P1A2 enzyme ; Radix Aconiti carmichaeli group has no effects on activity of CYP3A4 enzyme, Saposhnicovia divaricata group, Radix Aconiti carmichaeli compatibility of Saposhnicovia divaricata group and Paeoniae cinnamomi, Anemarrhenae decoction group could induce activity of CYP3A4 enzyme and the effects was statistically significant($P<0.05$).

Conclusions: It is based on the viewpoint of liver metabolic enzymes to verify Saposhnicovia divaricata cooperate with Radix Aconiti carmichaeli can induce the activity of CYP1A2 and CYP3A4, which was main reason of increase the metabolism of the toxicity ingredients of Radix Aconiti carmichaeli. Further confirmed scientific and rationality of the theory for traditional Chinese medicine compatibility, to provide direct basis in order to reveal the compatibility theory and reasonable combination of clinical drug use of traditional Chinese medicine.

Key words: Radix Aconiti carmichaeli; Saposhnicovia divaricata; attenuated mechanism

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STUDY ON THE QUANTITATIVE DETERMINATION FOR SCHISANDRIN A B IN DI SHUANG YIN ZI GRANULES

SUN Wan-Ying , LIU Lei, ZHANG Lu, ZHANG Xiao-yan*

(Research Institute of Traditional Chinese Medicine, Heilongjiang University of Chinese Medicine, Harbin 150040)

Abstract: Objective To study the quantitative determination for Schisandrin A、B. Method Schisandrin A B were determined by HPLC. Results: Schisandrin A、B could be determined by HPLC. Conclusion: This method is simple ,accurate and responsible, which is suitable for thequantitative determination of Schisandrin A、B

Key words: HPLC; Schisandrin A、B ; quantitative determination

Dihuangyinzi granule is made from Rehmanniae, Cistanche, Dendrobium, Polygala Farms by the preparation of the compound preparation, with kidney sputum, spleen and dampness and other effects, can be used for dementia and other diseases. In order to better control the quality of the preparation, so the establishment of the content of Schisandrin A、B content determination method.

1.Laboratory Materials

DiShuangYinZi Granules(20141225,20141227,20141229);perchloric acid, ether, cyclohexane, Formic acid, etc; Methanol (DikmaPure, chromatographic alcohol).

2. Method

2.1 Preparation of the reference solution

Accurately weighed Schisandra reference substance 1 g, schisandrin 3 g, with the same 5 ml bottle, added methanol dissolved and constant volume to the scale.Then précised amount of 1 ml and set 5ml volumetric flask, added methanol dissolved and shaked, as the reference solution.

2.2 Preparation of Test Solution

Taked the sample particles about 12 g and set 25 ml volumetric flask, added methanol 20 ml and ultrasound 40 min, then added methanol constant volume to the scale, as the test solution.

2.3 Standard curve preparation

Precisely absorbed the Schisandrin A、B mixed reference solution 1,2,4,6,8,10,12 ul, that were injected into the liquid chromatograph. Obtained the standard curve A is: Y = 152526x-40734, B is: Y = 319207x-81694.

2.4 Precision experiment

Precisely absorbed the reference substance solution 8ul and injected, continuous determination of 5 times. The re-

sults shown that A RSD(%) is 1.9, B RSD(%) is 1.1. Indicating that the precision is better and reliable.

2.5 Repetitive experiment

Accurately weighed the same batch of samples for the parallel sample 5, it through the microporous membrane and set the sample bottle, even into the 5-pin, according to the determination of the content under the determination. The results show that A RSD(%) is 2.6, B RSD(%) is 0.3,and the method is more reproducible.

2.6 Stability test

Taked the same test sample through the microporous membrane and set the sample bottle, Each time precision injection 20 ul, according to the set time to inject 6 times. The results shown that A RSD(%) is 2.9, B RSD(%) is 0.5, within 10 hours for the test solution when the stability.

2.7 Recovery test

According to the previous standard curve calculated 20ul of the sample of Schisandrin A amount of 0.59、 1.31 ug. According to the quality of the test sample and the reference substance is 1: 1, 1: 2, 1: 0.5 to the test sample, plused Schisandrin B mixed reference substance and preparated. The results show that A RSD(%) is 2.0, B RSD(%) is 2.1, and the recovery rate is high and the method is reliable.

3. Content determination consequence

The three samples containing Schisandrin an average of 0.0554 mg/g, Schisandra the average value of 0.1266 mg/g. According to the calculation of 6g per bag, each bag A should not be less than 0.04 mg, B should not be less than 0.1 mg. Transfer rate can reach more than 50%, It meet the requirements.

4. Discuss

Schisandrin A、B are pharmacological effects that lipid-lowering, liver protection, anti-oxidation and sedative hypnosis [1]. Wang Lijun [2] through the Schisandra alcohol A relative correction factor to calculate the content .Yin Guanxiu [3] used enzymatic hydrolysis of ultrasonic technology to extract the Schisandrin B and obtained the optimal conditions for the extraction of B.

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PHARMACOKINETICSOFCOIXSEEDINTHEINSULINRESISTANCEOF TYPE 2 DIABETES MELLITUSIN RATS

Sun Yu[1], Jiaxin Li[1], Kaixin Liu[1], Pengyang Yu[1], QijingHuang[1], Yuchi Zhang[1], Xiaoman Liu[1], PenglingGe *

1Department of Pharmacology, School of Basic Medical Sciences, Heilongjiang University of Chinese Medicine, Harbin 150040, China; *Corresponding authors: PenglingGe, Department of Pharmacology, School of Basic Medical Sciences, Heilongjiang University of Chinese Medicine, 24 Heping Road, Harbin 150040, China; E-mail: penglingge@126.com

Abstract Objectives:Through the establishment of HPLC-MS/MS analysis method, the research of compatibility of Yiyiren after Huaqizeren as its main active ingredient, 9- hydroxy - (10E, 12E) - eighteen C two acid (9-HODE) in rat plasma pharmacokinetics comparison.

Materials and methods:Male SD rats were randomly divided into Huaqizerengroup and Yiyiren group, intragastric administration, respectively.The plasma samples were collected at different time points, and the plasma concentration of 9-HODE was determined by HPLC-MS/MS.

Results:The method of HPLC-MS/MS analysis established in this study has good precision,the method has strong specificity, and the recovery, reproducibility and stability of each component meet the requirements of biological sample testing. It is suitable for the detection of plasma content of 9-HODE.The pharmacokinetic parameters of peak concentration of Cmax was 802.9 ±88.64 g/L main drug 9-HODE; the peak time of Tmax was 0.5 h; the half-life t1/2 was 7.737± 3.309 h; the area under the concentration time curve of AUC0-t was 1820 ± 154.2 g/L*h; the average dwell time of MRT0-t was 5.862 ± 1.304 h; plasma clearance rate of CL was 0.1905±0.01322 L/h/kg.After compatibility with Yiyiren group, Huaqizerengroup Zeren (CL) plasma elimination rate was significantly lower (P<0.05), the main pharmacokinetic parameters such as area under the concentration time curve (AUC), mean residence time (MRT), half life (t1/2) did not show significant differences.

Conclusion: 9-HODE, a major active component of Yiyiren, was rapidly absorbed in rats. Yiyiren compatibility showed Huaqizeren, plasma elimination rate (CL) decreased, the 9-HODE prolonged in vivo time.

Key words: Huaqizeren;Yiyiren; 9-HODE;Comparative pharmacokinetics;HPLC-MS/MS

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