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#### Citation

peng qilong, peng qifeng, deng xiaoling, lu heying. A Meta-analysis of the Effect of Early Nursing Intervention on Thrombolytic Therapy in Patients with Acute Ischemic Cerebral Infarction. PROSPERO 2021 CRD42021253829 Available from:

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### Review question

To systematically evaluate the influence of predictive and ultra-early nursing intervention model on the treatment effect, NIHSS score, complications and nursing satisfaction questionnaire of severe patients after thrombolysis in acute ischemic cerebral infarction.

#### Searches

Computer searches were conducted on CNKI, VIP database, Wanfang database, sinomed, PubMed,

Embase, Cochrane Library and Science of Webs.

Search time is limited to april 2021.

The search does not include any language and publication period restrictions.

yes.

Yes, will looking for unpublished research.

### Types of study to be included

We will include randomized trials to evaluate the beneficial effects of treatment.

### Condition or domain being studied

acute ischemic stroke; Thrombolytic nursing.

### Participants/population

Inclusion criteria: (1) The research of early nursing intervention on patients with acute ischemic cerebral infarction treated by thrombolysis published in open databases at home and abroad; (2) Research subjects: patients with acute ischemic cerebral infarction diagnosed clinically and treated with intravenous thrombolysis; (3) Evaluation indicators: treatment effect, NIHSS score, occurrence of complications, nursing satisfaction questionnaire and 95%CI, etc. (4) No consideration of age, sex and race; 5. Don't consider language.

Exclusion criteria: (1) No control group was set in the original study; (2) The test specimen was not taken from human; (3) Literature without test data, such as summary and meeting summary; (4) Non-RCTs research.

### Intervention(s), exposure(s)

According to the systematic analysis of disease burden in China1 and the world 2, stroke is the second leading cause of death in China and even the world, second only to ischemic heart disease; The economic burden of medical treatment and disability after stroke has also become a huge burden of public health3. The highest standardized age rate of stroke is in East Asia, especially in China, which reached 3.54/00/ year in 2016. Acute ischemic stroke (AIS) refers to the localized ischemic necrosis of brain tissue caused by



cerebral blood circulation disorder, ischemia and hypoxia, which accounts for more than 70% of acute cerebrovascular diseases, also known as cerebral infarction4.

Because of its high morbidity, mortality, recurrence rate and serious complications5, 6 the most effective treatment at this stage is to give thrombolysis in window period, which commonly includes intravenous thrombolysis with recombinant tissue plasminogen activator (RT-PA) and mechanical thrombectomy, showing obvious time correlation7-9.

### Comparator(s)/control

Placebo. A group of inpatients with conventional nursing after thrombolytic therapy for cerebral infarction.

### Main outcome(s)

Change in Effects of thrombolytic therapy on severe patients with acute ischemic cerebral infarction, NIHSS score, complications and nursing satisfaction questionnaire from baseline to the last available follow-up.

### Additional outcome(s)

Serious cardiovascular events after operation.

## Data extraction (selection and coding)

Two responsible persons independently extracted the evaluation data including author, literature time, sample size, age, treatment effect, NIHSS score, occurrence of complications, nursing satisfaction questionnaire, etc. Two responsible persons refer to QUADAS-2 quality evaluation rules one by one to evaluate the literature quality.

## Risk of bias (quality) assessment

Random sequence generation? Allocation concealment? Blinding of participants and personnel? Blinding of outcome assessment? Incomplete outcome data? Selective reporting? Other bias

Assessment will be done outcome level?

The criteria formal a risk of bias assessment is planned QUADAS.

Applicable.

Three.

In case of disagreement, a third researcher will judge.

## Strategy for data synthesis

Criteria under which the data will be synthesised level of consistency required for synthesis.

Synthesised including outcomes and summary effect measures, risk ratios for progression free survival at 2 years.

The formal method of combining individual study data including, as applicable, information about statistical models that will be fitted risk ratios for individual studies will be combined using a random effects meta-analysis.

### Analysis of subgroups or subsets

By using statistical software such as Review Manager 5.3, the influence of early nursing intervention mode on clinical curative effect related indexes of severe patients with acute ischemic cerebral infarction after thrombolysis was comprehensively analyzed. The treatment effect, NIHSS score, complications and nursing satisfaction questionnaire were extracted, and the values of H-M, RR, 95%CI and p were analyzed. the clinical value of early nursing intervention model for severe patients after thrombolysis of acute ischemic cerebral infarction was verified by data collection, and the forest map was drawn. X and I tests were adopted, and after statistical heterogeneity test, X test was included in the study of heterogeneity, and I was used to test the size of heterogeneity.



### Contact details for further information

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## Organisational affiliation of the review

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### Type and method of review

Intervention, Meta-analysis, Methodology, Systematic review

## Anticipated or actual start date

01 January 2021

## Anticipated completion date

31 July 2021

## Funding sources/sponsors

Nursing Research Fund of Enshi Central Hospital

Grant number(s)

State the funder, grant or award number and the date of award

#### 2019HL03

### Conflicts of interest

The all authors declare that they have no known conflicts of interest.

None known

### Language

**English** 

### Country

China

### Stage of review

**Review Ongoing** 

## Subject index terms status

Subject indexing assigned by CRD

### Subject index terms

MeSH headings have not been applied to this record

### Date of registration in PROSPERO

08 June 2021

### Date of first submission

08 May 2021

Stage of review at time of this submission



Stage	Started	Completed
Preliminary searches	Yes	No
Piloting of the study selection process	Yes	No
Formal screening of search results against eligibility criteria	Yes	No
Data extraction	No	No
Risk of bias (quality) assessment	No	No
Data analysis	No	No

The record owner confirms that the information they have supplied for this submission is accurate and complete and they understand that deliberate provision of inaccurate information or omission of data may be construed as scientific misconduct.

The record owner confirms that they will update the status of the review when it is completed and will add publication details in due course.

### Versions

08 June 2021 08 June 2021