



Application Effect of Emergency Nursing Process in Elderly Patients with Acute Cerebral Infarction

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Abstract: Objective — To explore the application effect of emergency nursing process in elderly patients with acute cerebral infarction. Methods — 206 elderly patients with acute cerebral infarction who received routine care in our hospital from January to December 2020 were selected as the control group, and 297 patients who received emergency nursing procedures from January to December 2021 were selected as the observation group. The treatment time, neurological function score, and living ability were compared between the two groups. Results — The triage time, referral time, and comprehensive treatment time of the observation group were shorter than those of the control group ($P<0.05$); the neurological function scores and daily living ability scores of the observation group were higher than those of the control group ($P<0.05$). Conclusion — The emergency nursing process can seize the best treatment time for elderly patients with acute cerebral infarction, improve the treatment effect and living ability, and is worthy of popularization and application.

Keywords: acute cerebral infarction in the elderly, emergency nursing process, treatment effect, prognosis

Cerebral infarction is one of the common cerebrovascular diseases in neurology. It is a brain injury caused by rupture of intracranial blood vessels or blockage of blood vessels that cannot flow into the brain. The affected population is mainly the elderly. The immune function, reactivity, and physical activity of the elderly are gradually declining. After the disease, cognitive dysfunction and movement disorders are aggravated, which affects the quality of life of patients [1]. Acute cerebral infarction is acute and progresses rapidly, with high disability and fatality rates. The shorter the time from onset to thrombolysis, the greater the chance of successful treatment and the lower the degree of neurological deficit. The development of a reasonable and smooth emergency nursing program can reduce the time for patients to receive treatment, and improve the success rate and prognosis of patients [2]. Therefore, in this paper, a case-randomized control was conducted to explore the application effect of emergency nursing process in elderly patients with acute cerebral infarction. The report is as follows.

1. Materials and methods

1.1 General information

206 elderly patients with acute cerebral infarction who received routine care in our hospital from January to December 2020 were selected as the control group, and 297 patients who received emergency nursing procedures from January to December 2021 were selected as the observation group. There were 112 males and 94 females in the control group, aged (60-88) years, average (71.25 ± 3.53) years, onset to admission time (2-28) hours, average (16.01 ± 3.04) hours; 160 males in the observation group, 137 females, aged (58-86) years old, average (72.54 ± 3.31) years old, onset to admission time (1-20) h, average (14.96 ± 4.02) h. All patients were diagnosed by head CT imaging examination, and there was no history of brain surgery or coagulation disorder, and their families were informed of this study.

1.2 Methods

Both groups of patients were given symptomatic treatment such as thrombolysis, lowering intracranial pressure and anticoagulation after admission. The group was given routine nursing procedures, closely monitored various physiological indicators of the patient, and if there was a sudden situation, immediate rescue work was performed; the patient was given physiological care according to the doctor's order, and the adverse reactions were closely observed after medication. The observation group was given emergency nursing procedures, and the specific methods were as follows. (1) Establish an emergency nursing team, select experienced and responsible head nurses, responsible nurses, and emergency pre-examination nurses as team members, all carry out emergency technical training, and formulate detailed emergency nursing flowcharts and emergency plans. (2) Emergency pre-examination nurses should grasp the main aspects that threaten the

patient's life, distinguish the priorities, use the fastest and most effective method to rescue the patient's life, stabilize the vital signs and then evaluate the condition, register in the emergency department first, open a green channel for the patient, notify the specialist and communicate the patient's situation. (3) Start the stroke emergency process, the responsible nurse immediately establishes a venous channel, quickly collects blood for laboratory examination, quickly checks the patient's blood pressure, blood oxygen saturation, and provides continuous ECG monitoring; quickly gives oxygen inhalation, vascular access, and infusion Interventions such as antiplatelet drugs, heparin anticoagulants, and antiarrhythmic drugs. If the patient has cardiac arrest, give cardiopulmonary resuscitation. If the patient is in shock, give antishock therapy, and then implement thrombolytic therapy.

1.3 Observation indicators

(1) The triage time, referral time, and comprehensive treatment time of the two groups were compared. (2) The neurological function and daily living ability scores of the two groups were compared. According to the neurological function scoring standard, hand coordination, upper limb reflexes, wrist function, and flexion-extension coordination are scored, with a total score of 12 points. The higher the total score, the better the recovery of neurological function; according to the daily living ability index scoring standard (BI)[3], the daily autonomous living ability of the patients after treatment was scored, with a total score of 60 points. The higher the total score, the stronger the patient's daily autonomous living ability.

1.4 Statistical analysis

SPSS18.0 software was used for processing, and the count data was tested by χ^2 , which was represented by n (%), and the measurement data was represented by t test, which was represented by $(\bar{x} \pm 2)$.

2. Results

2.1 Comparison of treatment time between the two groups

The triage time, referral time, and comprehensive treatment time of patients in the observation group were all shorter than those in the control group ($P < 0.05$), as shown in Table 1.

Table 1. Comparison of treatment time between the two groups($\bar{x} \pm 2$)

Group	Number of cases	Triage time	Referral time	Comprehensive treatment time
Control group	206	3.05±0.88	52.58±4.59	70.48±6.78
Observation group	297	0.67±0.16	29.48±2.58	40.37±4.38
t	/	5.686	4.568	7.462
P	/	0.041	0.023	0.024

2.2 Comparison of neurological function and daily living ability scores between the two groups

The neurological function scores and daily living ability scores of the observation group were higher than those of the control group ($P < 0.05$), as shown in Table 2.

Table 2. Comparison of neurological function and daily living ability scores between the two groups ($\bar{x} \pm 2$)

Group	Number of cases	Neurological function score (point)	Daily life ability score (point)
Control group	206	7.26±1.36	38.02±2.35
Observation group	297	10.12±1.25	50.23±2.47
t	/	6.124	7.256
P	/	0.031	0.019

3. Discussion

In recent years, the incidence of cerebral infarction in my country has been increasing year by year, and the incidence of the disease is mainly concentrated in the 60-year-old. The disease has a high mortality and disability rate. The factors

that cause this disease include insufficient cerebral blood supply, increased intracranial pressure, rupture of blood vessels, bad living habits, diabetes, gender and other factors. The principle of clinical treatment is thrombolysis, protecting the nervous system, lowering blood pressure, and increasing mobility. Although the current medical technology is relatively mature, and after effective treatment, patients can survive, but between 50% and 70% of the patients will have different degrees of sequelae [4]. Therefore, it is very important to carry out effective treatment in the early stage, which can improve the success rate of treatment and reduce the disability rate.

Thrombolysis is an important method for clinical treatment of acute cerebral infarction. To achieve the best therapeutic effect, the treatment time window needs to be minimized. The routine nursing process will have time to wait for registration, triage, and examination. It will take a long time to wait for the examination results, and then return to the emergency room after the results appear. The transfer time will be long, and explaining the condition with the neurologist will affect the treatment time window [5]. Emergency nursing is a comprehensive, scientific, effective and standardized nursing method. Medical staff use the shortest time to evaluate the patient's condition and prepare for smooth treatment. The medical staff has clear work arrangements, clear first aid steps, and implements treatment. The action is fast and standardized, which shortens the emergency time and greatly ensures the safety of the patient's life. Emergency nursing provides symptomatic treatment and first aid according to the actual situation of the patient, quickly gives the patient oxygen, establishes an intravenous channel, administers thrombolytic or sedative drugs, performs cardiopulmonary resuscitation for the cardiac arrest, and closely observes the patient's condition and vital indicators during transit. If an abnormality occurs, you can quickly rescue and open a green channel. At the same time, you can get in touch with neurology experts to communicate the patient's condition and various life indicators, so as to prepare the required drugs and medical equipment, so that the patient can go smoothly in the shortest time of receiving treatment. On the other hand, the implementation of the emergency nursing process can shorten the waiting time of patients in emergency triage, examination, transfer and treatment, thereby giving doctors and nurses more preparation time.

In the implementation of the emergency nursing process, an emergency nursing team should be established, technical training should be strengthened, respective responsibilities should be clarified, and the seamless connection between doctors and nurses should be strengthened [6]. In this study, the triage time, referral time, and comprehensive treatment time of patients in the observation group were all shorter than those in the control group ($P<0.05$). Shorten the time for triage, referral and thrombolysis, thereby improving the success rate of treatment. Seizing the golden treatment time of emergency cerebral infarction can improve the success rate of rescue. Emergency nursing uses the shortest time in emergency to carry out active and effective treatment to reduce neurological damage. In this study, the neurological function scores and daily living ability scores of the observation group were higher than those of the control group ($P<0.05$), which indicated that the emergency nursing process could reduce neurological damage and improve the prognosis and quality of life in elderly patients with acute cerebral infarction.

To sum up, the emergency nursing process can seize the best treatment time for elderly patients with acute cerebral infarction, improve the treatment effect and living ability, and is worthy of popularization and application.

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