

object, the control group using routine treatment, treatment group with oral Zhibaidihuang pill on the control group, two groups were treated with FOLFIRI/FOLFOX/XELOX chemotherapy, observed the influence of lumbar L2-4 and bilateral femoral neck BMD and bone metabolism before and after treatment of chemotherapy. The changes of statistical data analysis results show that Zhibaidihuang pill can improve the bone metabolism of colorectal cancer after chemotherapy, increase the bone mass within a certain range, and it can improve the syndromes of kidney Yin Deficiency Hyperactivity of fire in patients with colorectal cancer symptoms, improve the patient's quality of life.

1.2 hypoglycemic Xu Eyre compared the maintain amount, blood glucose recovery time and fasting C-peptide of Novolin 30R group and treatment group of patients. The conclusion shows Zhibaidihuang pill combined with Novolin 30R have the good clinical curative effect of diabetes due to yin deficiency, blood glucose significantly, shorten recovery time, improve the C-peptide level, reduce the amount of insulin. Liu Zhengjun research effect and safety of Zhibaidihuang Decoction Treatment of yin deficiency and heat type. He analysed data of 56 diabetes patients with yin deficiency and heat, which was divided conventional insulin therapy as group A, on the basis of A group and Zhibaidihuang decoction treatment group B. The data analysed shows the difference was statistically significant ($P < 0.05$), B group total efficiency is higher than 92.8% in group A, and less adverse reaction. The results showed that Zhibaidihuang Decoction Treatment of yin deficiency and heat diabetes not only high efficiency, safe and reliable, and less adverse reactions. Chen Chunyuan was divided yinxu huowang type 2 diabetes patients into control group and treatment group, and observed two groups' s the following index, blood glucose, TCM symptoms. Insulin resistance index (HOMA-IR), security and other changes. The treatment group improved insulin resistance and TCM symptoms in the treatment group than in control group. Especially dry mouth and throat, Yaoxisuanruan symptoms. Treatment group can effectively reduce the level of the FBG, 2hPBG and HbA1C than the control group ($P < 0.05$), the treatment group decreased HOMA-IR level higher than the control group, the treatment group in improving is good. Experiments show that Zhibai Dihuang Decoction Combined with metformin tablets in the treatment of yinxu huowang type 2 diabetic patients with glucose metabolism, insulin resistance, TCM symptoms than metformin.

DISCUSS THE ANTIPYRETIC MECHANISM OF BAIHU DECOCTION BASED ON THE THEORY OF FLAVOR AND MERIDIAN TROPISM

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Abstract: Flavor and Meridian tropism is the core component of traditional Chinese medicine theory system, which has important guiding significance for drug use. Rational use of Flavor and Meridian tropism, compatibility and drug release theory to explore the antipyretic mechanism of Baihu decoction single herb and compound.

Key words: Flavor and Meridian tropism; compatibility; drug release;

Baihu decoction; antipyretic mechanism Chinese medicine is a treasure of our country. Flavor and Meridian tropism is the core component of the theoretical system of Chinese medicine, to indicate the drug drug and the role of the positioning of the drug theory. It mainly including four properties and five tastes and channel tropism. Channel tropism indicate the location and scope of the drug action, and enhance the positioning and targeted Chinese medicine treatment. Four properties include cold, hot, warm, cool. Five flavors include sour, bitter, sweet, pungent and salty tastes. They respond to drug cold and heat properties and therapeutic effects, revealing the role of drug positioning. [1] The author will explore the mechanism of single taste and the antipyretic effect of compound medicine in Baihu decoction based on the theory of Flavor and Meridian tropism.

Baihu decoction from the Eastern Han Dynasty Zhang Zhongjing «Treatise on Febrile Diseases». It consists gypsum, rhizoma anemarrhenae, glycyrrhiza, rice. Modern clinical, mainly used in high fever, pneumonia, epidemic hemorrhagic fever and other acute infectious diseases. Chinese medicine compound to syndrome differentiation, for the use of a variety of compatibility to achieve the purpose of treatment. Baihu decoction in the decoction of the dosage form of the role of a single drug in the soup of the single control / coordination, multi-component role in the transmission of medicinal properties play a significant antipyretic effect.

Objective Discussion on the Antipyretic Mechanism of Baihu Decoction and Compound Prescription of Rational Use of Traditional Chinese Medicine with Flavor and Meridian tropism and compatibility and drug release.

Methods The active ingredient of gypsum is calcium sulfate. Gypsum of the cold, into the lungs, stomach, to remove heat diarrhea stomach fire, revealing the real heat of the Yangming meridians. Gypsum flavors is sweet and pungent, it can drive the operation of gas and blood, play antipyretic fire and body fluid does not wastage. Pharmacology, the antipyretic effect of gypsum also shows that the literature: Oral gypsum decoction after gastric acid effect, part of the soluble calcium, intestinal absorption into the blood, increase blood calcium concentration. Calcium ion as the main ion component of gypsum can act on the preoptic area-hypothalamus (PO/AH) system of the body temperature regulation center, which has obvious inhibitory effect on the heat generation center, thirsty center and sweating center, and regulate the body temperature central and antipyretic [2]. Rhizoma anemarrhenae of the cold, it can inhibit the excitability of the central nervous system, weaken the breathing, circulation, metabolism, thereby reducing the body's ability to respond to pathogenic stimuli, which affect the body temperature adjustment center and play an antipyretic effect [4]. The reason may be: inhibition of cell membrane $Na^+ - K^+ - ATPase$ activity, inhibition of monoamine oxidase activity, reduce 5-HT metabolism, thereby affecting the body temperature adjustment center. Licorice can regulate immunity, anti-inflammatory and anti-bacterial, antitussive expectorant, detoxification, etc [2]. Rice can improve the body's immune function.

Results and discussion Chinese medicine compound is a multi-component, the composition of complex and diverse nature, and has a multi-component synergies, multi-link, multi-target function. Baihu decoction through a reasonable concept of compatibility to decoction as an auxiliary dosage form, making multi-component synergies

between the role of antipyretic. Baihu decoction, the gastrointestinal tract by the absorption of the efficacy of components released to the target site, so that the release unit in the target site play an antipyretic effect.

References

[1] Yang Ming, Feng Yi, Xu Desheng, Zhu Weifeng, Tang Bin, Liao Zhenggen, Xie Xingliang, Fu Chaomei. Modern Chinese medicine compound release system construction [J]. World Science and Technology, 2006, (05): 10-15.

[2] PENG Cheng. Pharmacology of traditional Chinese medicine [M] .3 version. Beijing: China Traditional Chinese Medicine Publishing House, 2012: 335-336.

[4]Ma Zehong. Chinese medicine cold and heat cool cool four gas. Pharmacy Bulletin .1984, (10): 59.

RESEARCH PROGRESS ON PHARMACOLOGICAL EFFECTS OF TOTAL FLAVONOIDS IN GALIUM VRRUM L.

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Abstract: The main chemical ingredients of Galium vrrum L. are flavonoids. It includes diosmin, DXG, luteoloside, etc. Flavonoids are highly effective, natural, less toxic side effects of anti-cancer drugs. It has many biological functions, such as anti-inflammatory, bacteriostasis, reducing blood lipid and anti aging. In recent years, the pharmacological effects of these flavonoids are constantly being discovered. In this paper, the pharmacological effects of flavonoids in Galium vrrum L. were reviewed.

Key words: Total flavonoids in Galium vrrum L.(FGVL);pharmacological

1. Anticancer effect Zhao Rui[1] equals the mouse model of aged cervical cancer in the left forelegs under the armpit subcutaneous injection of 0.2mL U1 tumor cells after intraperitoneal injections of D-galactose 60d. After FGVL treatment of 13d, the symptom of weight loss in tumor-bearing mice improved markedly, the serum level of T-AOC and sod activity in the mice with elevated tumor can decrease the serum MDA and LDH level, so that FGVL can inhibit the growth of tumor cells in aged-bearing mice by lowering lipid peroxide level, decreasing LDH content and improving serum antioxidant enzyme activity. Zhao Rui[2] found that FGVL significantly inhibited the proliferation of NB4 cells in acute promyelocytic leukemia cell lines, and its mechanism was related to the expression of Bcl-2/Bax.

2. Antioxidant effect Shi Lingen[4] found that FGVL could enhance the activity of the popular vein endothelial cells (HUVECs), promote the growth of cells, protect and repair the oxidative damage induced by H₂O₂, and reduce the apoptosis of cells. Its function mechanism is related to the secretion of antioxidant and regulating ET-1/ CGRP. Zhang Ziyang[5] and other studies also found that FGVL on the damage of hydrogen peroxide HUVECs has a protective effect, antioxidant damage, its mechanism can be through the NF- κ B/ I κ B signal channel adjustment.

3. Anti-inflammatory effect LPs (Lipopolysaccharide, also known as endotoxin) is the cell wall component of Gram negative bacteria and is one of the important factors inducing the inflammatory reaction and dysfunction of endothelial cells. Studies such as Ningxin[6] found that the low middle and high doses of FGVL and luteolin could make HUVECs proliferate, effective inhibition of LPS on the proliferation of HUVECs cells, can significantly reduce the intracellular inflammatory factor IL-6, IL-8, TNF- α , VCAM-1 and other content, reduce the expression of the pathway proteins, LPS-induced inflammatory response has a good protective effect.

4. Anticoagulant, antithrombotic effect Kou Hanxu[7] The rat model of acute blood stasis was prepared by subcutaneous injection of adrenaline and ice water bath stimulation, the blood samples of inferior vena cava were measured, blood rheology indexes, four indices of coagulation, oxidative damage Index, vascular regulation substances and inflammatory factors were used. The results showed that FGVL could significantly improve the blood rheology indexes, significantly lower plasma FIB, MDA, CRP, TNF- α , IL-1 β , sICAM-1 content, and significantly prolong PT, APTT, TT, obviously increase serum no and plasma sod content, so found FGVL anticoagulant blood, antioxidant injury, anti-inflammatory, regulating vascular function of the role of the obvious, blood stasis caused by oxidative damage and inflammation, there is good protection and treatment.

Reference literature:

[1] Zhao Rui, Chen Zhibao, Jia Guiyan, etc. Effect of flavonoids on antioxidant defense system in aged mice with tumors [J]. Chinese Journal of Gerontology, 2011, 31 (14): 2684-2686.

[2] Zhao Rui, Chen Zhibao, Cai Yaping, etc. Study on the effect of flavonoids in vitro and in vivo against cervical cancer [J]. Heilongjiang Livestock Veterinarian, 2013, (03): 132-134+167.

[3] Dong Jing, Ma Yingli, Li Haixia, etc. Effect of total flavonoids in the canopy on apoptosis of NB4 cell lines [J]. China Public Health, 2014, 30 (07): 906-909.

[4] Shi Lingen, Ling Qiu, Yang Xiaolei, etc. The protective effect of total flavonoids on human umbilical vein endothelial cells injured by hydrogen peroxide [J]. Chinese New Drug magazine, 2012, 21 (13): 1523-1527.

[5] Zhang Ziyang, Ma Yingli, Dong Jing, etc. Effects of total flavonoids on oxidative damage of human umbilical vein endothelial cells NF- κ B/ I κ B signaling pathway [J]. Chinese Journal of experimental Prescription Science, 2015, 21 (01): 107-111.

[6] Ningxin, Dong Kun, Sun Chao, etc. The protective effect of the effective constituents of Galium vrrum L. on the inflammatory injury induced by lipopolysaccharide in human umbilical vein endothelial cells [J]. TCM information, 2017, 34 (01): 17-21.

[7] Kou Hanxu, Dong Kun, ningxin, etc. Study on the effect and mechanism of total flavonoids of Galium vrrum L. on hemorheology in rats with acute blood stasis [J]. Journal of TCM, 2015, 43 (01): 11-15.