Analysis of the Current Situation and Characteristics of Chinese Medicine in the Treatment of Depression

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Abstract. By reviewing the relevant literatures such as China Knowledge Network, Chinese Pharmacopoeia and Chinese Medicine Ministry Standards, this paper summarizes the current status and characteristics of Chinese medicine treatment of depression, and finds that Chinese medicine has an absolute advantage in the treatment of depression. Traditional Chinese medicine has a long history of treating depression. Traditional Chinese medicine treats depression through a combination of Chinese and Western medicine, traditional Chinese medicine and traditional Chinese medicine. The side effects of Chinese medicine are small, the damage is small, and the promotion prospect is good. However, the current research on the treatment of depression in traditional Chinese medicine is relatively one-sided, and the known regulatory mechanism is relatively simple. Further research is needed on the regulatory mechanisms and compatibility rules, with a view to being widely used clinically.

Introduction

Depression, also known as "psychic cold," has significant and persistent depression, which is the main type of emotional disorder. Clinical manifestations are: depression and inferiority, often accompanied by abnormal sleep, loss of appetite and other physical symptoms, and even suicide and other extreme behavior. At present, depression is the fourth largest disease in the world. According to WTO forecast, depression will become the second largest disease in human beings by 2020. Over the past 30 years, the incidence of depression has increased 10 to 20 times. The number of depressive patients worldwide has reached 322 million. With the increase of social pressure, this number will continue to grow, and the population of depression will become younger. Therefore, we should pay attention to depression and do a good job in propaganda and prevention [1]. The search for safer and more effective drugs for depression has also become an urgent issue.

Pathogenesis of Depression

The etiology of depression is not fully understood, but it is certain that many factors are related to the pathogenesis of depression in physiological, psychological and social environment. The most common causes in modern medicine are monoamine neurotransmitter and its receptor content hypothesis, inflammatory response hypothesis, hypothalamus-pituitary-adrenal (HPA) axis dysfunction hypothesis and neurotrophic factor hypothesis. Chinese medicine believes that depression belongs to the category of "depression" in traditional Chinese medicine, which is caused by emotional discomfort and Qi stagnation. Depression is the external cause of depression. Heart, liver, spleen, lung and kidney dysfunction are the internal factors. According to the principle of differentiation of symptoms and signs, depression is usually divided into five types: stagnation of liver-qì, stagnation of stagnation of Qi for a long time, deficiency of both heart and spleen, insufficiency of liver and kidney, stagnation of phlegm and Qi [2]. Studying the pathogenesis of depression can provide theoretical basis for the treatment of depression by traditional Chinese medicine, help to search for therapeutic drugs scientifically and quickly, and bring good news to patients with depression.
Treatment of Depression

Western Medicine for Depression

At present, western medicine mainly uses tricyclic antidepressants, selective norepinephrine (NE) reuptake inhibitors, selective serotonin (5-HT) reuptake inhibitors and monoamine oxidase inhibitors. Tricyclic antidepressants, such as imipramine, exert antidepressant effects by inhibiting neuronal re-uptake of NE and 5-HT; selective 5-HT re-uptake inhibitors, such as cloxitin and paroxetine, exert antidepressant effects by inhibiting 5-HT re-uptake and increasing the concentration of 5-HT in synaptic space; dual selective inhibitors, venlafaxine, achieve antidepressant effects by inhibiting neuronal re-uptake of 5-HT and 5-HT in synaptic space. To the antidepressant effect. These Western medicines have different degrees of efficacy in the treatment of depression, but the side effects are also obvious. Clinical side effects include dry mouth, nausea, vomiting, sleep disorders, fatigue and even mania. At the same time, the therapeutic target of Western medicine is relatively single, but the pathogenesis of depression is diverse, so chemical drugs cannot play a very good role in antidepressant treatment.

Treatment of Depression with Traditional Chinese Medicine

Chinese medicine has a long history and rich literature in the treatment of depression. There are records of the disease in the ancient books of TCM, such as “Treatise on Febrile Diseases,” “Synopsis of the Golden Chamber.” “Yang's Family Tibetan Prescription” and “Taiping Shenghui Prescription” [3]. Single Chinese herbal medicine such as Changepu, Yuanzhi Chinese herbal compound such as Xiaoyaosan, Kaixinsan and Yueju pills have better therapeutic effect on depression. Moreover, Chinese medicine has low side effects, a wide range of antidepressants and low addiction, which is of great research value.

Treatment of Depression with Chinese Herbal Medicine Alone

The results showed that fenugreek flavonoids had good antidepressant effect. For behavioral despair depression mice, total flavonoids of fenugreek significantly increased spontaneous activity times, tail-suspension activity time and swimming immobility time. The results showed that total flavonoids of fenugreek could improve the behavioral disorder of depressive mice. For retinol-induced depression mice model, total flavonoids of fenugreek can significantly increase the levels of dopamine, 5-HT and NE in brain homogenate, indicating that total flavonoids of fenugreek can improve depression through monoamine neurotransmitters; total flavonoids of fenugreek can also reduce depression symptoms by lowering the levels of corticotropic hormone (ACH) and interleukin-6 (IL-6) [4].

Flavonoids in licorice also have good anti-depression effect. The experiment shows that total flavonoids of licorice can significantly improve the tail suspension immobility time and swimming immobility time of mice, and have obvious effect on behavioral therapy of depression. Similar to Cucurbita flavonoids, total flavonoids of licorice can also improve the level of 5-HT, NE and DA in the treatment of depression with monoamine neurotransmitter deficiency. It can also affect the HPA axis by lowering cortisol concentration and regulating the level of IL-6. Total flavonoids of licorice can also reduce depression symptoms by anti-inflammatory cytokines and protecting neurons. In addition, glycyrrhizin in liquorice extract can significantly reverse the damage of chronic stress on rats' behavior, prevent lipid peroxidation and reduce the production of malondialdehyde by increasing the activity of superoxide dismutase (SOD) to scavenge free radicals, so as to achieve anti-depression [5].

Other similar single-flavor drugs include Morinda officinalis alcohol extracts. Studies have shown that Morinda officinalis extract has antidepressant effects through 5-HT nervous system, and some extracts also have effects on dopaminergic nervous system. There are ginsenosides extracted from ginseng, alkaloids extracted from Semen Ziziphi Spinosae and alcohol extracts from Polygonum tenuifolia, all of which have different degrees of antidepressant effect [6].

Compound Chinese Medicine for Depression

Chinese herbal medicine has a long history in the treatment of depression in China. In Zhang Zhongjing’s Treatise on Typhoid Fever in the Eastern Han Dynasty, "Chaihu Longgu Muli Decoction” is considered to be one of the most suitable ancient prescriptions for treating depression. Modern pharmacological studies have shown that Chaihu
Longgu Muli Decoction achieves antidepressant effect by blocking the re-uptake of 5-HT and NE [7]. Kaixinsan, a traditional Chinese medicine antidepressant, is also the basic prescription for treating emotional disorders in TCM. Yuanzhi, Renshen, Fuling and Changpu are commonly used drugs for treating emotional disorders in TCM. Modern studies have shown that Kaixinsan can significantly improve the levels of 5-HT, NE and DA in the brain, thereby alleviating depression. Kaixinsan can also improve hippocampal brain-derived neurotrophic factor (BDNF) to achieve antidepressant effect. Kaixinsan has the effect of invigorating qi, calming mind and nourishing heart, and modern Chinese medicine often adds or subtracts the prescription to treat depression [8]. Yueju pill in “Danxi Heart Law Volume 36 Depression 52” is a famous prescription founded by Zhu Danxi in Jin and Yuan Dynasties according to his theory of six depression. Clinical studies have found that Yueju pill has a rapid and lasting anti-depression effect without side effects. Yueju pill can enhance synaptic plasticity through mammalian rapamycin target protein (mTOR) and eukaryotic elongation factor kinase 2 (eEF2K) signaling pathway, and produce a rapid and lasting antidepressant effect [9].

Combination of Chinese and Western Medicine in the Treatment of Depression. Clinical research shows that the combination of traditional Chinese and Western medicine has obvious advantages in the treatment of depression. The combination of traditional Chinese medicine and Western medicine can achieve twice the result with half the effort, one plus one is more than two [10]. Venlafaxine combined with traditional Chinese medicine in the treatment of senile depression has also achieved remarkable results. Venlafaxine is a 5-HT and NE double-uptake inhibitor. Combined with traditional Chinese medicine, it can alleviate depressive symptoms faster, safer and more reliable [11]. Similar to the combination of traditional Chinese and Western medicine, paroxetine and Shugan Jieyu recipe [12]. The combination of traditional Chinese and Western medicine in the treatment of depression has fast curative effect, good curative effect and little side effects, which is worth promoting.

Discussions and Prospects

Traditional Chinese medicine has its unique advantages in the treatment of depression. Chinese medicine has a long history in the study of depression, which has produced abundant theoretical results and many good prescriptions; Chinese medicine has a variety of targets, which can be adjusted through a variety of mechanisms, and has a broader antidepressant effect; Chinese medicine is safer, less addictive and better patient compliance; Chinese medicine combined with western medicine or physical therapy has a better therapeutic effect and can play a faster anti-depressant role. Depression, Western medicine has a single effect and traditional Chinese medicine has a wide range of effects, such as fenugreek flavonoids have antidepressant effect as well as antioxidant effect. TCM treatment of depression has obvious clinical effect and good prospects, should be vigorously promoted. However, at present, western medicine is still the main treatment of depression. In the treatment of depression, attention should be paid to the single use of traditional Chinese medicine, compound prescriptions or the combination of traditional Chinese and Western medicine. Give full play to the multi-target regulation of traditional Chinese medicine, less toxic side effects, can quickly and effectively combat the advantages of depression, so that patients benefit. Modern pharmacology is still in its infancy in the study of antidepressant mechanism of traditional Chinese medicine. Most studies focused on the monoamine neurotransmitter hypothesis, the HPA axis hypothesis and the neurotrophin factor hypothesis [13]. However, depression is the result of the interaction between external factors and the body, while relatively one-sided research still has limitations. Therefore, we should further study the physical and chemical properties of depression, explore more effective antidepressant mechanism, and provide a broader theoretical basis for clinical medication. At the same time, we should further explore the compatibility law of traditional Chinese medicine antidepressants to provide more ideas for the development of new drugs. It is believed that under the advanced science and technology in the future, Chinese medicine will be widely used in the treatment of depression.
Acknowledgement


References


