

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

Evaluation of the neuroprotective effect of N-Acetyl-Cysteine in patients with cerebrovascular accident in years 95-96 in firoozgar hospital.

Protocol summary

Summary

The study goal is Evaluation of the neuroprotective effect of N-Acetyl-Cysteine in patients with cerebrovascular accident in years 95-96 in firoozgar hospital. it is a single blind placebo controlled trial. Population study is patients admitted to stroke unit of firoozgar hospital. The main inclusion criteria are patients with mild to moderate first attack of CVA admitted within 24 hours of symptom onset. The main exclusion criteria are allergy to N-acetyl- cysteine, severe hepatic or renal failure and patients who received r-tPA. Study sample size which is sum of both control and treatment group is 60 patients. N- acetyl- cysteine is given to treatment group in addition to standard CVA treatment. Patients in control group only received standard CVA treatment. Intervention time is first 24 hours of CVA onset. The blood sample for measuring MMP-9 marker is collected from both groups before and 24 hours after receiving N-acetyl- cysteine and standard treatment. NIHSS for the patients in both group is calculated before therapy, 24 hours, 2 weeks, 1 months and 3 months after therapy.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2017011931229N2**

Registration date: **2017-02-24, 1395/12/06**

Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2017-02-24, 1395/12/06

Registrant information

Name

Azadeh Eshraghi

Name of organization / entity

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Recruitment status

Recruitment complete

Funding source

Iran University of Medical Sciences

Expected recruitment start date

2016-03-19, 1394/12/29

Expected recruitment end date

2018-03-20, 1396/12/29

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Evaluation of the neuroprotective effect of N-Acetyl-Cysteine in patients with cerebrovascular accident in years 95-96 in firoozgar hospital.

Public title

N- acetyl- cysteine effect in stroke treatment

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: all admitted patients with first attack of mild to moderate CVA according to NIHSS between 0-16; admitted patients within first 24 hours of onset of CVA. Exclusion criteria:Hemorrhagic stroke; Severe Hepatic or renal failure. (creatinine clearance less than 30 mg/dl);

History of Vasculitis; Allergy to N- acetyl- cystein;
Alzheimer or dementia due to any cause; Coexistent
other neurologic disorders.;Past history of CVA;Age more
than 80 years; Diseases that affect on MMP-9 level. e.g
neuropsychiatric disorders like schizophrenia and bipolar
disorder,epilepsy and mutiple sclerosis; Intravenous or
intaarterial r-tPA injection.

Age

From **18 years** old to **80 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **60**

Randomization (investigator's opinion)

Randomized

Randomization description**Blinding (investigator's opinion)**

Single blinded

Blinding description**Placebo**

Used

Assignment

Parallel

Other design features**Secondary Ids**

empty

Ethics committees**1****Ethics committee****Name of ethics committee**

Iran University of Medical Sciences

Street address

Tehran- hemmat highway- near milad tower- iran
university of medical sciences

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Postal code

1449614535

Approval date

2016-09-22, 1395/07/01

Ethics committee reference number

IR.IUMS.REC.1395.28001

Health conditions studied**1****Description of health condition studied**

Stroke

ICD-10 code

G46

ICD-10 code description

Vascular syndromes of brain in cerebrovascular disease

Primary outcomes**1****Description**

MMP9

Timepoint

Before and 24 hours after intervention

Method of measurement

ELISA kit

2**Description**

NIHSS

Timepoint

Before intervention, 24 hours, 2 weeks, 1 month and 3
months after intervention

Method of measurement

Standard scale

Secondary outcomes**1****Description**

Side effects

Timepoint

24 hours after treatment

Method of measurement

Clinic

Intervention groups**1****Description**

Intervention: 1. Amp N- acetyl- cysteine 100 mg/kg stat
in the onset of stroke then 10 mg/kg/hour IV infusion for
10 hours.

Category

Treatment - Drugs

2**Description**

Intervention: 2. Tab ASA 325 mg PO daily for 14 days
then 80 mg PO daily lifelong

Category

Treatment - Drugs

3**Description**

Intervention: 3. Tab plavix 325 mg PO stat then 75 mg
daily for 90 days

Category

Treatment - Drugs

4

Description

Control: 2. Tab plavix 325 mg PO stat then 75 mg daily for 90 days

Category

Treatment - Drugs

5

Description

Control: 1. Tab ASA 325 mg PO daily for 14 days then 80 mg PO daily lifelong

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center

Firoozgar hospital

Full name of responsible person

Rezan Ashayeri

Street address

Region 6- Valiasr Square- beh Afarin street.

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Iran University of Medical Sciences

Full name of responsible person

Zahra Ebrahimi Monazzam

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Grant name

Grant code / Reference number

Is the source of funding the same sponsor organization/entity?

Yes

Title of funding source

Iran University of Medical Sciences

Proportion provided by this source

100

Public or private sector

empty

Domestic or foreign origin

empty

Category of foreign source of funding

empty

Country of origin

Type of organization providing the funding

empty

Person responsible for general inquiries

Contact

Name of organization / entity

Iran University of Medical Sciences

Full name of responsible person

Rezan ashayeri

Position

Neurology Resident

Other areas of specialty/work

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Assistant professor

Other areas of specialty/work

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Position

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Other areas of specialty/work**Street address**

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Sharing plan**Deidentified Individual Participant Data Set (IPD)**

empty

Study Protocol

empty

Statistical Analysis Plan

empty

Informed Consent Form

empty

Clinical Study Report

empty

Analytic Code

empty

Data Dictionary

empty