

# Clinical Efficacy of Clinical Nerve Intervention in the Treatment of Cerebrovascular Diseases

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## Abstract

**Objective:** To explore the clinical efficacy of clinical nerve intervention in the treatment of cerebrovascular diseases. **Methods:** 72 cases of patients with cerebrovascular disease in our hospital from June 2019 to June 2020 were randomly divided into observation group and control group, 36 cases in each group. The patients in the observation group were treated with clinical nerve intervention, while those in the control group were treated by craniotomy. The quality of life, complications, recurrences and improvement of arterial blood vessels were compared and analyzed. **Results:** The total incidence of complications in the observation group 0 cases (0.00%) was significantly lower than the control group 6 cases (16.67%), the improvement rate of arterial thrombosis in the observation group 33 cases (91.67%) was significantly higher than the control group 26 cases (72.22%), the recurrence rate of the observation group 0 cases (0.00%) was significantly lower than the control group 7 cases (19.44%), the differences were statistically significant ( $P < 0.05$ ). The scores of quality of life (QOL) of meeting, body, environment, psychology and comprehensive in the observation group were significantly higher than the control group ( $P < 0.05$ ). **Conclusion:** For patients with cerebrovascular disease, clinical nerve intervention therapy can significantly improve the quality of life of patients, reduce the recurrence rate of disease, improve the patients' arterial blood vessels, reduce the incidence of complications, it is safe and effective, with clinical application value.

## Keywords

Cerebrovascular disease, Clinical efficacy, Clinical, Nerve intervention therapy

## 1. Introduction

In clinical practice, cerebrovascular disease is one of the typical malignant diseases, which seriously threatens human health and has a high mortality and disability rate [1]. With the continuous increase in the incidence of disease, clinical treatment research has gradually deepened, and nerve intervention therapy has become the main way, committed to improving the quality of life and survival probability of patients, and achieved good practical results [2]. In this study, 72 patients with cerebrovascular diseases in our hospital from June 2019 to June 2020 were treated with clinical Neurointerventional therapy.

## 2. Materials and methods

### 2.1. General information

72 cases of patients with cerebrovascular disease in our hospital from June 2019 to June 2020 were randomly divided into observation group and control group, 36 cases in each group. The patients in the observation group were treated with clinical nerve intervention, while those in the control group were treated by craniotomy. The quality of life, complications, recurrence and improvement of arterial blood vessels were compared and analyzed. All patients voluntarily participated in the study and were approved by the hospital ethics committee. Exclusion criteria: those who were not willing to participate in this study. Inclusive criteria: in line with the diagnostic criteria of cerebrovascular disease; no previous psychiatric history; good compliance of the research object. The observation group was (25-65) years old, with an average of  $(52.2 \pm 2.1)$  years old, with 26 males and 10 females; the control group was (26-64) years old, with an average of  $(52.8 \pm 2.3)$  years old, with 25 males and 11 females. Compared with the general data, there was no statistical difference.

### 2.2. Methods

#### 2.2.1 Control group

The patients were treated by craniotomy. First install the head frame, fix the patient's head in the process of specific implementation of the operation, and then implement effective epidural anesthesia. Based on this, according to the specific examination results of brain CT, the patient is craniotomy with electric drill to thoroughly remove the hematoma and check the hematoma of the patients.

#### 2.2.2 Observation group

Clinical Neurointerventional therapy was applied. The vital signs such as blood pressure, pulse and so on were monitored, and a series of routine examinations were carried out, and then the nerve intervention operation was carried out. In the specific process, select the appropriate puncture point, disinfect the inguinal part of the patient, use the guide tube to enter the lesion site through the puncture point, carry out local anesthesia for the patient, achieve the purpose of treatment, and carry out injection embolization and drug treatment [3]. At the end of the operation, pay attention to the basic characteristics of patients, at the same time, effectively bandage the puncture site.

### 2.3. Observation indexes

The quality of life, complications, recurrence and improvement of arterial blood vessels were compared and analyzed. Quality of life score [4]: the WHOQOL-BREF scale was selected and divided into 5 fields, namely, society, body, environment, psychology and comprehensive, with a total of 26 items. When the quality of life of the patients is better, the higher the score will be.

### 2.4. Statistical analysis

Spss23.0 statistical software was used to represent the measurement data with the mean  $\pm$  standard deviation ( $\bar{x} \pm s$ ), and t test should be selected to test the quality of life between the two groups; the use rate of count data, the treatment effect comparison of complications, disease recurrence and arterial improvement between the two groups was performed by chi square test. When the difference was statistically significant,  $P < 0.05$ .

## 3. Results

### 3.1 Comparison of treatment effects of the two groups

The total incidence of complications in the observation group was 0 cases (0.00%), which was significantly lower than the control group 6 cases (16.67%). The improvement rate of arterial thrombosis in the observation group was 33 cases (91.67%), which was significantly higher than the control group 26 cases (72.22%). The recurrence rate of the observation group was 0 cases (0.00%), which was significantly lower than the control group 7 cases (19.44%). The differences were statistically significant ( $P < 0.05$ ). See Table 1.

**Table 1. Comparison of treatment effect between the two groups [n (%)]**

Group	n	Complication	Improvement of arterial thrombosis	Relapse
Observation group	36	0 (0.00)	33 (91.67)	0 (0.00)
Control group	36	6 (16.67)	26 (72.22)	7 (19.44)
X <sup>2</sup>		4.5455	4.5997	5.6967
P		0.0330	0.0320	0.0170

### 3.2 Comparison of quality of life of the two groups

Compared with the control group, the social, physical, environmental, psychological, comprehensive quality of life scores of the observation group were significantly higher, the differences were statistically significant ( $P < 0.05$ ), see Table 2.

**Table 2. Comparison of WHOQOL-BREF scores between the two groups ( $\bar{x} \pm s$ , points)**

Group	n	Sociology	Body	Environmental Science	Psychology	Comprehensive
Observation group	36	24.95±5.40	23.17±5.30	23.37±5.16	23.33±5.32	26.47±5.60
Control group		18.06±5.31	17.66±5.26	17.20±5.11	17.24±5.24	18.66±5.56
t		5.4586	4.4274	5.0977	4.8934	5.9381
P	36	0.0000	0.0000	0.0000	0.0000	0.0000

## 4. Discussion

There are ischemic diseases and hemorrhagic diseases in cerebrovascular diseases. The common treatment principle is to control basic diseases, including arteriosclerosis, hypertension, diabetes, hyperlipidemia, homocysteinemia, etc., as well as prevention of infection and other complications [5-6]. In addition, comprehensive measures such as nutritional therapy, rehabilitation therapy, traditional Chinese medicine, acupuncture and massage are supported [7]. These are common treatments principle. Methods there are drug treatment and surgical treatment, for ischemic patients, there are anticoagulant therapy, thrombolytic therapy, protection of brain cells, and repair of brain cells function to prevent recurrence. For bleeding, there are conservative treatment, hemostasis, blood pressure, intracranial pressure, surgical removal of hematoma, treatment of aneurysms and other principles [8-9]. During the rehabilitation period, rehabilitation is unified, and the prevention of recurrence is also unified [10]. These are the basic principles for the treatment of cerebrovascular disease [11]. According to the different priorities, the different incidence and the different resistance, it is basically a specific analysis of specific problems [12]. Only comprehensive measures and targeted treatment can achieve good clinical effect.

Cerebrovascular disease is a high incidence of malignant disease, extremely dangerous, usually bring serious harm to patients and families, usually accompanied by serious complications, increasing the burden of life of patients [13]. In the elderly, cerebrovascular diseases are more common. Arteriosclerosis, tumor, heart disease, hypertension, etc., can cause the occurrence of cerebrovascular diseases. The pathogenesis factors are more complex, which can reduce the blood supply function of cerebral blood vessels, and the cerebral blood vessels are mutated, which seriously threaten the brain health of patients [14]. Neurointerventional therapy mainly relies on venous catheterization and arteries to treat patients with intracranial cerebral vessels. As a new treatment method, it has higher safety and less harm to patients. In addition, this treatment has an extremely wide range of applications, and has a rapid recovery after surgery, without severe gravity function or liver and kidney dysfunction. Therefore, in the treatment of cerebrovascular diseases, the nerve intervention therapy is selected to complete [15].

In this study, the total incidence of complications in the observation group (0.00%) was significantly lower than the control group 6 cases (16.67%). The improvement rate of arterial thrombosis in the observation group was significantly higher than the control group (26 cases, 72.22%). The recurrence rate in the observation group 0 cases (0.00%) was significantly lower than the control group 7 cases (19.44%) in the control group. The comprehensive quality of life scores were significantly higher, the difference was statistically significant. The results of this study confirmed that for patients with cerebrovascular disease, clinical nerve intervention therapy can improve the disease treatment effect of patients to a certain extent, improve the quality of life, and achieve significant effect.

To sum up, for patients with cerebrovascular disease, the use of clinical nerve intervention therapy, can significantly improve the quality of life of patients, reduce the recurrence rate of disease, improve the patient's arterial blood vessels, reduce the incidence of complications, it is safe and effective, with clinical application value.

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