MEDS Public Health and Preventive Medicine (2022)
Clausius Scientific Press, Canada

DOI: 10.23977/phpm.2022.020207
ISSN 2616-1915 Vol. 2 Num. 2

A brief discussion on the research progress of traditional Chinese and western medicine in the treatment of post-stroke depression

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Keywords: post-stroke depression; western medicine treatment; traditional Chinese medicine treatment

Abstract: The incidence of stroke disease in my country is extremely high, and post-stroke depression has also attracted widespread attention. Western medicine treatment is mainly based on antidepressant drugs, and traditional Chinese medicine treatment is mainly based on traditional Chinese medicine decoction combined with acupuncture and other characteristics of traditional Chinese medicine. The purpose of this article is to briefly discuss the recent years Come to the clinical treatment progress of western medicine and traditional Chinese medicine for post-stroke depression, and provide reference for its further treatment plan.

1. Introduction

Since the early 1980s, with the rapid development of my country's economy, people's living standards have improved significantly, resulting in prolonged life expectancy and lifestyle changes, resulting in significant changes in my country's disease spectrum. Among them, the incidence of stroke is increasing year by year, and it has become the top three causes of death, and it is also the disease with the highest disability rate of a single disease [1]. Post-stroke depression (PSD), as one of the common complications after stroke, is the most common mental disorder in stroke survivors, and about 1/3 of patients will develop PSD at some point after stroke [2]. The main clinical manifestations are depression, unresponsiveness, lack of interest, cognitive impairment and weakened ability of daily living. It not only affects the recovery of patients' neurological function and reduces the quality of life, but also increases the morbidity and mortality, causing a heavy economic burden to the family and society [3]. Because some post-stroke depression patients have atypical symptoms or communication barriers, and do not actively express it, and the clinical manifestations of PSD are diverse and do not receive attention, many potential PSD patients have not received timely and effective identification and treatment [4]. Therefore, for post-stroke depression, it should be detected and treated in time, so as not to delay the disease and bring greater economic and psychological burden to patients and their families.

1.1 Western medicine's understanding of post-stroke depression post-stroke depression

Mainly occurs in any stage of the acute and convalescent stages of stroke, usually within 1 year after stroke [4]. Its clinical manifestations are diverse and generally divided into core symptoms and non-core symptoms. The core symptoms are: 1. Feel unhappy, depressed, and even miserable most of the time. 2. Decreased or lost interest and pleasure, unable to be as willing to do and gain pleasure from activities or things that are usually hobbies and interests. 3. Fatigue or loss of energy, feeling that life is boring and meaningless most of the time every day, feeling like living a year; often thinking that there is no meaning in living in the world, even life is better than death; serious people have a tendency to commit suicide. Non-core symptoms: 1. Physiological symptoms, such as weight loss, difficulty falling asleep, light sleepiness and dreaminess, easy awakening and early awakening, unexplained pain, loss of appetite or hyperactivity, loss of libido, etc.; 2. May be associated with nervousness, anxiety and exercise 3. Other symptoms, such as indecision, decreased self-evaluation, self-blame, self-guilt, sense of worthlessness, suicide and self-injury, decreased attention [4]

1.2 Western medicine's understanding of the pathogenesis of post-stroke depression

1.2.1 Social Psychological Mechanisms

Because the quality of life of stroke patients is lower than before, and the psychological burden after illness is heavier, thus accelerating the development of post-stroke depression. Cognitive dysfunction, low social support, unoptimistic personal income, and previous history of stroke, which lead to mental balance disorders in patients, are all risk factors for the occurrence of PSD [5].

1.2.2 Neuroendocrine mechanism

At present, most researchers believe that the neurotransmitter hypothesis is the possible mechanism of depression. As a relatively special depression, PSD also has changes in various neurotransmitters. The destruction of the neurotransmitter pathway or the increase or decrease of neurotransmitter release may be caused by the neurotransmitter disturbance at the corresponding damage loss site directly caused by the stroke lesion.

1.2.3 Monoamine neurotransmitters

The metabolism of monoamine neurotransmitters is closely related to the degree of nerve tissue damage caused by acute stroke. Changes in monoamine neurotransmitters or related system dysfunction are associated with the occurrence of depression There is also a close relationship [6-9]. Studies have found that abnormal changes in the neurotransmitters of 5-hydroxytryptamine (5-HT), norepinephrine (NE) and acetylcholine (Ach) in the brain after stroke are related to the occurrence of depression.

1.2.4 Neurotrophic factor

Brain-derived neurotrophic factor (BDNF) is a part of neurotrophic factor and is a key factor in neuronal regeneration after stroke. Studies have shown that BDNF has an inseparable relationship with the occurrence and development of PSD. Fu Xiaoyan et al. [10] found that the overexpression of BDNF in the hippocampus of the PSD rat model can alleviate the depression of PSD and exert neuroprotective function. After antidepressant drug intervention in PSD model rats, it was found that the depressive symptoms of the rats were alleviated, and the expression of BDNF protein in the hippocampus was also significantly increased [11].

1.2.5 Inflammatory factor

Kang Xiao et al. [12] found that the serum levels of tumor necrosis factor-α (TNF-α) and interleukin-

1β (IL-1β) in PSD model rats were significantly increased. Serum levels of some interleukin (IL), high-sensitivity c-reactive protein (hs-CRP), and TNF-α in patients with PSD were significantly increased, and in mild, moderate, and severe cases The serum levels of depressed patients increased sequentially, suggesting that the above-mentioned inflammatory factors may be involved in the occurrence and development of PSD, and the different levels reflect the degree of depression in PSD patients. In addition, it has been confirmed that the serum interleukin 10 (IL-10) of patients with post-stroke depression is significantly lower than that of healthy people, while hs-CRP, TNF-α, IL-1β, IL-6, and IL-8 are significantly higher than those of healthy individuals. healthy [13].

1.3 Treatment of post-stroke depression by western medicine

At present, a variety of treatment methods such as drug therapy, psychotherapy and physical therapy are used in combination to achieve the best therapeutic effect.

1.3.1 Drug therapy

Selective serotonin reuptake inhibitors Clinically representative drugs include sertraline, escitalopram, citalopram, fluoxetine, fluvoxamine, and paroxetine. Evidence from clinical studies suggests that SSRIs are effective for PSD [14]. Among them, sertraline has few contraindications in elderly stroke patients, so it is recommended as the preferred SSRI antidepressant. Serotonin norepinephrine reuptake inhibitors Serotonin norepinephrine reuptake inhibitors have dual reuptake inhibition effects of 5-HT and NE, and the representative drugs are venlafaxine and duloxetine. NE and specific serotonergic antidepressants NE and specific serotonergic antidepressants (noradrenergic and specific serotonergic antidepressant, NaSSA) by enhancing NE, 5-HT transmitters and specifically blocking 5-HT2, 5 -HT3 receptors, antagonize the central NE-ergic neurons presynaptic α2 receptors and related heterogeneous receptors, and the representative drug is mirtazapine.

Tricyclic antidepressants After the 1950s, tricyclic antidepressants (TCAs) have become the first choice for the treatment of depression patients. The efficacy of TCA drugs is similar to that of SSRIs, but its adverse reactions affect three Clinical application of cyclic drugs. The pharmacological mechanism of TCA drugs is by inhibiting the reuptake of 5-HT and NE, and also has the effect of blocking M1, α1 and H1 receptors, and has a faster onset of action. Represented by amitriptyline, imipramine, and clomipar. Trazodone, another drug that can be used for PSD, has 5-HT2A receptor antagonism and selective 5-HT and norepinephrine reuptake inhibition, in addition to relatively strong histamine H1, adrenergic α2 receptor antagonism, less adverse reactions than tricyclics, Deanixin is a compound preparation of flupentixol and melitracen, commonly used in the treatment of depression and anxiety.

1.3.2 Psychotherapy

Such as cognitive behavior therapy (CBT), eye movement desensitization and reprocessing (EMDR), mindfulness-based interventions (MBIs).

1.3.3 Physical therapy

Modified electroconvulsive shock (MECT), repetitive transcranial magnetic stimulation (rTMS), hyperbaric oxygen therapy.

2. Research status of traditional Chinese medicine on post-stroke depression

There is no relevant discussion on post-stroke depression in ancient literature, but according to its clinical symptoms, etiology and pathogenesis, it can be attributed to the category of "depression due to illness and illness due to depression" in Chinese medicine. It is caused by the original liver

prosperous, or weak physical quality, and additional emotional injury caused by the stagnation of qi and stagnation, the failure of the liver to disperse, the failure of the spleen, the failure of the heart, and the disorder of qi and blood of the viscera. The main clinical manifestations are depression, depression, Emotional restlessness, chest fullness, flank pain. Or easy to cry and irritate, or if there is a foreign body plug in the throat, etc. as the main clinical manifestations of a type of disease. Its clinical classification can be divided into six types: liver stagnation and qi stagnation, qi stagnation transforming into fire, phlegm qi stagnation, mental dystrophy, heart and spleen deficiency, and heart and kidney yin deficiency. The basic pathogenesis of stagnation syndrome is emotional injury, liver qi stagnation, resulting in visceral yin, yang, qi and blood disorders. The disease is located in the liver, involving the heart, spleen and kidney. Liver governs stagnation, and has the function of dredging and regulating the qi of the whole body. On the one hand, it can regulate qi and blood, qi is yang, and blood is yin. Qi and blood are in harmony, yin is balanced and yang is secret, and body and mind are comfortable, and life activities can run normally. The relationship between depression and the heart has been discussed in detail in the "Nei Jing" as early as the "Su Wen Jutong Lun": "Thinking is the existence of the heart, the spirit is returned, and the righteousness remains but does not work, so the qi stagnates. It's over."; "Lingshu Benbing Lun" also said: "When people are worried and worried, they are sad." Zhang Jingyue believes that depression syndrome is divided into depression in a broad sense and depression in a narrow sense, and the disease location of depression in the narrow sense is mainly in the heart. "When the five qi are stagnant, there are all kinds of diseases. This is because of illness and depression. When it comes to emotional depression, it is always due to the heart, and this is because of depression. The disease is also caused by depression. Thinking activities are mainly the embodiment of the function of the heart; Qi and blood circulate in and out of the human body, which must be based on the normal function of the heart. Zhu Danxi believes that depression is mainly located in the spleen and stomach of the middle energizer. "Danxi Heart Method: Six Depressions" "All depressions are in the middle focus, and those who are depressed cannot get out of the way. When they rise, they cannot rise, when they fall, they cannot descend, and when they change, they cannot change. This is the abnormality of transmission., the disease of six depressions is obvious." This shows that the dysfunction of the spleen and stomach, and the imbalance of ascending, descending, transporting and transforming are the main pathogenesis of depression. Since the spleen and stomach are the foundation of the acquired, the whole body is the pivot of the qi movement, which can transform qi, blood, and body fluids, and transfer the essence of water and grains. Worry is easy to damage the spleen, the function of the spleen and stomach is derelict, and the intake and transport are abnormal, resulting in the stagnation of qi in the whole body and the formation of qi stagnation, which causes the disharmony of qi and blood. The kidney is one of the five internal organs, the innate foundation, and the deficiency of kidney qi affects the disease of the body. Sun Yikui said in Chishui Xuanzhu Yumen Yu, "If there are people who are deficient in elements, once things go wrong, their heads will be dizzy, their spirits will be short, and their muscles will be short of breath." Depression is also a disease of visceral qi, which originates from excessive thinking and weak visceral qi, so the disease of six depressions arises." This all shows that people with deficient elements or weak visceral qi are more prone to stagnation.

2.1 Treatment of post-stroke depression by traditional Chinese medicine

Traditional Chinese medicine mostly adopts acupuncture combined with traditional Chinese medicine in the treatment of post-stroke depression [16]. In traditional Chinese medicine treatment, the representative drugs of oral antidepressant preparations include Wuling Capsule and Shugan Jieyu Capsule. In the classics, Chaihu Longgu Muli Decoction, Huanglian Wendan Decoction, Chaihu Shugan Powder, Xiaoyao Powder, Ditan Decoction, Madman Mengxing Decoction, and Buyang

Huanwu Decoction are all effective [17]. The proposed recipes such as Jieyu Huoxue Decoction [18] and Tongqiao Xiaoyu Decoction [19] have also achieved certain curative effects. It is effective in resolving phlegm and liver stagnation, or in soothing the nerves and relieving stagnation. Traditional Chinese medicine auxiliary therapy mainly includes: five elements music therapy; ear acupoint pressing bean method; moxibustion therapy; traditional Chinese medicine fumigation and so on. 3. Conclusion PSD develops after stroke, and its onset is insidious. In clinic, physicians pay more attention to the recovery of limb function after stroke, but neglect their mental health. It is necessary to pay attention to the occurrence and development of post-stroke depression, and timely intervene and treat with integrated traditional Chinese and Western medicine to improve the quality of life of patients.

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