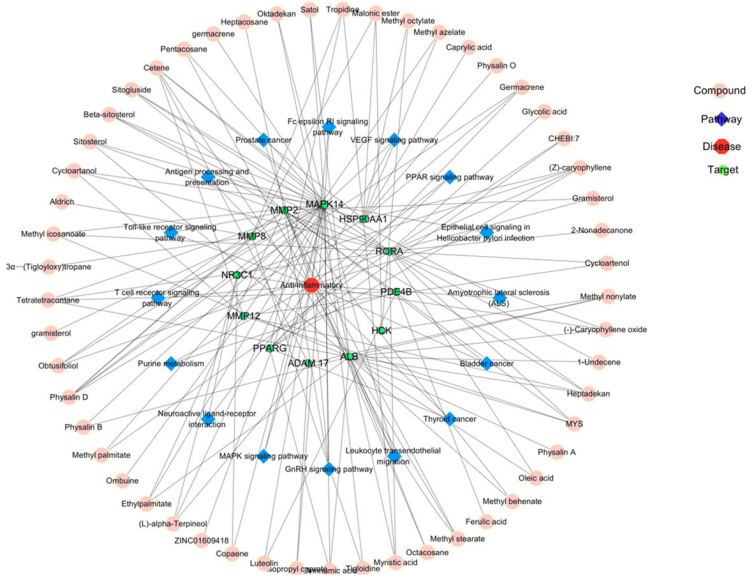

Figure 1 Compounds-Targets-Pathways-Disease network of active ingredients of PAFM

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.

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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 Dijing [8] near the use of Zuogui Wan combined with lysine inositol vitamin B12 solution, the treatment of late youth short.

4 Urinary system Sun Qingkun [9] according to the syndrome differentiation of traditional Chinese medicine to the Erzhi Wan combined with Zhibai Dihuang Wan addition and subtraction in the treatment of primary and secondary nephrotic syndrome. Zhang Kuiling [10] on the liver and kidney yin deficiency of the occult glomerulonephritis with Erzhi Wan combined with cypress soup treatment.

5 Cardiovascular system Hypertension to traditional Chinese medicine kidney manifestation is more prominent, the use of traditional Chinese medicine treatment of hypertension can effectively control blood pressure, prevention of target organ damage. Related experimental studies have also shown that Bushen Recipe can protect endothelial cells, increase vasodilator production, regulate RAAS system and water and sodium metabolism and other mechanisms of blood pressure [11].

Conclusion In summary, Bushen prescription is Ziyin Bushen, fill the essence of fine marrow prescription. Especially in the sub-health intervention and drug treatment, effective components and dosage forms of reform and other aspects of the deepening, is bound to promote the application of kidney side and research areas to further expand.

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STUDY ON COMPATIBILITY RULE OF COMPOUND PRESCRIPTION OF RHUBARB AND ACONITE DECOCTION BASED ON CYP450

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Objective: The study was based on the theory of metabolic drug interactions mediated by cytochrome P450, was to research the mechanism that monkshood toxicity reducing and then to clarify law of compatibility of medicines in Rhubarb and Aconite Decoction.

Methods: Rats were randomly divided into eight groups: Rhubarb group; Monkshood group; Asarum group; Rhubarb + Monkshood group; Rhubarb + Asarum group; Monkshood + Asarum group; Rhubarb and Aconite Decoction group and blank control group. Development and utilization the HPLC method for simultaneous determination the concentrations of caffeine (CYP1A2 enzyme substrates) and midazolam (CYP3A4 enzyme substrates) in liver microsomes. Using calcium chloride precipitation method to obtain liver microsomes. The CYP1A2 and CYP3A4 enzyme activity was quantified by Cocktail method in vitro. All samples (20μL) were separated on a Diamonsil C18 reversed−phase column (150mm×4.6mm,5 mm) by HPLC system. The mobile phase consisted of methyl alcohol and Diammonium phosphate buffer solution（51:49 V/V）at a flow rate was 0.8 mL/min. The separation was carried out at 35℃. UV detection wavelength was 254nm. Specificity, sensitivity, accuracy and stability of the method met the requirements of biological sample measurement.

Results: Rhubarb 、Rhubarb + Monkshood 、 Rhubarb + Asarum group could induce the enzyme activity of CYP1A2 significantly（$p<0.05$, $p<0.05$, $p<0.05$）. Monkshood + Asarum group could inhibit the enzyme activity significantly（$p<0.05$）. Rhubarb and Aconite Decoction group could induce enzyme activity of CYP1A2 slightly, but the effects was no statistically significant. Monkshood group and Asarum group showed no effects on enzyme activity of CYP1A2.

Asarum and Monkshood + Asarum group could inhibit the enzyme activity of CYP3A4（$p<0.05$, $p<0.05$）. Rhubarb、Rhubarb + Asarum and Rhubarb and Aconite Decoction group could induce the enzyme activity of CYP3A4