similar to the low price, in recent years increasingly by the Chinese Medicine community attention.

Key words: Fermented Cordyceps; Clinical application; Summary of research

Cordyceps preparations mainly contain Cordyceps polysaccharide, a variety of amino acids, cordyceps, ergosterol and other chemical composition. The clinical application of fermented Cordyceps preparations can be used in the treatment of cardiovascular, liver, kidney and other diseases and adjuvant therapy, has a high application prospects, the recent fermentation Cordyceps mycelium pharmacological effects and clinical efficacy of induction and summary.

- 1.The study of immune function Tao Genjin[1] research shows that: Fermentation Cordyceps polysaccharide extract grass within a certain range (40-160 mu g/mL) can significantly improve the immunosuppressive mice ratio of CD4 + / CD8 + T lymphocytes (P < 0.01), increased spleen lymphocytes in the supernatant IL 4, TNF alpha and beta IL 1 content, by regulating spleen lymphocyte differentiation may be one of the ways to give play to the role of immune regulation.
- 2.The study of arrhythmia Zhong Weizhi[2] in 112 cases of patients with chronic arrhythmia diagnosis, were randomly divided into research group (56 cases) and control group (56 cases), the team to give fermented Cordyceps and trimetazidine treatment, the control group only give trimetazidine treatment, clinical observation for 30 days, to chronic arrhythmia statistical research of TCM syndrome integral, according to the results of treatment group total effectiveness 96.43%, control group total effective rate 80.35%, the difference was statistically significant (P < 0.05).
- 3. The study of liver disease Wang Xianbo[3] et al were randomly divided into observation group (40 cases) and control group (20 cases) in 60 patients with chronic hepatitis B diagnostic criteria, the observation group taken fermented Cordyceps preparations, Control group taken Heshuluogan tablets, observed treatment for 6 months. Detection of liver function, HBV-DNA load, serum fibrosis and other items. The results showed that after treatment, the observation group was better than the control group. The results show that fermented Cordyceps preparations can improve liver function, with antiviral effect, liver fibrosis also has a good antagonistic effect.
- 4.The study of kidney disease Gu Liubao[4] in research such as Chinese caterpillar fungus fermentation extract cordycepin effect on the left side of the ureteral ligation of renal fibrosis in mice showed that compared with the control group mice Masson staining renal tissue fibrosis, taking small tube cavity of mice cordycepin although kidney also has expanded, but it is much better than the control group, renal interstitial collagen deposition that extracts from cordyceps cordycepin can alleviate the renal interstitial fibrosis.
- 5. Summary and Prospect In summary, the artificial cultivation of fermented Cordyceps and its chemical monomer composition has a significant effect on mediating immune function, anti-fibrosis, mediating blood glucose, etc. in the treatment of immune diseases, liver diseases, kidney diseases and other diseases of the advantages, and in the course of the use of no significant side effects, the use of relatively safe, the effect is relatively stable. For the further development of the cultivation and utilization of Cordyceps species, different strains of the treatment of diseases have different effects, especially in the immune system, liver, kidney disease research should be more in-depth study, for the compound medicine, new drug research and development with far reaching significance, artificial cultivation of fermented Cordyceps development and utilization has a good prospect. References
- [1] Tao Genjin. Study on immunoregulation of fermenting cordyceps and polysaccharides [D]. Nanchang: nanchang university, 2016:25.
- [2] Zhong Weizhi. The clinical effect analysis of combined trimetazidine in the treatment of slow arrhythmias in elderly patients [J]. Chinese medicine guide, 2014, 14 (4): 182.
- [3] Wang Xianbo, Jiang Yuyong, Zhao Caiyan, Wang Xiaojing, Liu Fang, Wang Yadong, Cheng Jun. Clinical Study on Treatment of Hepatic Fibrosis of Chronic Hepatitis B with Xinganbao Capsule [J]. Chinese Journal of Integrated Traditional and Western Medicine, 2012,32 (3): 325-328.
- [4] Gu Liubao. Bian Rongwen, Tu Ming, Hu Hao, Wan Yigang, Sun Weigang. The mechanism of regulating eIF2 alpha/TGF beta/Smad signaling pathway to improve renal interstitial fibrosis [J]. Chinese traditional Chinese medicine journal, 2014, 39 (21): 4096-4101.

RESEARCH PROGRESS OF TREATMENT OF ALZHEIMER 'S DISEASE WITH DIHUANGYINZI

Shuai Shao, Bo Zhang, Wei Li, Yang Xu, Shuming Huang*

(Heilongjiang University of Chinese medicine, China, Harbin 150040)

Abstract: Dihuangyinzi is a classical prescription. In recent years, clinical and experimental studies have shown that Dihuangyinzi has a certain effect in the prevention and treatment of Alzheimer's disease, vascular dementia and stroke, and it has a good protective effect on the nervous system This artiche discusses the experimental research in recent years.

Key words:Dihuang yinzi; senile disease; experiment study; summary

1 The effect of the cholinergic system

The activity of the cholinergic system is closely related to human learning and memory and cognitive function. In the event of Alzheimer's disease (AD), Ach synthesis and release are reduced, which can lead to

the loss of memory. Dihuangyinzican improve the memory impairment of dementia rats and reduce the contents of MAO and AchE in the brain, thus proving that the decoction has the effect of delaying AD.

- 2 Antioxidant and reduce free radicals In the normal physiological conditions, the body's oxidation and antioxidant levels to maintain a dynamic balance, the body does not constitute harm, when the balance was broken by certain incentives, the emergence of balance disorders, free radicals were not cleared in time in the normal condition that causing the damage of body, The activity of antioxidant enzymes such as SOD, CAT and CSH-Px can be used as an indirect antioxidant to alleviate the toxicity of H_2O_2 and maintain the function of the cells,While reducing lipid peroxidation, improve the reduced antioxidant enzyme activity.
- 3 The effect of the neuronal apoptosis The studies have shown that a pathogenesis of neurological diseases, Dihuangyinzi cal apoptosis is decoction can apoptosis, It play a role in brain protection through the improvement of HPA axis disorders.
- 4 The effect on neurons Shi Rui suggested that Dihuang Yinzi may inhibit the expression of NOS through the experiment, reducing the formation of NO in the cerebral cortex and its toxic effects on nerve cells ,which may be one of the mechanisms of protection of Dihuangyinzi on vascular dementia.
- 5 Conclusion The studies have shown that Dihuang Yinzi has a significant role in prevention and treatment in the treatment of geriatric disease, The studies also showed that Dihuang Yinzi can reduce the activity of acetylcholinesterase in brain tissue, improve the ability of learning and memory, repair the cerebral ischemia-reperfusion injury, antioxidant and free radicals, reduce cell apoptosis, protect neurons. It could provides preparation on preventing the treatment of geriatric disease through the modern advanced scientific means and technology .

References

- [1] Song baohua, Peng xuejie, The effects of Dihuangyinzion Cognitive Ability and MAO and AchE Activity in Alzheimer 's Disease Rats [J] The Traditional Chinese Medicine of Liaoning magazine, , 2005,32 (2):616-617
- [2] Zhou yanyan,Xie ning,Yao yinmin. The experimental study on the neuroprotective effect of Rehmannia glutinosa on senile dementia, [J] Journal of Traditional Chinese Medicine and Pharmacology,2011,39 (2): 58-61
- [3] Ma tao, Yan yan. The effects of Bushen Filling on P13K / AKt Pathway Activation and Oxidative Stress in Alzheimer's Disease Mice [J] Beijing Traditional Chinese Medicine, 2014, 33 (7): 492-495
- [4] Xie ning,Yu miao. The effects of Rhizoma Rheumatoid Recipe on Oxidative Stress in PC-12 Cells [J] SHIZHEN Chinese medicine medicine, 2012,23 (8): 1885-1886
- [5] Zhang geng, Wu jinjuan, Zhang miao, Research on Treating Alzheimer 's Disease with Chinese Medcine exhibition [J], Chinese Journal of Experimental Traditional Medical Formulas, 2014, 20 (6): 217-222.
- [6] LI zijun, Liu chunna, Protective Mechanism of Rehmanniae Decoction on Hypoxia Injury in Hippocampal Neurons, [J] , Chinese medicine, 2012, 34 (8):1421-1424

Author: Shuai Shao, E-mail: 309863766@qq.com Shuming Huang, E-mail: huangshuminghljzyy@126.com

Address: Heilongjiang University of Traditional Chinese Medicine, Harbin, Heilongjiang, Heping Road, No.24, 150040

METABOLOMICS FOR LIVER DISEASES IN CLINIC

Song Qi, Hui Sun, Heng Fang, Guangli Yan, Xijun Wang*

Sino-America Chinmedomics Technology Collaboration Center, National TCM Key Laboratory of Serum Pharmaco-chemistry, Chinmedomics Research Center of State Administration of TCM, Laboratory of Metabolomics, Department of Pharmaceutical Analysis, Heilongjiang University of Chinese Medicine, Heping Road 24, Harbin, China. E-mail: xijunwangls@126.com

Abstract Metabolomics has been instrumental for the identification of new biomarkers of liver disease which can be measured in plasma, serum and urine samples. New biomarkers are needed to help guide therapy by identifying patients with liver disease progression who might need aggressive treatment. It certificates that metabolomics had great potential on both discovering clinical biomarkers and elucidating previously unknown mechanisms of liver disease pathogenesis.

Key words: metabolomics, clinical use, liver diseases, biomarkers

Metabolomics is an emerging discipline that assesses the concentration of different metabolites in complex biological samples to understand the ongoing metabolism. Recently, metabolic-based liver disease studies have been used to screen plasma, and urine from control populations and patients[1, 2]. There are many reasons that can induce liver disease. Liver diseases are worldwide public health problems. Liver disease in accordance with the pathogenesis can be divided into viral liver disease and non-viral liver disease. Underlying pathophysiological mechanisms in progression of liver disease to cirrhosis are not yet understood.

Clinical Metabolomics A new opportunity to discover biomarkers in complex diseases has been provided by metabolomics, which may improve the clinical course and provide pathological understanding of the disease, beyond the traditional technology[3]. The potential of this approach for clinical diagnostics is enormous, since only minimal biological preparation is required. Recently altered metabolism has been identified as a key marker of liver disease and metabolism focused research has received renewed attention. Diagnostic liver desease biomarkers detected