

Analysis of the Influence of Fibrinolytic Enzyme Combined with Ginkgo Biloba Extract with Oxygen Inhalation in the Treatment of Acute Cerebral Infarction on Patients' Mental Function and Prognosis

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Abstract: It was to analyze the effects of fibrinolytic enzyme combined with ginkgo biloba extract inhaled with oxygen on patients with acute cerebral infarction in this study. It was selected as research objects that 106 patients with acute cerebral infarction admitted to our hospital from January 2014 to January 2015, and who were randomly divided into experimental group (53 cases) and control group (53 cases). Compared the therapeutic effects of the two groups in this experiment, patients in both groups were given regular treatment, the control group on the basis of fibrinolytic enzyme combined with simple oxygen inhalation treatment; The experimental group was treated with fibrinolytic enzyme combined with ginkgo biloba extract inhaled with oxygen. Results there was no significant difference between the two groups ($p > 0.05$), it was (31.53 ± 5.44) that score of energy deficiency in the experimental group, and it was (31.67 ± 5.66) in the control group. There was no significant difference between the two groups ($p > 0.05$). It was (12.79 ± 4.56) that score of mental energy deficiency in the experimental group, and it was (15.32 ± 4.89) in the control group. There was improvement in the scores of deformity in two groups, but it significantly improved in the experimental group. The improvement was obvious in the experimental group. It was 9 6.23% of total efficiency in the experimental group, and that of the control group was 8 6.79%. It was significantly higher that total efficiency of the experimental group than that of the control group. It was better that the prognosis of the experimental group than that of the control group. Conclusion it can effectively improve the patients' mental function that fibrinolytic enzyme combined with ginkgo biloba extract inhaled with oxygen (drug oxygen inhalation) in the treatment of acute cerebral infarction, and promote their recovery, which is worthy of clinical promotion.

Keywords: Fibrinolytic enzyme; Ginkgo biloba extract; Oxygen inhalation; Acute cerebral infarction

1. Introduction

Cerebral infarction is an ischemic stroke, which is mainly caused by the obstruction of blood supply. Cerebral infarction can cause neurodegenerative diseases, hypoxic necrosis and cerebral tissue ischemia in the course of emotional development [1]. Acute cerebral infarction is more common in the elderly. In recent years, the incidence rate has shown a certain rising trend, which poses a certain degree of threat to the life and health of the elderly population. A certain result was obtained which were treated the patients admitted to our hospital with acute cerebral infarction by fibrinolytic enzyme combined with ginkgo biloba extract following oxygen inhalation (drug oxygen inhalation) from January 2014 to

January 2015 in order to study the effective treatment of acute cerebral infarction. This report is as follows.

2. Materials and Methods Inclusion Criteria

All patients met the inclusion criteria for the diagnosis of acute cerebral infarction (formulated by the cerebrovascular conference) and CT examination, the patients and their families were informed of the study and signed the informed consent. exclusion criteria [2]. patients with severe dysfunction of heart, liver and kidney, patients with severe mental disorder, patients who have been treated with other drugs within 1 week, and patients with active bleeding tendency.

2.1. Clinical data

Who were taken as clinical observation objects that 106 cases of acute cerebral infarction patients admitted and treated in our hospital from January 2014 to December 2012 and were divided into experimental group (53 cases) and contrast group (53 cases) by random number method. In the experimental group, there were 27 males and 26 females, aged 42 to 75 years old, with an average age of (59.6± 5.2 years old), a course of 3 to 20 h, and an average course of (15.4± 4.2)h. In the control group, 29 males and 24 females were aged 45 to 73 years, with an average age of 61.6 ± 5.3 years, a course of 3 to 19 h, and an average course of 14.5 ± 3.9 h. There was no statistically significant difference between the two groups in gender, age, course of disease and other aspects (p> 0.05). It was comparable in two groups.

2.2. Square method

Patients in both groups were given conventional treatment, which mainly included lowering blood pressure, control brain swelling, Maintain electrolyte balance, brain protection agent. On this basis, the treatment group was given fibrinolytic enzyme combined with simple oxygen inhalation. 20 units of fibrinolytic enzyme (approved by China national drug administration, H11022110, produced by Beijing sisheng pharmaceutical co., LTD.) were diluted in 500 ml sodium chloride injection (0.9%), intravenously injected once a day, and continuously injected for 10d. At the same time, low-flow oxygen was continuously inhaled, and the oxygen flow was controlled to be 1.5L/min, and the inhalation time was 0.5, once a day, for 10 days. The experimental group was treated with fibrinolytic enzyme combined with ginkgo biloba extract. The use of fibrinolytic enzyme was consistent with the control group. Ginkgo biloba extract drops (DR willmar schwabe Gmbe @amp: CO KG, registration number: H20090365 30ml, 1.2g kinnado, Germany). Dissolved 30 ml of oxygenated solution in 150 ml distilled water and placed in a humidification flask. The air door of the atomizer is connected with the medical oxygen, allowing the oxygen to fully mix with the medicine. Assist the patient to hold the atomizer mouth and slowly suck the mixed drug, with the oxygen flow controlled at 1.5l/min and the suction time at 0.5h once a day for 10 days.

Table 2. Comparison of efficacy between the two groups

Groups	Cases	Heal	Effective	Partical response	Invaild	Total effective rate
Experimental group	53	20(37.74)	19(35.85)	12 (22.64)	2(3.77)	51(96.23)
Control group	53	14(26.42)	17(32.07)	15(28.30)	7(13.21)	16(86.79)

Comparison of prognosis between the two groups: The prognosis of the experimental group was better than that of the contrast group

4. Discussions

Acute myocardial infarction (AMI) is characterized by a more acute onset, with a sudden onset usually occurring

2.3. Efficacy determination

The actual curative effect of the patients was evaluated according to the score standard of neurological function defect approved by the 4th session of cerebrovascular disease conference of Chinese medical association. The lower the score, The better the neurological function of the patients. Recovery the score of functional defect decreased by more than 91 %, and the degree of disability was 0. Significant effect: the score of functional defect decreased by 46 % to 90 %, and the degree of disability was 1 to 3. Effective: functional defect score decreased by 18 % to 45 %. Inefficacy: functional defect score decreased by less than 18 %. Total effective rate = (cured + significant + effective)/total cases.

2.4. Statistical methods

It was used to analyze the data that SPSS 16.0 statistical software. The measurement data were expressed as mean standard deviation ($\bar{x} \pm s$), and t test was used for the comparison between groups. $\alpha = 0.05$ is the test leve.

3. Results

3.1. Comparison of scores of neurological defects between the two groups before and after treatment

There was no significant difference in neurological defect scores between the two groups (P>0.05) before treatment. The scores of nerve defects in both groups were improved after treatment, but the improvement was more obvious in the experimental group.

Table 1. Comparison of neurological defect scores between the two groups before and after treatment

Time/Group	Experimental group	Control group
Prior treatment	31.53±5.44	31.67± 5.56
Posttreatment	12.79±4.65	15.32±4.89

3.2. Comparison of efficacy between the two groups

It was 96.23% that total effective rate of the experimental group, and that of the control group was 86.79%. It was higher that total effective rate of the experimental group than in the control groupof (P<0.05).

during quiet rest or sleep, the onset of the disease will develop rapidly and reach a peak within 1 to 2 days. Patients with acute cerebral infarction often present with headache, vertigo, tinnitus and other symptoms. When the disease is severe, Patients may present with hemipleg

and difficulty swallowing and some of the patients may also suffer from slurred speech, nausea and vomiting. Studies have shown that patients with multiple acute cerebral infarction are associated with atherosclerosis, hyperlipidemia and coronary heart disease and diabetes. There may be recurrence of the disease, and is relatively stubborn even if the treatment is successful. Modern medicine advocates early stage therapy, individualized therapy and holistic therapy in the treatment of acute cerebral infarction. Routine treatment methods include arterial thrombolysis, Antiplatelet aggregation therapy, anticoagulation therapy and brain protection therapy. However, thrombolytic therapy has made a definite impact on the actual effect of thrombolytic therapy, and has made some progress in its popularization because it has many contraindications and is difficult to be done within the thrombolytic time window in the actual clinical treatment. Brain protection therapy has better suitability Compared with thrombolytic therapy. Through the use of drugs to produce sustained protection of the scriptures, it can avoid the death of shen jing yuan to prevent and obstruct ischemia and reperfusion after ischemia, which is of obvious use for the disease situation. Fibrinolytic enzyme is used for the specific degradation of fibrinogen to reduce the level of fibrinogen in the body as an important component of the fibrinolytic system, so as to control the excessive coagulation of fibrinogen [5]. There is an ischemic penumbra around the central infarction dead area in the early stage, and a large number of active neurons still exist in the area after the onset of acute cerebral infarction. If the patient can receive timely treatment, the blood flow can be restored quickly, which is beneficial to improve the brain and restore the normal function of the active god. While controlling the excessive coagulation of fibrinolytic proteins, fibrinolytic enzymes can accelerate the dissolution of thrombus, inhibit the formation of new thrombus, and restore the blood

flow to normal level in time, so as to maintain the brain function of the patients and prevent the death by infarction again. Ginkgo biloba extract (ginnado) can promote the circulation of brain and limb, and can inhibit the generation of platelet activating factor, so as to protect neurocyte. At the same time, ginkgo biloba extract can regulate the vascular tension and elasticity, which is helpful to prevent the decrease of blood flow in the central nervous system. In addition, ginkgo biloba extract is conducive to promoting the recovery of patients, as it has antioxidant function and it can timely remove excessive free radicals in the body, maintain the internal environment balance. Ginkgo biloba extract was mixed with oxygen, and oxygen was used as drug carrier to form drug oxysol. The drug will be rapidly absorbed from the respiratory tract and alveolar tissue in the form of a sol under high oxygen conditions, and through the blood circulation to the brain, to rapidly improve the brain blood supply, oxygen supply, and enhance the cerebral arterial oxygen saturation. This administration method can also enhance the blood oxygen content partial pressure and blood oxygen dispersion ability, promote the recovery of brain cells and brain god, let the disease situation quickly controlled.

From the results of this study, there was no significant difference between the two groups ($p > 0.05$) due to neurological defects were scored as (3.153 ± 5.44) in the experimental group and the score was (3.167 ± 5.56) in the control group before treatment. The scores of neurological defects in the experimental group were (12.7 ± 4.65), and those in the control group were (15.32 ± 4.89) after treatment. The scores of nerve defects were improved in both groups, but the experimental group showed a greater improvement.

It was that total effective rate of the experimental group higher than that of the control group ($P > 0.05$) due to It was 96.23 % that the total effective rate of the experimental group, and it

was 86.79 %that of the control group. The prognosis of the experimental group was better than that of the control group ($P>0.05$).The results were similar to those reported in the literature [7].Thus it is worthy of clinical promotion and application that the treatment of

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drug oxygen inhalation on the basis of fibrinolytic enzyme, which can further improve the patient's condition, promote the maintenance of nerve function and brain metabolism, rapidly control the disease, and improve the prognosis.