Research Progress in the Treatment of Epilepsy by Traditional Chinese Medicine

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Abstract: Epilepsy, the second most common disease in neurology after headache, has brought great trouble to people's study, life and work. Traditional Chinese medicine has unique advantages in the treatment of epilepsy, which can be prevented and treated through prescriptions, acupuncture, acupuncture thread burials and other methods, effectively reducing adverse drug reactions and reducing predisposing factors. This article reviews the existing research on the treatment of epilepsy by traditional Chinese medicine and summarizes the effective traditional Chinese medicine methods in order to propose new treatment ideas.

Keywords: Epilepsy; The treatment of the traditional Chinese medicine; Research progress

1. Introduction

Epilepsy (Ep) is a chronic recurrent transient brain dysfunction syndrome characterized by abnormal firing of brain neurons ^[1], clinical manifestations are sudden loss of consciousness, even servant, unconscious, eyes up, mouth spit, tonic convulsions, or mouth like pig and sheep cry, move to wake up, wake up like ordinary people, belongs to the category of traditional Chinese medicine "epilepsy", also known as "sheep epilepsy", "sheep madness", "sheep horn wind". There are about 10 million people with epilepsy in China ^[2], and their quality of life has been seriously affected. The treatment period of epilepsy is long, and the effective treatment of western drugs in the treatment of epilepsy patients is only 60%, and it is often accompanied by multiple adverse reactions ^[3]. Traditional Chinese medicine has unique advantages in the treatment of epilepsy, so it is important to review the research on the treatment of epilepsy by traditional Chinese medicine.

2. Concept and history

Epilepsy belongs to the category of "epilepsy" in traditional Chinese medicine, which is a kind of episodic mental disorder caused by congenital or acquired factors caused by dysfunction of the internal organs, qi disorder, and loss of control of the yuan spirit. Eclampsia evidence first appeared in "Inner Path", "Suwen Curious Disease Theory" said: "People who are born with disease and epilepsy... The disease is called fetal disease. "Danxi Xinfa Eclampsia" believes that "nothing more than phlegm and salivation, misty holes" and causes epilepsy. "Criterion for Evidence and Treatment: General Introduction to Epilepsy" distinguishes between madness and epilepsy. "Emergency Preparedness: On the Treatment of Disease Brief Case III" proposed the name of "epilepsy" for the first time, and summarized the symptoms into 20 items.

3. Etiology and pathogenesis

TCM believes that the causes of epilepsy are divided into congenital and acquired factors. Congenital factors include inadequate or abnormal innate endowments. Acquired factors include emotional disorders, poor diet, traumatic falls or brain cord injury caused by other diseases. The basic pathogenesis are organ dysfunction, qi machine disorder, loss of control of the yuanshen spirit, and pathological factors are wind, fire, phlegm, and stasis [4], mainly phlegm. The disease is located in the brain, which is closely related to the heart, liver, spleen and kidney. In addition, there are also blood deficiency and wind that cause disease, insufficient or unsmooth meridian qi and blood, causing the

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brain to become epilepsy [5].

4. The treatment of the traditional Chinese medicine

4.1 From phlegm to cure

The clinical manifestations are sudden stumbling, unconsciousness, eyes looking up, foaming at the mouth, closed teeth, strange screams in the mouth, and convulsions of hands and feet. Wind sputum occlusion has a red tongue, white moss, and smooth veins; Sputum hot internal disturbance has red tongue, moss yellow greasy, pulse slippery number.

- (1) Wind phlegm obstruction,For example, Chen Yan ^[6], Yulan ^[7], etc. were used to treat epilepsy patients with epilepsy with epilepsy pills and epilepsy decoction through clinical controlled experiments, and the frequency and adverse reaction rate of seizures were significantly reduced and the duration was significantly shortened after treatment. Wei Chan ^[8] used Quenching Wind Polyester Sputum Soup (30 g mother-of-pearl, 20 g Fushen, hook vine, Chuan Fritillary, Fa Banxia, 15 g each of Xiangxia, 12 g each of stone cassia, gall Nanxing, and bamboo liquor, 10 g of zombie silkworm, 9 g each of calamus and tianma, 8 g of tangerine peel, 2 g of amber powder (swallowed in divided doses), 6 g each of Jiaoyuanzhi and licorice, and 4 g of whole scorpion) in the treatment of patients with acute epilepsy and sputum obstruction, which can significantly improve the cognitive function of patients.
- (2) Sputum heat internal disturbance,For example, Lin Yubin [9] used Scutellaria baicalensis warm gallbladder soup (10 g of skullcap, 10 g of tangerine peel, 10 g of Fa Banxia, 15 g of white poria, 9 g of zhuru, 10 g of citrus aurantium, 3 g of licorice, 9 g of Yuanzhi, 10 g of calamus, 15 g of hook vine, 15 g of danshen, 30 g of floating wheat, 15 g of keel, 15 g of oysters. Treatment of 62 patients with sputum fever internal disturbance epilepsy improved EEG and reduced the number of seizures. Zhou Shen [10] divided sputum fever into liver wind sputum fever, spleen deficiency sputum fever, and yin deficiency sputum fever, and used Chaihulong oyster soup (self-mimic formula), astragalus epilepsy decoction (self-mimic formula), and soft liver tongluo decoction (self-mimic formula) to eliminate epilepsy and dispersion to treat and obtain good results.

4.2 From the stasis to the treatment

Epilepsy caused by bruising often has a history of brain trauma, sudden fainting, twitching of limbs, severe headache, blue lips, purple tongue with ecchymosis, and astringent pulse. Liu Zuyi, a master of traditional Chinese medicine, uses the antispasmodic method to treat epilepsy with a history of brain trauma, and commonly used drugs include: astragalus, windproof, earth dragon, tulip, green gravel, zombie silkworm, tianma, cicada molt, Chuanxiong, whole scorpion, tangerine peel, hawthorn, etc. [11]. Li Chenxi et al. [12] used Tongjiao Blood Decoction to treat cerebral stasis obstruction epilepsy, which increased or decreased with the patient's condition, and the clinical effect was remarkable. Zhang Jingchun [13] et al. treated 40 patients with refractory epilepsy caused by brain trauma and blood stasis with Xuefu Zhuyi decoction, and the number of seizures decreased significantly within one month after treatment.

4.3 From the liver on treatment

In recent years, the theoretical system of "treatment from the liver" for the treatment of epilepsy is also gradually improving, and the treatment of epilepsy by belonging to the liver is often used clinically [14]. The abnormal function of the main drainage of the liver will lead to the production of pathological products such as wind, fire, phlegm, and stasis, which will further induce the seizures of epilepsy, so the treatment of epilepsy from the liver has the function of outlining. For example, Xie Wei used his own formula "Chai Hu Liver Soup" to add and subtract to treat epilepsy, and the drugs include: Chai Hu, Scutellaria baicalensis, Banxia, Guizhi, White Peony, Hook Vine, Raw Keel, Raw Oysters, Codonopsis, Licorice, Jujube [15].

4.4 From the kidney on treatment

According to the kidney-essence-pith-brain theory of traditional Chinese medicine, some doctors have proposed the idea of treating epilepsy from the kidney theory. For example, Rong Ping [16] et al. treated 31 patients with pediatric epilepsy with iris capsules (deer antler velvet, calamus, dodder seed, gallnan star, tianma, whole scorpion, zombie silkworm, banxia, tangerine peel, poria, ice chips, licorice) based on the kidney filling method, and the effective rate was 77.42%, which was significantly better than that of the western medicine treatment group.

4.5 From the spleen to the rule

Weak liver will produce wind, weak spleen will produce phlegm, Guo Yaxiong [17] believes that eating fat and thick taste or excessive eating raw and cold, and causing great injury to the spleen and yang, helping to produce phlegm and epilepsy. The focus of treatment is to strengthen the temper and dissolve phlegm. Based on the theory of the brain-gut axis emerging in modern medicine [18]—there is a two-way regulatory effect between the central nervous system and the intestine, Shi Qianxin [19] et al. believe that gastrointestinal dysfunction is related to seizures. Clinically, it is commonly used to use the four gentlemen's soup, Lizhong soup, and strengthen the spleen and warm and invigorate qi.

4.6 Discussing Treatment from Deficiency

Deficiency and excess are very important differentiation points in traditional Chinese medicine. Based on the theory of "epilepsy cannot occur without weakness", Hong Rongqing et al. [20] conducted a clinical controlled trial and used Qingxin Tang (ginseng, atractylodes macrocephala, Poria cocos, licorice, Polygonum multiflorum, Huangjing, Angelica sinensis, Ophiopogon japonicum, Radix Polygalae, Fructus ziziphi spinosae, Chuanxiong, Radix Rehmanniae, and Rhizoma Acorus) to treat 40 epilepsy patients, with a total effective rate significantly higher than the control group. Ying Xin [21] believes that secondary epilepsy often occurs in the sequelae of cerebral infarction, with a longer course of disease, old age, and weak physique. It is often characterized by weak symptoms such as liver and kidney deficiency, insufficient qi and blood, and cerebral spinal cord insufficiency. In terms of treatment, it is necessary to tonify the liver and kidney, replenish qi, nourish blood, and nourish the body, and give more modified treatments such as Da Bu Yuan Jian, Liu Junzi Tang, and Bu Yang Huan Wu Tang.

4.7 Treatment from the Rise and Fall of Qi Mechanism

Abnormal rise and fall of the visceral qi mechanism leads to abnormal brain function [22]. An important pathogenesis of epilepsy is the disorder of qi. Jiang Tao [23]et al. believe that the majority of epilepsy patients have congenital factors or pathological constitutions of "uneven visceral qi", and the abnormal movement of qi in and out is the key to the onset of epilepsy. Clinically, Xiaochaihu Tang can be used to pivot the Shaoyang mechanism, opening and closing the inside and outside, connecting the upper and lower levels, restoring the rise and fall of qi, and achieving the effect of calming convulsions and stopping seizures.

5. Acupuncture and moxibustion

Acupuncture and moxibustion can dredge the meridians, promote blood circulation in the brain, and reduce seizures [24]. Zhou Hong [25]et al. treated 25 epileptic patients with the epilepsy three needle therapy, with a total effective rate of 96% and a lower adverse reaction rate than the control group. Hou Xinlei [26] and others reported the effect of acupuncture and moxibustion combined with Tianma Zhixian Decoction on the levels of GAL and IREG1 in epileptic patients. Using a clinical control study, on the basis of conventional antiepileptic treatment, the control group was treated with Tianma Zhixian Decoction, and the observation group was treated with acupuncture and moxibustion on the basis of the control group. The results showed that the effective rate of treatment in the observation group was 96.88%. Acupuncture and moxibustion combined with traditional Chinese medicine treatment could inhibit the abnormal expression of GAL and IREG1 and improve the symptoms of epilepsy in patients. Wang Guiling [27] and others summarized the experience of He Puren, a master of Chinese medicine, in the treatment of epilepsy with acupuncture and moxibustion. In the acute stage, Renzhong, Zanzhu, Hegu, Neiguan, Baihui, Sishencong, Buche, Chengjiang, etc. were the main points, and all of them used the twisting and reducing method. During the intermission period, the main acupoints are Dazhui, Yaoqi, and Shenshu. The method of needling Dazhui and Yaoqi points along the skin and keeping needles for a long time is used to supplement deficiency and reduce excess.

6. Combination therapy of acupuncture and medicine

In clinical practice, acupuncture and medicine are often used to treat epilepsy, which is more effective than traditional Chinese medicine or acupuncture and moxibustion alone. Huang Renfeng [28] and others randomly divided 110 patients with epilepsy into two groups. The control group was treated with Chaigui Wendan Dingzhi Decoction, and the observation group was treated with acupuncture and moxibustion on the basis of the control group. After treatment, the effective rate of the control group

was 81.82%, and the effective rate of the observation group was 96.36%. It showed that Chaigui Wendan Dingzhi Decoction combined with acupuncture and moxibustion could improve the clinical symptoms of patients with epilepsy.

7. Acupoint catgut embedding therapy

Acupoint catgut embedding is based on the theory of acupuncture and moxibustion and moxibustion. It is used to treat diseases by stimulating the meridians and harmonizing the viscera, qi, blood, yin and yang within the acupoints through acupuncture tools and medicinal threads. Liu Renjing [29] et al. randomly divided 100 patients with intermittent epilepsy into two groups, with the control group receiving a sodium valproate loading dose; The treatment group was given a 1/2 load dose of sodium valproate, with thread embedding at the main acupoints of Yintang, Dazhui, Baihui, Neiguan, Hegu, Taichong, and Yaoqi, and treated according to syndrome differentiation. The therapeutic effect was observed. The number of seizures in the treatment group was significantly lower than that in the control group. The total effective rate in the treatment group was 95.83%, while the total effective rate in the control group was 78.26%. Moreover, the adverse reaction rate in the treatment group was lower. Indicating that acupoint catgut embedding therapy can significantly reduce the frequency of epileptic seizures and improve clinical symptoms.

8. Summary

In summary, traditional Chinese medicine has great advantages in preventing and treating epilepsy, with multiple ideas, methods, high efficacy, and fewer adverse reactions. It is worthy of clinical promotion to improve epilepsy symptoms, reduce the frequency of seizures, and reduce adverse reactions by taking Chinese herbal medicine, acupuncture and moxibustion and acupuncture based on syndrome differentiation. However, there are also certain shortcomings in the treatment of epilepsy with traditional Chinese medicine, such as: (1) there is currently no unified standard for TCM syndrome differentiation and efficacy evaluation; (2) Lack of experience in critical and severe treatment of epilepsy; (3) At present, only seizures can be controlled and there is a lack of methods to cure epilepsy; (4) Lack of research on the relevant mechanisms of traditional Chinese medicine for treating epilepsy and evidence-based medical evidence; Therefore, while strengthening clinical trials and research on the treatment of epilepsy with traditional Chinese medicine, attention should be paid to exploring the classics of traditional Chinese medicine, hoping to find the golden key to curing epilepsy and overcoming world medical problems from the classics.

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