

the distribution of the orbicularis oculi muscle, on the upper lip muscle, infraorbital nerve, facial nerve zygomatic branch, stagnation needle here can enhance yang, improve nerve excitability, recovery of orbicularis oculi muscle Upper lip muscle function, is conducive to the recovery of eyelid closure function, reduce the chance of corneal infection, ease the wind and tears to improve the side of the patient side of the phenomenon of drooping.

The results of this observation show that the treatment of strenuous needle pulling method is beneficial to the recovery of all aspects of patients with refractory facial paralysis.

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FACTORS EFFECT IN ADRIAMYCIN INDUCED NEPHROPATHY

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Abstract Adriamycin induced nephropathy (AN), an experimental animal model, which is used to investigate mechanisms of chronic kidney disease, especially focal stage glomerulonephritis (FSGS) and nephrotic syndrome (NS). As far as it is concerned, damage of glomerulus podocytes is fatal. It implies that podocytes, slit diaphragm (SD) and endothelial may be injured in AN. We summarize factors of this review in the following and look forward to provide new ideas for clinical treatment.

Based on the structure of the glomerulus, it occurs to renal lesion if the apoptosis of podocytes and endothelial cells appears or proteins of SD that includes nephrin, podocin, podocalyxin, CD-2AP and WT-1 express fewer. And there are various hypotheses about the pathways of podocytes apoptosis and the relationships among them. And the proteins of SD are regulated by the corresponding genes.

Inflammatory factors, which cause injury and aggregate lesion of kidney, have been reported that act in AN with different effects. So far, it is reported that factor- β 1 (TGF- β 1), tumor necrosis factor- α (TNF α), nuclear factor kappa B (NF- κ B), and interleukin (IL) in different stage of AN. Not only that, cytokines such as vascular endothelial growth factor (VEGF), ICAM and monocyte chemoattractant protein 1 (MCP) also participate in AN.

Extracellular matrix (ECM), which has adhesion, communication and differentiation, affects in AN. Naturally, the components of ECM have been noticed and get a lot of results. The most important thing is that the synthesis and degradation of balance in ECM in renal tissues in AN.

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RESEARCH PROGRESS ON PHARMACOLOGICAL ACTIVITIES OF REHMANNIA GLUTINOSA

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Abstract: *Rehmannia glutinosa* is the tuberous root of Scrophulariaceae plant dried and steamed. The first time referred is in the "Bei Ji Qian Jin Yao Fang", formerly known as the "cooked *Rehmannia*". It tastes sweet, and has a tepid spirit. It has an effect on the liver and kidney, with nourishing Yin as well as filling effect of lean pulp as blood goes. *Rehmannia glutinosa* is commonly used in the clinical blood deficiency and liver and kidney yin deficiency syndromes. In recent years, many medical workers carried out extensive and in-depth study of *Radix rehmanniae*. In this paper, we will take a review on the pharmacological of *Radix Rehmanniae*.

Key words: *Rehmannia glutinosa*, pharmacological, progress

1. Enhancement of immunity function *Radix Rehmanniae Preparata* has the ability to enhance immune system in spleen prescriptions of traditional Chinese medicine by filling in the kidney essence, promoting blood circulation to remove blood stasis, and replenishing spirits. The result shows that *Rehmannia* yellow water extract (0.049, 0.49, 4.9 mg·M L⁻¹) and crude polysaccharide (0.032, 0.32, 3.2 mg·M L⁻¹) could significantly promote the proliferation of concanavalin A stimulation before and after murine thymocytes and spleen lymphocytes to improve the supernatants of interleukin (IL-2, IFN gamma, interleukin 2). It may be gross polysaccharide of *Radix Rehmanniae Preparata*, and mechanism of action and enhancement of the expression of T lymphocyte Th1 and Th2 cytokines.

2. Memory enhancement Cui Ying et al [4]. used glutamic acid monosodium(MSG) damage model in the arcuate nucleus of the hypothalamus as kidney yin deficiency of learning and memory impairment model. Through the step-down test and Mirrio water maze method and free method to observe. The mechanism was related to the inhibition of plasma CORT content and the expression of GRmRNA in hippocampus. We believe that the *Rehmannia glutinosa*'s improvement in learning memory mechanism may be related to the increase of c-fos and NGF gene expression in the hippocampus of the relevant [6].

3. Promotion of hematopoiesis *Rehmannia polysaccharide* has a strong effect on protecting blood deficiency model mice white blood cell count (WBC), red blood cell count(RBC), hemoglobin(HB), platelet(PLT), which is better than that of non-*Rehmannia polysaccharide* part and *Rehmannia decoction*. In different blood deficiency model mice peripheral blood, bone marrow nucleated cells were decreased antagonism and of murine hematopoietic stem cells can promote the effect of value-added and differentiation, which shows that the effect of enriching blood.

In summary, *Radix rehmanniae* can enhance immunity, improve memory, promote hematopoiesis, antioxidation, and improve anti mutation inhibition of tumor suppressor and central. With the further study of the scholars of pharmacology, the further development of pharmaceuticals and drug metabolism and pharmacokinetics, *Radix Rehmanniae Preparata* in clinic will get more extensive application, and it will play a more important significance to human health.

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EFFECT OF LATERALIS RADIX PRAEPARATA COADMINISTRATION WITH LATERALIS RADIX PRAEPARATA ON CYP1A2 AND CYP3A4 IN RAT

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OBJECTIVE: To determine the attenuated mechanism of the combination of *Aconiti Lateralis Radix Praeparata* (ALRP) and *DRR* *Rehmannia* (DRR). We examined potential mechanisms, specifically alterations in enzyme activity of CYP450 in rats.

METHOD: Rats were randomly divided into four groups with six animals in each group and treated as follows: control group, ALRP group, DRR group and DRR combined with ALRP group. All groups were administered via gavage once a day for seven days, the control group received saline water. Rats were administered continuously for seven days, fasting for 12h, on the eighth day were killed by cervical dislocation, then flush the liver with cold 0.9% NaCl solution until the color turn to yellow. Add 0.25mol·L⁻¹ sucrose solution in liver tissue at the ratio of tissue: solution= 1: 4 to make homogenate. Calcium precipitation method was used to make liver microsomal under the condition of low temperature, high-speed centrifuge for 15 min with 20000 r·min⁻¹. Then the liver microsomal was incubated with two probe drugs (caffeine and midazolam) in vitro. The RT- HPLC method was established to determine the two probe drugs in liver microsomes, to evaluate the effect of the different group on the activity of CYP1A2 and CYP3A4. The analytes were determined at room temperature on analytical column and the mobile phase was composed of 0.05mol·L⁻¹ ammonium dihydrogen phosphate, adjusted to pH 3.4 with phosphoric acid (A) and methanol (B) at the ratio of A:B of 49:51(v/v) and a flow rate of 0.8 mL·min⁻¹. The detector was operated at 254 nm and the column temperature was maintained at 35°C.

RESULT: The activity of CYP1A2 in ALRP group was higher than the control group's, but the statistical analysis of the data was P>0.05. It means just a slight induction effect on CYP1A2 activity, no significant difference. The activity of CYP1A2 in DRR combined with ALRP group was higher (P<0.05), and there was significant difference.

ALRP group had no effect on the activity of CYP3A4 (P>0.05), while DRR group and DRR combined with ALRP group increased the activity of CYP3A4 compared with the control group (P<0.05), and there was significant difference.

CONCLUSION: The enzyme activity showed significant induction effect on CYP3A4 enzyme in containing DRR groups, indicating DRR induced CYP3A4 activity, and accelerated the metabolism of the toxic component of ALRP, reduced the accumulation of toxic components in vivo. DRR itself had no effect on CYP1A2 activity, but can obviously induce the activity of CYP1A2 when it combined with ALRP. Maybe there were some changes in chemical composition which can induce the activity of CYP1A2 generation in the boiling process or in vivo. ALRP combined with DRR induced CYP450 activity expression may be one of the mechanisms of toxicity of ALRP. It verified the scientific nature of traditional Chinese medicine compatibility theory.