

Research Progress of Traditional Chinese Medicine in Prevention and Treatment of AIDS

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Abstract: Objective: To review the research progress of using Chinese medicine ginseng to prevent and treat AIDS in China. **Methods:** Based on the method of TCM syndrome differentiation, Chinese medical researchers divided AIDS into four types: heat toxin stagnation type, Qi and blood deficiency type, stasis and internal resistance type, and Qi and Yin injury type. **Results:** The therapeutic effects of the compound preparation of traditional Chinese medicine were significant, such as Aikang capsule, Tangcao tablet, Wuweilingqi capsule, Aining granule, compound Sanhuang powder, etc. Astragalus, licorice, honeysuckle, Scutellaria, bupleurum, Salvia miltiorrhiza, Viola, Hedyotis diffusa and other 8 kinds of traditional Chinese medicine have been proved to have anti HIV effect. **Conclusion:** Among the 27 kinds of Chinese medicine ginseng, *Andrographis paniculata*, Viola, *Arnebia*, *Arctium lappa*, *Sophora flavescens*, honeysuckle, Guanzhong, Prunella, Coptis, Wolfberry, *Wedelia* and *epimedium* have been proved to have the effect of preventing HIV replication.

Keywords: Chinese medicine ginseng; Prevention and treatment of AIDS; Research progress

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AIDS is a disease in which human immune cells are attacked by human immunodeficiency virus and the

normal immune function of human body is impaired. It will cause great damage to human health and quality of life. From the point of view of the way of infection and the time of discovery, AIDS can be classified as a major infectious disease, and in terms of its harm, AIDS has already become one of the top three diseases threatening human health. At present, there are about 25 kinds of licensed drugs that can effectively treat AIDS in the world, which fully shows that the research on AIDS has made great progress. Western medicine treatment of AIDS can help patients to fully reduce the number of virus, but once the drug is stopped, it will easily lead to the rebound of the number of virus, and the difficulty of the second treatment will be significantly increased. The traditional Chinese medicine ginseng therapy has obvious advantages in the prevention and treatment of AIDS. Now there are a number of authoritative data that shows that Chinese medicine ginseng has significant effect on the reduction of HIV load. In recent years, traditional Chinese medicine ginseng has made a breakthrough in the prevention and treatment of AIDS. Many compound preparations of traditional Chinese medicine ginseng can obviously produce great resistance to HIV. Based on this, this paper will report the current research progress of Chinese medicine in the prevention and treatment of AIDS as follows.

1 Material and methods

Aids can be classified into the categories of "Fu Qi Wen disease", "epidemic disease" and "virtual

labor" in traditional Chinese medicine. Its pathogenic factors include internal causes and external causes. The internal causes are mostly internal losses caused by the patient's long-term virtual labor, which leads to serious loss of healthy qi. In the past, the body will have the problem of deficiency of all five internal organs. The external cause is that the body is attacked by the epidemic virus, and then the healthy qi of the patient's body is seriously damaged. Based on the clinical manifestations of AIDS, AIDS can be generally divided into four types: heat toxin stagnation, Qi and blood deficiency, congestion and internal resistance, Qi and Yin injury. The patients with heat toxin stagnation type are infected by the epidemic situation, or because the body itself is relatively weak. After being attacked by the epidemic degree, the patients will be depressed and become toxic. For this type of AIDS, we can use honeysuckle, isatis root and other traditional Chinese medicine to treat it^[1]. The patients with deficiency of Qi and blood are severely damaged due to the deficiency of spleen and stomach, deficiency of biochemical sources of Qi and blood, lack of medium coke and other problems. For this type of AIDS patients, we can make them take peony, angelica, ginseng and other traditional Chinese medicine to achieve the necessary prevention and control work. Congestion type patients are due to the epidemic virus flowing to all parts of the patient's body, so that the body's skin, blood vessels, meridians and other parts of the existence of too many viruses, resulting in a serious decline in the patient's immunity. For this type of AIDS patients, can make them take red peony, rattan, Xiangfu, bupleurum these four kinds of Chinese medicine. The patients of Qi and Yin injury type suffer from the attack of epidemic virus. After a long time, the body's muscles and blood vessels are seriously damaged, and finally the condition of Qi and yin deficiency appears. For this type of AIDS patients, we can make them take Radix Ophiopogonis, ginseng, angelica, Schisandra, paeony and other traditional Chinese medicine ginseng, and ultimately promote the number of HIV in the body to achieve the necessary reduction.

2 Results

2.1 Compound preparation of traditional Chinese medicine and ginseng for prevention and treatment of AIDS

At present, the use of traditional Chinese medicine to achieve effective treatment of AIDS has made a relatively perfect development, which is mainly reflected in the number of Chinese medicine compounds that have been successfully developed at home and abroad to effectively prevent AIDS is increasing. At present, the commonly used Chinese medicine compound preparations against AIDS in China include wuweilingqi capsule, Yiaikang capsule, compound Sanhuang powder, tangcao tablet, Zhongyan No.2, aining granules, Zhongyan No.4, etc. According to the relevant authoritative statistics of traditional Chinese medicine, these traditional Chinese medicine compound preparations have obvious antiviral effect in clinical trials, which can effectively increase the number of CD4 production. CD4 lymphocyte is an important immune cell in human body, and its effective production will protect human body from the threat of disease. It should be noted that the above-mentioned Yiaikang capsule is frequently used by first-line doctors and AIDS patients at home and abroad. Its reasonable use will promote the CD4 cell count in AIDS patients to achieve the necessary improvement, so that the patients' immune function can achieve significant improvement, and it can effectively reduce the symptoms of AIDS complications, and then effectively improve the patients' immune function Quality of life^[2].

According to the TCM syndrome differentiation and typing of AIDS, the treatment of AIDS patients with deficiency of Qi and blood can be based on the treatment principle of "deficiency is tonifying", and the treatment means of tonifying and nourishing blood can be adopted. The main components of Yiaikang capsule are Astragalus, ginseng, Poria, Atractylodes macrocephala, Ligusticum chuanxiong, angelica, Scutellaria and Paeonia alba. It is a kind of Chinese medicine compound preparation which can effectively improve the immunity of the body according to the treatment principle of "deficiency is nourishing". Yiaikang capsule has the functions of nourishing blood, protecting stomach, nourishing qi, strengthening spleen, detoxifying, etc. it can effectively improve the CD4 cell count in the body of patients, so as to realize the significant improvement of patients' immune function. In addition, Yiaikang capsule will have a more serious impact on the expression process of T cell receptor CXCR4 and

CCR5 in HIV infected patients, but at the same time, it will also improve the level of CD4 in patients to a higher extent, and can effectively weaken the viral plasma load level. The expression of CXCR4 and CCR5 on the surface of T cells in vivo after HIV-1 invasion is closely related to the immune response of patients. The treatment with Yiaikang can promote the expression of CXCR4 and CCR5 on the surface of CD8 + T cells to a higher extent.

2.2 Single Chinese medicine reference for prevention and treatment of AIDS

According to the authoritative TCM data, Professor Yang Xianrong and other professors have carried out detailed clinical trials on 27 kinds of heat clearing and detoxifying traditional Chinese medicine ginseng and a variety of traditional Chinese medicine compound preparations. The results show that the single Chinese medicine ginseng with the highest frequency of use are Astragalus, liquorice, ginseng, Scutellaria, Danshen, honeysuckle, angelica, bupleurum, Viola and Hedyotis diffusa. The frequency of medical ginseng in improving symptoms and improving immunity was 54.6% in Glycyrrhiza, 63.7% in Astragalus, 24.5% in ginseng, 33.4% in Scutellaria, 22.1% in Angelica, 24.4% in Viola, 15.4% in honeysuckle, 18.4% in Danshen, 6.3% in Hedyotis diffusa and 12.5% in Bupleurum. In addition to ginseng and Angelica sinensis, astragalus membranaceus, liquorice, honeysuckle, Scutellaria baicalensis georgi, Radix Bupleuri, Salvia miltiorrhiza, Rhizoma dioscoreae and Chrysopraxe have been proved to have significant anti-HIV activity. Among the 27 kinds of Chinese medicine ginseng which have the effect of clearing away heat and detoxification, the ones which have been proved to have the function of preventing HIV replication at the same time are Andrographis paniculata, Viola, lavender, Arctium lappa, Sophora flavescens,

honeysuckle, Guanzhong, Prunella, Coptis, wolfberry, Wedelia, Epimedium, etc.

3 Conclusion

In recent years, the use of traditional Chinese medicine to prevent and treat AIDS has become the main means of treatment at home and abroad, but for the related clinical trials of traditional Chinese medicine, we should still fully define the research objectives of the trial, and correspondingly increase the sample capacity of the trial, and then the observation time of the clinical trial to achieve the necessary extension. For the design of the experimental scheme, the corresponding planning work should be implemented based on the implementation principle of the randomized double-blind controlled trial^[3]. With the continuous recombination and screening of compound drugs and single drugs, it is believed that in the future, there will be more traditional Chinese medicine ginseng with enhanced immune function and anti HIV function, which can be found in time. Moreover, effective integration of basic theories of traditional Chinese medicine and formulation of targeted traditional Chinese medicine ginseng treatment plan will be the leading thinking and means to prevent and control AIDS in the future.

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