

# Analysis of Clinical effect of Acupuncture and Moxibustion on Patients with Cerebrovascular disease

Zhongyuan Hu<sup>1,2</sup>, Weigang Wang<sup>1,\*</sup>

<sup>1</sup>*Shaanxi University of Chinese medicine, Xianyang, Shaanxi 712000, China*

<sup>2</sup>*Ankang Traditional Chinese Medicine Hospital, Ankang, Shaanxi 725000, China*

**Abstract:** In this study, 68 patients with cerebrovascular diseases who were treated in our hospital from June 2022 to June 2023 were selected and randomly divided into the experimental group and the control group. The patients in the experimental group were treated with acupuncture and moxibustion, and the patients in the control group were treated with western medicine. Combined with the treatment observation, it can be seen that acupuncture and moxibustion can help the patients with cerebrovascular diseases recover their limb functions.

**Keywords:** Cerebrovascular Disease; Acupuncture and Moxibustion; Curative Effect

## 1. Introduction

Cerebrovascular disease has a high incidence rate in clinic, which has a great negative impact on the health of patients. Most of the patients are middle-aged and elderly. The treatment cycle of cerebrovascular disease is long. In the process of conventional western medicine treatment, it can promote the corresponding symptoms of patients to improve in a short time, but the long-term treatment effect has some limitations, and some patients are prone to adverse reactions during the medication [1]. The treatment of patients from the level of traditional Chinese medicine acupuncture and moxibustion has gradually been applied in clinical practice. This research mainly explores the specific value of acupuncture and moxibustion in the treatment of patients with cerebrovascular disease.

## 2. Information and Methods

### 2.1 General Information

68 patients with cerebrovascular disease who received corresponding treatment in our hospital were selected as the research subjects. They were randomly grouped into the research group

and the control group with 34 patients. There are 17 male patients and 17 female patients in the research group, with an age range of 40-75 years and an average of  $(58.73 \pm 1.85)$  years old. There are 18 male patients and 16 female patients in the control group, with an age range of 41-74 years and an average of  $(59.18 \pm 1.96)$  years old. The basic data of patients in the research group and the control group were compared,  $p > 0.05$ .

### 2.2 Methods

The control group patients were treated with western medicine in clinical practice, mixing 250ml of 0.9% physiological saline with 0.5g of cytidine diphosphate choline, 250ml of 5% glucose solution with 0.75g of Naoming injection, intravenous infusion once a day. Medical staff need to monitor the patient's intravenous infusion process, and if any abnormalities are found, they should take corresponding measures in a timely manner. The patients in the research group added acupuncture and moxibustion on the basis of western medicine treatment, and medical staff determined the acupuncture and moxibustion point selection according to the actual situation of the patients. The main point can be Sanyinjiao point, Neiguan point, Zhiyang point, Xiajiquan point, Shuigou point, Dazhui point, etc., and then the point matching needs to be determined according to the patient's symptoms. If the patient has dysphagia or aphasia, the acupuncture and moxibustion point matching treatment can be selected Lianquan point, Yamen point and Tongli point. If the patient has facial paralysis, Chuanjiache point, Yingxiang point and Dicang point can be selected to treat the patient. If the patient has upper limb weakness, Quchi point and Shousanli point can be selected for acupuncture and moxibustion treatment. If the patient has weakness in finger extension, Guanchong point can be selected for acupuncture and moxibustion. If the patient has

finger grip weakness, the acupuncture and moxibustion point combination treatment can choose Tuosanlian point. If the patient has lower limb weakness, the combination of acupuncture and moxibustion can choose Huantiao point, Yinbai point, Yanglingquan point and Zusanli point. If the patient has unstable grip, Wangu point and Fengchi point can be selected. It is confirmed that the treatment after acupoints is mainly based on the middle and lower stimulation, and the manipulation of reducing and tonifying is adopted. After acupuncture, 0.5 h is reserved, and the patients are treated with acupuncture and moxibustion once every 10 minutes. The patients need to continue the treatment for 2 weeks.

### 2.3 Observation Indicators

The quality of life scores, clinical treatment indicators, and serum inflammatory factors of patients in the research and control groups were observed. The quality of life is evaluated by the Karnofsky score, which includes indicators such as social relationships, surrounding environment, mental health, and physical health. The higher the score, the better the patient's quality of life. The clinical treatment indicators mainly include the NIHSS (Neurological Impairment) score and the Fugl-Meyer score. The NIHSS score effectively evaluates the patient's neurological function, and the higher the score, the more severe the defect the patient has. The Fugl-Meyer score effectively evaluates the patient's motor function, and the higher the score, the better the patient's motor function. The main serum inflammatory factors are CRP (C-reactive protein) levels, TNF- $\alpha$  (tumor necrosis factor- $\alpha$ ) levels, and IL-6 (interleukin-6) levels.

### 2.4 Statistical Methods

The research data were analyzed by SPSS 26.0 software, and the econometric data was presented in the form of mean  $\pm$  standard deviation. The t-value was used as the research test value, and if  $p < 0.05$  was obtained, it can indicate that there are statistical significance between the research data.

## 3. Results

### 3.1 The Quality of Life Scores of Patients in Two Groups

The social relationships, surrounding environment, mental health, and physical health scores of patients in the research group were higher than those in the control group ( $p < 0.05$ ). The specific data of the study are shown in Table 1.

### 3.2 The Clinical Treatment Indicators of Patients in Two Groups

The NIHSS score of patients in the research group was lower than that in the control group, and the Fugl-Meyer score of upper limb and that of lower limb in the research group were both higher than those in the control group ( $p < 0.05$ ). The specific data of the study are shown in Table 2.

### 3.3 Serum Inflammatory Factors of Patients in Two Groups

The CRP, TNF- $\alpha$ , and IL-6 levels of patients in the research group were lower on average than those in the control group ( $p < 0.05$ ). The specific data of the study are shown in Table 3.

## 4. Discussion

In recent years, the clinical incidence rate of cerebrovascular disease has increased. Cerebrovascular disease is a group of brain disorders caused by cerebrovascular diseases and blood circulation disorders, which are divided into acute cerebrovascular diseases and chronic cerebrovascular diseases. Acute cerebrovascular disease, also called as cerebral stroke, includes cerebral infarction, cerebral hemorrhage, subarachnoid hemorrhage and transient ischemic attack, while chronic cerebrovascular disease include vascular dementia [2-3].

Traditional Chinese medicine classifies cerebrovascular disease into the scope of stroke. The pathogenesis of this disease is stagnation of blood, obstruction of venation, absence of consciousness, closure of orifices, dyskinesia of limbs and loss of nourishment of skin and muscles [4]. Acupuncture and moxibustion can make the blocked meridians in clinical patients become unblocked, blood begins to flow normally, and the human body gradually recovers to be healthy [5]. The treatment of patients with cerebrovascular disease with traditional Chinese medicine acupuncture and moxibustion can make the patients' blood vessels expand significantly, which is conducive to the enhancement of the blood circulation of

the collateral branches of the patients' cerebral vessels, so that the microcirculation of the patients' limbs and brain can be effectively adjusted, the brain tissue damaged by the patients' disease can be strengthened, the blood supply of the patients' brain tissue can be increased, and metabolism can be further promoted. Acupuncture and moxibustion at Neiguan point can calm the mind, dredge the meridians, regulate and relieve pain. Shuigou point has the functions of awakening and resuscitation, clearing heat. Jiquan acupoint has the function of broadening the chest, and activating meridians and collaterals. Zhiyang acupoint has the functions of meridian blood, dispelling pathogenic factors, supporting the body, and alleviating pain. Acupuncture at Dazhui acupoint can usually have the effect of relaxing muscles and activating collaterals, as well as promoting blood circulation and resolving blood stasis. The Yamen acupoint in the matching acupoints can collect and divert yang qi. Dicang acupoint can relieve pain, relax muscles and activate collaterals. Quchi acupoint can relieve pressure, relieve fatigue, relieve heat, and aid in bowel movements. In addition, acupuncture and moxibustion treatment can also

effectively activate the patient's Nervous tissue cells, so that the patient's related motor neuron can recover to normal functions as soon as possible. The combination of Chinese medicine acupuncture and moxibustion and medicine can significantly enhance the clinical treatment effect of patients with cerebrovascular disease. It helps repair the damaged brain tissue of patients with cerebrovascular disease, and significantly reduce the damage of brain tissue cells of patients [6]. From the data of this study, it can be seen that the social relationships, surrounding environment, mental and physical health scores of patients in the research group are higher than those in the control group. The NIHSS score of patients in the research group is lower than that in the control group, and the Fugl-Meyer score of upper limb and that in lower limb in the research group are both higher than those in the control group. The average levels of CRP, TNF- $\alpha$ , and IL-6 in the research group are lower than those in the control group. It can be proved that acupuncture and moxibustion combined with medication can improve the quality of daily life of patients, and is conducive to improving the motor function of patients.

**Table 1. The quality of Life Scores of Patients in Two Groups ( $\bar{x} \pm s$ , points)**

Group	Case	Social relationships	Surrounding environment	Mental health	Physical health
Research group	34	93.72 $\pm$ 3.91	92.35 $\pm$ 2.18	89.58 $\pm$ 2.08	92.39 $\pm$ 2.71
Control group	34	70.34 $\pm$ 2.87	70.58 $\pm$ 2.17	70.17 $\pm$ 1.69	71.76 $\pm$ 2.28
t	-	9.127	9.368	9.458	9.528
P	-	0.001	0.001	0.001	0.001

**Table 2. The Clinical Treatment Indicators of Patients in Two Groups ( $\bar{x} \pm s$ , points)**

Group	Case	NIHSS	Fugl-Meyer score of upper limb	Fugl-Meyer score of lower limb
Research group	34	11.43 $\pm$ 2.38	56.12 $\pm$ 6.16	24.59 $\pm$ 3.53
Control group	34	16.40 $\pm$ 2.73	44.37 $\pm$ 5.53	18.29 $\pm$ 2.83
t	-	8.096	8.117	8.658
P	-	0.001	0.001	0.001

**Table 3 Serum Inflammatory Factors of Patients in Two Groups ( $\bar{x} \pm s$ )**

Group	Case	CRP (mg/L)	TNF- $\alpha$ (ng/mL)	IL-6 (pg/mL)
Research group	34	4.32 $\pm$ 1.03	2.39 $\pm$ 0.45	12.06 $\pm$ 2.19
Control group	34	7.38 $\pm$ 1.53	3.48 $\pm$ 0.58	15.40 $\pm$ 2.65
t	-	9.138	9.246	9.254
P	-	0.001	0.001	0.001

## 5. conclusion

Acupuncture and moxibustion treatment has a good effect on patients with clinical cerebrovascular diseases. acupuncture and moxibustion treatment can improve the nerve defect of patients, promote the recovery of

patients' muscle strength, improve the quality of life of patients during treatment, and speed up the recovery of patients.

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