2.1.3 To strong the postgraduate examination mechanism of postgraduate students and optimizate the training conditions. Liu Zhengxin[1] puts forward to evaluate the postgraduate clinical ablity by stage assessment scheme.

2.1.4 To establish a national TCM clinical research base and optimize educational resources.

The poor clinical ability of postgraduate students is related to the limitations of the clinical practice scope and the particularity of medical education.

2.2 Enhance the capacity of postgraduate clinical practice

2.2.1 To Practice education and focus on cultivating the ability of postgraduate students in clinical practice. Improving the postgraduate students' clinical practice ability is the most direct and effective method to solve the poor clinical ability. Asking students to proficiently apply professional knowledge and clinical skills to the medical research and the disease diagnosis, treatment and prevention. Getting the ablity to differentiate and prescribe independently.

2.2.2 To imporve the medical ability by scientific research and pay more attention to the cultivation of clinical postgraduate student scientific research ability. The relationship between scientific research and clinical practice is not contradictory, but complementary. The cultivation of clinical scientific research ability is the bridge for postgraduate students to realize scientific research and clinical practice tight binding.

2.2.3 Goodness first and give priority to the good medical professionalism. Medical and health services is noble. The postgraduate students must have a good professional ethics and professional excellence. For futher training postgraduate medical professionalism, universities should organize and carry out ideological andtheoretical course.

In short, many factors may influence the research quality of TCM clinical postgraduate students. This paper just selectively talk about the experience of author and research the appropriate measures to improve the research quality of postgraduate students from different aspects.

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PRELIMINARY SCREENING AND IDENTIFICATION OF THE ABSORBED BIOACTIVE COMPONENTS AND METABOLITES IN RAT PLASMA AFTER ORAL ADMINISTRATION OF GUIZHI FULING WAN USING UPLC-ESI-Q-TOF-MS

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Abstract Objective: Traditional Chinese medicine(TCM) plays an irreplaceable role in healthcare-focused medical system[1]. The therapeutic effects of traditional Chinese medicine (TCM) are mainly due to their synergistic effects of its multiple constituents[2]. Therefore, characterization of constituents may be equally significant for understanding the pharmacological foundation. Guizhi Fuling Wan (GFW), as one of well-known classical prescription containing five herbs, namely Cassia twig, Poria cocos, Cortex moutan, Peach kernel, and Radix paeoniae rubra, is widely used to treat gynecological diseases and remove blood stasis for thousands of years [3]. On the basis of previous research, the pupose is to further study the absorbed bioactive components and metabolites from GFW.

Methods: In this study, a rapid and sensitive analysis method of UPLC-ESI-Q-TOF-MS with automated MetaboLynx analysis software were established to characterize the absorbed bioactive components and metabolites in rats after oral administration of GFW, simultaneously. The analysis process was implemented on a Waters UPLCTM HSS T3 (2.1 × 100 mm, 1.8 um) using gradient elution system. Combined MS/MS fragmentation behavior with retention time to promote the structural identification of the constituents.

Results: With optimized conditions, a total of 62 constituents were identified in vivo after oral administration of GFW (41 prototype constituents and 21 metabolites).,41 compoounds were absorbed into rat plasma in prototype identified as peaoniflorin , Oxypaeoniflorin, (+)-Catechin , gallic acid, paeonol , mudanoside B , Ellagic acid , etc. The compounds absorbed into rat plasma were further metabolized by various drug metabolizing enzymes. These metabolic reactions mainly include phase Ⅱ reactions whichoccurred by conjugation with molecule (glucuronic acid, amino acid, methyl, etc.) to form conjugated metabolites. In this study, a total of 21 conjugated metabolites were tentatively identified, including demethylated metabolites of paeonol and Oxypaeoniflorin, catechin glucoside, Cinnamic acid glucoside, etc. Related pharmacological studies have shown that peaoniflorin mainly possessed analgesic, anti-inflammatory, anticancer, immunomodulatory, and hematopoietic effects[4,5]. Furthermore, both gallic acid and catechin could inhibit the growth of cancer cell, and cancer therapy of in clinic[6-7].

Conclusions: This work demonstrated that feasible and integrative UPLC-ESI-MS approach coupled with reliable MetaboLynx analysis platform can elucidate structural features of bioactive components and metabolites from GFW rapidly. This constituents might be the potential active constituents in vivo. Based on these results, this identification and structural elucidation of the chemical constituents may provide useful information for further clinical application and mechanism studies of GFW.

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DETECTION TECHNOLOGY OF CALCIUM ION IN BAIHU DECOCTION

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Abstract:This paper summarizes the detection methods of calcium ion in Baihu Decoction in recent years. The results showed that the different detection methods were different according to the existence form of calcium and the in vitro and in vivo methods. This paper describes the in vitro assay of free calcium, which provides a choice for laboratory studies of calcium ions in Baihu Decoction.

Key words:calcium, Detection method, Baihu decoction

Baihu Decoction, from the Han Dynasty Zhang Zhongjing famous “Treatise on the”.Fromgypsum, anemarrhena, licorice, japonica rice composition. The main component of theantipyretic effect of baihu decoctionis still a controversial issue. It may be argued that Ca2 + in gypsum is the main component of heat removal or the combination of glycyrrhizin acid and trace metal in gypsum to form a complex, [1]. This paper introduces the principle of ICP-OES and the process of detection of the importance of the detection of calcium ions.

1.EDTA titration With the gauze will Baihu Tang solution concentrated to 500mL. Accurately weighed 25mL, with NaOH solution to adjust the PH value of 13, add a little calcium indicator, with EDTA standard solution titration solution from purple to pure blue [2].

2.ICP-OES 1mL from the liquid made from 500mL decoction, put Xpress microwave digestion tank (power 800W, 5min temperature rose to 180 ℃, keep 18min), add 8mL nitric acid. After cooling in the 50mL volumetric flask volume, with ICP-OES detection. The RF power is 1.150KW, the frequency is 27.12Hz, the pump speed is 50r / min, the auxiliary air flow rate is 0.5L / min, the integration time is 30s, the line selection is 315.887nm.

3.LC Chromatographic conditions for high performance liquid chromatography (HPLC): C18 column (4.6 mm x 250 mm, 5 μg); detection wavelength 256 nm; column temperature 30°C; flow rate 1 mL / min. In the literature, the mobile phase was acetonitrile-KH2PO4 (75:25), and a few literatures used mobile phase methanol-0.2% ammonium acetate solution - glacial acetic acid (61:39:1) ［3］.

It has been studied that ultra-high liquid chromatography (UPLC) can also detect calcium ions in gypsum decoction. The chromatographic conditions were as follows: C18 column (2.1mm × 100mm, 1.7μg); mobile phase was acetonitrile-0.1% phosphoric acid (15:85); detection wavelength 258nm; column temperature 35 ℃; flow rate 0.3mL / min. The resulting spectrum is compared with the standard map of calcium, with overlapping peaks (except for solvent peaks) that the presence of calcium in the Baihu Decoction.

4.FAAS Determination of Calcium in Gypsum Decoction by Detecting Calcium Ion Content in Calcium Gluconate in Oral Liquid. The detection conditions were wavelength 422.7nm, lamp current 5mA, slit width 0.5nm, acetylene flow 2.0L / min, air flow 10.0L / min. In the weighed sample gradually added nitric acid - perchloric acid (4:1) heated to brownish black, and finally was colorless transparent or slightly yellow, cooled in the volumetric flask, diluted to the mark. Weigh the solution by adding 0.1 g / mL of solution and then set the volume. Sampling into the atomic spectrophotometer for detection. The detection of the absorbance compared with the standard calcium can be detected whether the oral liquid containing calcium ions.

5.Conclusion The calcium ion in gypsum is the main component, 1:1 (Ca2 + and organic ligand) Hans liquid in vitro culture test can enhance rabbit alveolar macrophages on Staphylococcusaureus and colloidal gold phagocytosis, and promote macrophage maturation , To enhance phagocytosis of macrophage activity, to maintain its macrophage physiological function play a role in its antipyretic effect. In