

# Application of comprehensive nursing in interventional thrombolysis for acute cerebral infarction

Ma Zichun

The Third People's Hospital of Guiyang, Guiyang Guizhou 550000, China

**【Abstract】 Objective:** To explore the application effect of interventional thrombolysis in acute cerebral infarction patients using comprehensive care. **Methods:** According to the random number table method in our hospital 35 patients with acute cerebral infarction interventional thrombolysis (2021. 01-2022. 03) grouping study, 18 patients in the control group, using routine care, 17 patients in the observation group, using evidence-based model of care, compared the effects of care in each group. **Results:** Before the intervention, there was no difference in nhiss scores between the groups ( $P>0.05$ ); After the intervention, there was no difference in the comparison of the success rates of thrombolysis between the groups ( $P>0.05$ ); After the intervention, the nhiss scores, total time to rescue, waiting time for treatment, and time from visit to thrombolysis were different among the groups ( $P<0.05$ ). **Conclusion:** Comprehensive nursing intervention can significantly improve the neurological function of patients in this study, and its clinical application is significant.

**【Key words】** Acute cerebral infarction; Thrombolysis; Integrated care; Nhiss score

Early intravenous thrombolysis is an effective method for the treatment of cerebral infarction. Recombinant tissue plasminogen activator is a commonly used clinical drug. This treatment method has a high time requirement, and the treatment time window is 3-4.5 hours after the onset<sup>[1]</sup>. During the treatment with this method, there are high requirements for the infarct area and medication time, so it is necessary to strictly follow the doctor's instructions and closely monitor the treatment process. Because the disease is serious and acute, and the morbidity and mortality rate are high, most patients have poor prognosis, so effective nursing intervention and auxiliary treatment are necessary to improve the prognosis. Comprehensive nursing is a common clinical nursing mode at present, which mainly implements nursing from multiple aspects, and runs through the whole process of treatment, and is widely used in clinical practice. From January 2021 to March 2022, 35 patients with acute cerebral infarction underwent interventional thrombolysis in our hospital were divided into groups to explore the application effect of comprehensive nursing. The report is as follows.

## 1 Data and methods

### 1.1 General information

According to the method of random number table, 35 patients with acute cerebral infarction undergoing interventional thrombolysis (2021. 01-2022. 03) in our hospital were divided into two groups: 10 males and 8 females in the control group; The age is 45-75 years old, with an average of  $(60.15 \pm 10.21)$  years; The course of

disease was 1-19 h, with an average of (10.21±1.32)h. There were 11 males and 6 females in the observation group; Age: 45-75 years old, average (60.20±10.13)years old; The course of disease was 1-20 h, with an average of (10.51±1.01)h. There was no statistical difference in basic data between the two groups ( $P>0.05$ ).

Inclusion criteria: ①All patients were diagnosed by CT and MRI; ②The thrombolytic treatment time is within 48 hours; ③Mental disorders and language disorders; ④The medical records are complete; ⑤All signed the informed consent form. Exclusion criteria: ①vascular dementia; ②Have cerebral hemorrhagic disease; ③Abnormal coagulation function; ④Abnormal heart, liver and kidney function; ⑤Withdraw the patient during the intervention.

## 1.2 Method

The control group was given routine nursing, including basic nursing, diet nursing and medication guidance. The observation group was given comprehensive nursing at the same time as routine nursing: ①nursing before thrombolysis: medical staff should record and screen the patient's data and prepare for thrombolysis treatment. Give comfort to patients with high psychological pressure, eliminate negative emotions of patients, and improve treatment compliance. ②Nursing during thrombolysis: medical staff should closely observe the patient's vital signs, and the blood pressure measurement interval is 20 minutes. 24 hours after thrombolytic therapy, the monitoring time should be adjusted appropriately according to the patient's condition, so as to reduce the monitoring frequency. The medical staff should comprehensively observe the local physical signs and consciousness changes of the patients during treatment, such as the improvement of language function and limb function. If the patients have consciousness disorders, large blood pressure fluctuations, headaches, etc., the medical staff should timely report to the doctor for symptomatic treatment. ③Post-thrombotic care: After thrombolytic treatment, the patient needs to prevent bleeding symptoms comprehensively, and collect the patient's blood samples 1 day after treatment, and monitor the relevant indicators in the blood samples, such as fibrinogen changes, coagulation time and platelets; Check whether the patient has abnormal stool color, gingival bleeding, skin and mucous membrane bleeding, and closely observe the bleeding after the extraction of the infusion tube.

## 1.3 Observation indicators

①Compare the total rescue time, waiting time for treatment, the time from treatment to thrombolysis, and the success rate of thrombolysis between the two groups. ②The score was assessed by the National Institutes of Health Stroke Scale (NIHSS) and was proportional to the nerve defect.

## 1.4 Statistical methods

SPSS23.0 was used to calculate the rescue success rate and NIHSS score in ( $\pm s$ ), and the thrombolytic success rate in (%),  $n$ . If  $P<0.05$ , there was a difference between the two groups.

## 2 Results

### 2.1 Rescue success rate

After the intervention, the comparison of rescue success rates in each group is shown in Table 1.

Table 1 Rescue success rate

group	n	Total rescue time	Waiting time for treatment	Time from visit to thrombolysis	Thrombolytic success rate
control group	18	5.40±0.76	5.46±1.20	76.13±12.36	10 (55.56)
Observation group	17	3.39±0.39	2.21±1.03	48.34±11.01	15 (88.24)
$t/X^2$		9.754	8.574	7.008	0.765
$P$		0.000	0.000	0.000	0.381

### 2.3 NHISS score

See Table 2 for comparison of NHISS scores before and after intervention.

Table 2 NHISS score ( $\bar{x} \pm s$ , points)

group	n	Before intervention	After intervention
control group	18	27.98±3.97	22.16±4.37
Observation group	17	29.49±4.36	15.65±2.74
$t$		1.072	5.243
$P$		0.291	0.000

### 3 Discussion

The clinical treatment of acute cerebral infarction is mainly thrombolytic therapy, which can significantly achieve a better therapeutic effect. However, the quality of nursing intervention during the treatment is directly related to the degree of prognosis and the level of body health. Therefore, effective nursing intervention should be taken during the treatment of patients.

Comprehensive nursing is a commonly used clinical nursing mode, which can reflect the comprehensive characteristics of clinical nursing. It is more flexible than traditional nursing mode in nursing. It is necessary to comprehensively evaluate the nursing risk factors during the formulation of nursing plan and run through the whole treatment process. It can effectively prevent nursing risks, avoid the occurrence of medical risks, minimize nursing risk factors, and play an important role in accelerating the recovery of patients' body, Improve nursing quality comprehensively<sup>[2]</sup>. This nursing model is mainly based on the core concept of "people-oriented" nursing. The extension of holistic nursing is mainly to implement nursing care as a whole for hospitals, patients and disease types. It is a new nursing model with characteristics<sup>[3]</sup>. The results of this study show that after intervention, the limb motor function score, MMSE score, NHISS score, quality of life score, total rescue time, waiting time for treatment, and the time from treatment to thrombolysis in each group may be due to the fact that comprehensive nursing intervention can integrate all elements into a whole, such as patients, diseases, and medical staff, which can be highly personalized by taking corresponding nursing measures for patients from all aspects, It has a good extension effect on the basis of comprehensive nursing. Through the implementation of psychological nursing and rehabilitation training for the patients, the patients are guided to carry out early functional exercise, which plays an important role in improving the limb function.

To sum up, comprehensive nursing intervention can significantly improve the limb function and mental state of the patients in this study, and improve the quality of life. The clinical application effect is significant.

## Reference

- [1]Wang Cuiting, Huang Kaixiu. Observation on the effect of comprehensive rehabilitation nursing intervention on patients with lower limb intermuscular vein thrombosis in the recovery period of cerebral infarction[J]. Laboratory Medicine and Clinical, 2020, 17 (17): 2545-2547.
- [2]Yin Juan. Study on the application effect of comprehensive nursing in the rehabilitation care of elderly cerebral infarction[J]. China Pharmaceutical and Clinical Journal, 2019, 19 (24): 4411-4413.
- [3]Gao Ying, Gao Jing. Effect of comprehensive rehabilitation nursing of traditional Chinese medicine on endothelial cell function and limb function of hemiplegic patients with cerebral infarction[J]. Chinese Journal of Practical Nursing, 2019, 35 (2): 81-85.

## 综合护理在急性脑梗死介入溶栓术中的应用

马子春

贵阳市第三人民医院，贵州贵阳 550000

**【摘要】目的：**探究急性脑梗死介入溶栓术患者采用综合护理的应用效果。**方法：**依据随机数字表法对本院 35 例急性脑梗死介入溶栓术患者 (2021. 01-2022. 03)分组探究，对照组患者 18 例，采用常规护理，观察组患者 17 例，采用循证护理模式，对比各组护理效果。**结果：**干预前，各组 NHISS 评分对比无差异 ( $P>0.05$ )；干预后，各组溶栓成功率对比无差异 ( $P>0.05$ )；干预后，各组 NHISS 评分、抢救总时间、等待治疗时间、就诊至溶栓时间对比有差异 ( $P<0.05$ )。**结论：**综合护理干预可显著提高本研究患者神经功能，临床应用效果显著。

**【关键词】**急性脑梗死；溶栓术；综合护理；NHISS 评分

早期静脉溶栓是对脑梗死疾病治疗的有效方法，重组组织型纤溶原激活剂是临床常用药物，此种治疗方法有较高的时间要求，治疗的时间窗口在发病后 3-4.5 h<sup>[1]</sup>。在使用此方法治疗期间对梗死面积与用药时间有较高要求，因此需严格遵医嘱用药，同时对治疗过程密切监测。由于该疾病病情重、发病急，且致残率及病死率高，多数患者预后较差，所以需采用行之有效的护理干预辅助治疗，对改善预后至关重要。综合护理是目前临床常见护理模式，主要从多个方面实施护理，且贯穿于治疗全过程，在临床应用广泛。本文对 2021 年 1 月-2022 年 3 月本院 35 例急性脑梗死介入溶栓术患者分组探究综合护理的应用效果，现报道如下。

### 1 资料与方法

#### 1.1 一般资料

依据随机数字表法对本院 35 例急性脑梗死介入溶栓术患者 (2021. 01-2022. 03)分组探究, 对照组男 10 例, 女 8 例; 年龄 45-75 岁, 平均 (60. 15±10. 21)岁; 病程 1-19 h, 平均 (10. 21±1.32)h。观察组男 11 例, 女 6 例; 年龄 45-75 岁, 平均 (60. 20±10. 13)岁; 病程 1-20 h, 平均 (10. 51±1. 01)h。两组患者基础资料无统计学差异 ( $P>0. 05$ )。

纳入标准: ①均通过 CT、MRI 确诊; ②溶栓治疗时间在 48 h 内; ③精神障碍、语言障碍④病历资料均完善; ⑤均签署知情同意书。排除标准: ①血管性痴呆; ②患有脑部出血性疾病; ③凝血功能异常; ④心肝肾功能异常; ⑤干预期间退出患者。

1.2 方法

对照组采用常规护理: 包含基础护理、饮食护理、用药指导。观察组在常规护理的同时给予综合护理: ①溶栓前护理: 医护人员需对患者资料进行记录与筛选, 并做好溶栓治疗准备。对心理压力较大患者给予安抚, 消除患者负性情绪, 以此提高治疗依从性。②溶栓中护理: 医护人员应对患者生命体征密切观察, 血压测量时间间隔为 20 min。溶栓治疗后 24 h, 根据患者病情对监测时间适当调整, 以此使监测频次减少。医护人员需对患者治疗时局灶体征及意识改变情况全面观察, 如语言功能、肢体功能等改善情况, 若患者出现意识障碍、血压较大浮动、头痛等, 医护人员应及时上报医师对症处理。③溶栓后护理: 患者溶栓治疗后, 需对出血症状全面预防, 且治疗后 1 d 对患者血样进行采集, 监测血样中相关指标, 如纤维蛋白原变动、凝血时间以及血小板等; 对患者是否出现排便颜色异常、牙龈出血以及皮肤黏膜出血等, 同时密切观察输液管拔除后出血情况。

1.3 观察指标

①对比两组抢救总时间、等待治疗时间、就诊至溶栓时间、溶栓成功率。②采用美国国立卫生研究院卒中量表 (NIHSS)评估, 分值与神经缺损成正比。

1.4 统计学方法

采用 SPSS23. 0 计算, 抢救成功率、NIHSS 评分以 ( $\bar{x} \pm s$ )表示, 溶栓成功率以 (%、n)表示, 若  $P<0. 05$ , 则两组数据有差异。

2 结果

2.1 抢救成功率

干预后, 各组抢救成功率对比见表 1。

表 1 抢救成功率					
组别	n	抢救总时间	等待治疗时间	就诊至溶栓时间	溶栓成功率
对照组	18	5. 40±0. 76	5. 46±1.20	76. 13±12.36	10 (55. 56)
观察组	17	3. 39±0. 39	2.21±1. 03	48. 34±11. 01	15 (88. 24)
$t/\chi^2$		9. 754	8. 574	7. 008	0. 765
$P$		0. 000	0. 000	0. 000	0. 381

2.3 NIHSS 评分

干预前后, 各组 NIHSS 评分对比见表 2。

表 2 NHISS 评分 [ ( $\bar{x} \pm s$ ) 分]

组别	n	干预前	干预后
对照组	18	27.98 $\pm$ 3.97	22.16 $\pm$ 4.37
观察组	17	29.49 $\pm$ 4.36	15.65 $\pm$ 2.74
<i>t</i>		1.072	5.243
<i>P</i>		0.291	0.000

### 3 讨论

临床对急性脑梗死疾病主要以溶栓治疗为主,可显著达到较好的治疗效果,然而在治疗期间护理干预质量直接关系到预后程度,影响机体健康水平。因此,需要在对患者治疗期间采取行之有效的护理干预。

综合护理是临床常用护理模式,可体现出临床护理综合特点,在护理中较传统护理模式灵活度较高,在进行护理方案制定时需对护理风险因素全面评估,且贯穿于整个治疗过程,可对护理风险有效预防,避免医疗风险的发生,将护理风险因素降至最低,对加快患者机体恢复发挥重要作用,全面提高护理质量<sup>[2]</sup>。该护理模式主要以“以人为本”护理为核心理念,整体护理的延伸主要是把医院、患者、病种等作为一个整体实施护理,是一种具有特色的新型护理模式<sup>[3]</sup>。本研究结果显示,干预后,各组肢体运动功能评分、MMSE 评分、NHISS 评分、生活质量评分、抢救总时间、等待治疗时间、就诊至溶栓时间,可能是因综合护理干预可将所有要素融入到一个整体中,如患者、疾病以及医护人员等,可通过从各个方面对患者采取相应护理措施,具有较强的个性化,在全面护理的基础上起到较好的延伸效果。通过对患者实施心理护理与康复训练护理指导患者进行早期功能锻炼,以此对提高肢体功能发挥重要作用。综上所述,综合护理干预可显著改善本研究患者肢体功能及精神状态,提生活质量,临床应用效果显著。

### 参考文献

- [1]王翠婷,黄开秀.综合康复护理干预对脑梗死恢复期合并下肢肌间静脉血栓患者的效果观察[J].检验医学与临床,2020,17(17):2545-2547.
- [2]尹娟.综合护理在老年脑梗死康复护理中的应用效果研究[J].中国药物与临床,2019,19(24):4411-4413.
- [3]高英,高晶.中医综合康复护理对脑梗死偏瘫患者内皮细胞功能及肢体功能的影响[J].中国实用护理杂志,2019,35(2):81-85.