

Effect of Yiqi Tongnao Decoction on Acute Cerebral Infarction of Qi Deficiency and Blood Stasis

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Abstract: Objective: To explore the method and clinical effect of applying Yiqi Tongnao Decoction in the treatment of patients with acute cerebral infarction of Qi deficiency and blood stasis. **Methods:** To carry out research work in our hospital, a total of 70 patients with acute cerebral infarction of Qi deficiency and blood stasis who were treated in our hospital from March 2018 to March 2019 were randomly divided into two groups, one of which was given Western Medicine as the control group, and the other group was given Yiqi Tongnao Decoction combined with Western medicine, as the research group, the treatment status of the two groups of patients was compared and observed. **Results:** When comparing, the research group with skewed mouth and eyes, white greasy tongue coating, shortness of breath and fatigue, and pulse fineness scores were lower than those of the control group. The data difference between the groups was shown as $P < 0.05$. The difference between the research group and the control group is quite large. Before treatment, the NIHSS score of the two groups of patients did not change significantly, $P > 0.50$. After the treatment intervention, the score of the research group was (5.10 ± 1.24) , which was lower than that of the control group, and the difference between the groups was $P < 0.05$. Before receiving treatment, there was no significant difference in blood lipid levels between the two groups of patients, $P > 0.05$. After treatment, the blood lipid level of the two groups of patients both changed, but in contrast, the degree of change in the research group was significantly greater than that of the control group, $P < 0.05$, in general, the treatment effect of the research group was better. **Conclusion:** In the treatment of patients with acute cerebral infarction of qi deficiency and blood stasis, Yiqi Tongnao Decoction has significant effects, which can effectively improve the patients' adverse symptoms and has positive significance for clinical development.

1 Introduction

Cerebral infarction is a common disease in the clinic, mostly due to atherosclerotic changes in the patient's cerebral arteries, resulting in patients with local arterial stenosis and blockage, which in turn leads to brain vascular disease such as insufficient blood supply to the brain tissue, it has a relatively high clinical lethality and mortality, and it is the main disease that pose a serious threat to human physiological health [1]. From the perspective of traditional Chinese medicine, acute cerebral infarction belongs to the syndrome of Qi deficiency and blood stasis, and it belongs to the category of "stroke" in traditional Chinese medicine. To start treatment, it is necessary to focus on Qi benefiting, blood circulating, and vein relaxing [2]. On the basis of this study, Yiqi Tongnao Decoction was applied to explore its clinical intervention effect.

2 General information and research methods of patients

2.1 General information analysis

To carry out research work in our hospital, a total of 70 patients with acute cerebral infarction of Qi deficiency and blood stasis who were treated in our hospital from March 2018 to March 2019 were randomly divided into two groups, one of which was given western medicine treatment as control group, and the other group was given Yiqi Tongnao Decoction combined with western medicine treatment as research group, there are 35 patients in each group. Among them, in the research group, there were 22 male patients and 13 female patients. The average age of patients was (65.45 ± 3.23) years and the average course of disease was (8.78 ± 0.95) days. In the control group, the number of male patients and the number of females was 20 and 15 respectively. The average age and duration of the patients were (66.05 ± 3.56) years and (9.04 ± 0.85) days, respectively. There

was no significant difference in age and gender between the two groups of patients, $P > 0.05$, which can be compared between groups.

Inclusion criteria: The patient meets the diagnostic criteria of Qi deficiency and blood stasis syndrome in the "Guiding Principles of Clinical Yajiu of Traditional Chinese Medicines". The patient's diagnostic criteria for Western medicine are consistent with the diagnostic criteria for ischemic cerebrovascular disease in "Neurology". The patient was admitted within 2h-2 weeks after the initial onset. The patient was informed and agreed to participate in the study.

Exclusion criteria: The patient is allergic to research drugs, the patient has other major diseases, the patient has a mental disorder, the patient has transient cerebral ischemia, under imaging examination, the patient is found to have intracranial hemorrhage.

2.2 Research methods

In this study, the patients in the control group were treated with simple western medicines, with Shuxuening injection as the main application, and with drugs mainly selected from Shenwei Pharmaceutical Group Co., Ltd, with corresponding production lot number as 150612, dissolving it in 250ml of physiological saline, giving it intravenous drip. The dosage of the drug needs to be started from the patient's specific weight, 1-2g / kg, and the patient's urine volume is maintained at 30-50ml / h, once a day, with 14 days continuous medication.

Among the patients in the research group, Yiqi Tongnao Decoction should be applied at the same time with the treatment method in the control group. The specific prescription is: 30g Heliotrope, 60g Astragalus, 12g Dilong, 15g Chuanqiong, 30g Salvia miltiorrhiza, soak those herbal medicines for 30 minutes, and on this basis, decocting with water three times to ensure that each decoction is 150ml, and the decoction is mixed well, orally taking the decoction 30 minutes after meal, three times a day with continuous medication for 14 days.

2.3 Observation indicators

According to the "Standards for Diagnosis and Efficacy of TCM", the TCM syndrome scores of the two groups of patients were observed, which mainly included skewed mouth and eyes, shortness of breath and fatigue, white greasy tongue coating, and thin pulse. The higher the score, the more serious the patient's condition.

The stroke scale NIHSS was used to compare the degree of neurological damage before and after treatment, and the score was proportional to the patient's neurological deficit.

The improvement of blood lipid levels before and after treatment in two groups of patients was compared, including LDL-C, TG, TC and HDL-C.

2.4 Statistical methods

Using the statistical software SPSS20.0 as a tool, performing statistical analysis on the data presented in this study, verifying the t value of the comparison result of the measurement data ($\bar{x} \pm s$), verifying the χ^2 value of the comparison result of the count data (n,%). When the result showed $P < 0.05$, it indicated that there was statistical analysis value in the difference between the groups [3].

3 Results

3.1 TCM Symptom Points

When comparing, the research group with scores of skewed eyes and mouth, white and greasy tongue coating, shortness of breath and fatigue, and pulse thinness were lower than that of the control group. The data difference between the groups was $P < 0.05$, which was significant. This difference is quite large.

Table 1 Comparison of TCM Syndrome Points of Two Groups of Patients After Treatment ($\bar{x} \pm s$)

Group	Skewed eyes and mouth	Shortness of breath and fatigue	White greasy tongue	Pulse finesse
Research Group (n=35)	1.34±0.14	1.03±0.55	0.76±0.44	1.07±0.21
Control Group (n=35)	2.25±0.99	3.99±1.00	2.10±0.88	2.98±1.44
t	4.059	5.883	4.755	5.495
P	<0.05	<0.05	<0.05	<0.05

3.2 Comparison of NIHSS scores between two groups of patients before and after treatment

Before treatment, there was no significant change in the NIHSS score of the two groups of patients, $P > 0.50$.

Table 2 Comparison of NIHSS scores between two groups of patients before and after treatment ($\bar{x} \pm s$)

Group	Before treatment	After treatment
Research Group (n=35)	10.44±2.35	5.10±1.24

After the treatment intervention, the score of the research group was (5.10 ± 1.24), which was lower than that of the control group, it shows that research group has a better result.

Control Group (n=35)	10.78±0.95	7.96±299
t	0.495	9.045
P	>0.05	<0.05

3.3 Comparison of changes in blood lipid level before and after treatment

Before receiving treatment, there was no significant difference in blood lipid level between the two groups of patients, $P > 0.05$. After treatment, the blood lipid level of

the two groups of patients both changed, but in contrast, the degree of change in the research group was significantly greater than that of the control group, $P < 0.05$, the research group has a good result, as shown in the following table.

Table 3 Comparison of changes in blood lipid level between two groups of patients before and after treatment ($\bar{X} \pm s$)

Group	Time	TC	TG	HDL-C	LDL-C
Research Group (n=35)	Before treatment	5.44±1.22	1.98±0.85	1.04±0.44	2.97±0.84
	After treatment	4.40±1.03	1.55±0.43	1.22±0.54	2.23±0.65
Control Group (n=35)	Before treatment	5.79±1.20	1.99±0.75	0.97±0.43	2.99±0.75
	After treatment	5.20±1.22	1.74±0.83	1.02±0.32	2.67±0.74

4 Discussion

As far as acute cerebral infarction is concerned, it belongs to an acute ischemic cerebral infarction problem, which mostly occurs in the elderly, and patients usually have high blood pressure, coronary heart disease and diabetes and other basic diseases [4]. The onset of this disease occurs mostly when the patient is resting, and the initial development rate is slow, but it will reach the climax in a short period of time, usually a few minutes, or 1-2 days, which will cause the patient to appear hemiplegia and aphasia [5]. Judging from the current clinical development situation, the treatment of this disease is usually by using of brain protective agents and dehydrating agents, but the clinical effect is not significant to reach the ideal result, which will make it difficult to effectively improve the clinical symptoms of patients. From the perspective of traditional Chinese medicine, the pathophysiological basis of patients with acute cerebral infarction of Qi deficiency and blood stasis is cerebral infarction. At the same time, patients are accompanied by weakening of the organs and the occurrence of problems such as physical weakness, and the pathogenesis of this disease are mainly wind evil invasion, meridian empty and so on. According to the results of relevant research data, the main pathogenesis of ischemic stroke is Qi deficiency with blood stagnation, and arthralgia blocks the brain collateral. Therefore, the treatment needs to focus on increasing Qi and blood circulation, dispersing blood stasis and dredging collateral [6].

This study mainly applies Yiqi Tongnao Decoction, in which Astragalus is the governing medicine and Dilong is the minor medicine, Salvia miltiorrhiza, Chuan Qiong and Heliotrope are adjuvants. Astragalus belongs to liver and lung meridian, and is mainly used in the treatment of Qi and blood circulation, Salvia miltiorrhiza belongs to liver and heart meridian, and is mainly used in the treatment of heartache, chest and heat pain, Heliotrope can achieve the effects of regulating menstruation and

analgesic, soothing muscles, Dilong has the effect of activating blood circulation, removing blood stasis, and activating meridian, Chuanqiong has the effect of Qi and pain relief, divergence and circulation, etc. [7]. In the case of using various medicines in combination, it can achieve the effect of activating blood circulation and benefiting Qi, tonifying the pulse and removing blood stasis of the patients, improving the chest micro-circulation of the patients, protecting brain tissue, and promoting the expansion of the patient's cerebral blood vessels, improving the patient's blood flow and brain hematology index [8].

The results of this study showed that when comparing, the research group after treatment with scores of skewed eyes and mouth, white and greasy tongue coating, shortness of breath, fatigue, and fine pulse were lower than those of the control group. The data difference between the groups was $P < 0.05$, which is very significant. Before treatment, the NIHSS score of the two groups of patients did not change significantly, $P > 0.50$. After the treatment intervention, the score of the research group was (5.10 ± 1.24) , which was lower than that of the control group, and the difference between the groups was $P < 0.05$. Before receiving treatment, there was no significant difference in blood lipid level between the two groups of patients, $P > 0.05$. After treatment, the blood lipid level of the two groups of patients both changed, but in contrast, the degree of change in the research group was significantly greater than that of the control group, $P < 0.05$, in general, the treatment effect of the research group was better.

In summary, in the treatment of patients with acute cerebral infarction of Qi deficiency and blood stasis, it has a significant effect by using Yiqi Tongnao Decoction, it can effectively improve the patients' adverse symptoms, and has positive significance for clinical development.

References

1. Wang Xi. Effect analysis of Yiqi Tongnao Decoction on acute cerebral infarction of Qi deficiency and

- blood stasis [J]. *Guangming Traditional Chinese Medicine*, 2016, 31 (24): 3602-3604.
2. Zhou Zhongping, Tang Lianghua. Therapeutic effect analysis of Yiqi Tongnao Decoction on acute cerebral infarction of Qi deficiency and blood stasis [J]. *The World's Latest Medical Information Digest*, 2017, 17 (52): 206 + 210.
 3. Wu Hongqiang. Observation on the therapeutic effect of Yiqi Tongnao Decoction on acute cerebral infarction of Qi deficiency and blood stasis [J]. *Journal of Cardiology of Integrated Chinese and Western Medicine*, 2019,7 (34): 171.
 4. Jing Lei. Effect of Yiqi Tongnao Decoction on patients with acute cerebral infarction due to Qi deficiency and blood stasis [J]. *Clinical Medicine Research and Practice*, 2017,2 (35): 95-96.
 5. Wang Zhengjun. Observation on Treatment of Acute Cerebral Infarction of Qi Deficiency and Blood Stasis with Yiqi Tongnao Decoction [J]. *Modern Distance Education of Chinese Medicine*, 2015,13 (21): 54-55.
 6. Li Ying, Cai Jinwei, Huang Zhen, Ji Xiaoxia, Pei Wen, Shen Yiyao, Li Wenbin. Observation of therapeutic effect of Yiqi Tongnao Decoction on 35 cases of acute cerebral infarction with deficiency of Qi and blood stasis [J]. *Journal of Cardiocerebral Vascular Diseases with Integrated Chinese and Western Medicine*, 2013,11 (10): 1167-1168.
 7. Li Ying, Cai Jinwei, Huang Zhen, Ji Xiaoxia, Pei Wen, Shen Yiyao. Effect of Yiqi Tongnao Decoction on Coagulation Function in Patients with Acute Cerebral Infarction [J]. *Shandong Journal of Traditional Chinese Medicine*, 2013,32 (10): 719-721.
 8. Nie Lanmin. Progress of traditional Chinese medicine treatment of acute cerebral infarction [J]. *Popular Science and Technology*, 2015,17 (11): 82-83.