

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

10 Jun 2026

### Comparison of response to two regimens of Lactulose and Bisacodyl in the treatment of acute constipation in patients with acute stroke

#### Protocol summary

##### Study aim

Determination of the response rate to the drug (lactulose, bisacodyl) in acute cerebral stroke patients with acute constipation

##### Design

A clinical trial with community-based and pragmatic control group, with parallel and single blind, randomized, 45 patients in the control group and 45 patients in the intervention group will be included.

##### Settings and conduct

This is an interventional study on 45 patients with acute stroke. Patients will be checked on the second day after admission and will be questioned for the presence of defecation. Patients with constipation will randomly be assigned to either 30 ml or 20 gr lactulose or 10 mg bisacodyl pill. Patients will be evaluated for defecation during the duration of admission (on average 5 days) and will be evaluated with the phone call if they are cleared earlier.

##### Participants/Inclusion and exclusion criteria

Inclusion criteria: Patients with acute stroke (Diagnosed by a neurologist and confirmed by MRI or CT-Scan) who had new onset constipation during 48 hours. Exclusion criteria: - Previous history of chronic constipation or incontinence - Previous history of colon or rectum cancer - Metabolic cause of constipation (eg. Hypokalemia) - Taking drugs induced constipation (eg. Anticholinergics or drugs with anticholinergic effects, calcium channel blockers and etc.) - Previous history of diabetes mellitus or hypothyroidism - Previous history of stroke and new symptoms due to metabolic derangement or acute infection

##### Intervention groups

Intervention group: Patients receiving Bisacodyl  
Control group: Patients receiving Lactulose

##### Main outcome variables

Constipation improvement and response to treatment

#### General information

##### Reason for update

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20181009041286N1**

Registration date: **2019-01-17, 1397/10/27**

Registration timing: **retrospective**

Last update: **2019-01-17, 1397/10/27**

Update count: **0**

##### Registration date

2019-01-17, 1397/10/27

##### Registrant information

##### Name

reza Daneshvar kakhki

##### Name of organization / entity

##### Country

Iran (Islamic Republic of)

##### Phone

+98 31 5554 0026

##### Email address

daneshvar-r@mail.kaums.ac.ir

##### Recruitment status

**Recruitment complete**

##### Funding source

##### Expected recruitment start date

2017-12-22, 1396/10/01

##### Expected recruitment end date

2018-07-23, 1397/05/01

##### Actual recruitment start date

2017-12-22, 1396/10/01

##### Actual recruitment end date

2018-07-23, 1397/05/01

##### Trial completion date

2018-08-01, 1397/05/10

##### Scientific title

Comparison of response to two regimens of Lactulose and Bisacodyl in the treatment of acute constipation in patients with acute stroke

#### Public title

The effects of laxative drugs in the treatment of acute constipation in patients with acute stroke

#### Purpose

Treatment

#### Inclusion/Exclusion criteria

##### Inclusion criteria:

Admission within 48 hours of onset of symptoms  
Definite stroke diagnosis and confirmation with CT-Scan or MRI  
Acute constipation

##### Exclusion criteria:

Patients with constipation before stroke  
History of colon or rectum cancer  
Constipation caused by metabolic disorder such as hypokalemia  
Taking drugs that cause constipation, such as anticholinergic drugs or drugs with anticholinergic effects, calcium blockers, etc.  
History of diabetes mellitus  
History of myocardial infarction  
History of hypothyroidism

#### Age

No age limit

#### Gender

Both

#### Phase

3

#### Groups that have been masked

- Participant

#### Sample size

Target sample size: **50**

Actual sample size reached: **45**

#### Randomization (investigator's opinion)

Randomized

#### Randomization description

Selecting groups is completely random and will be done after matching. Randomization of patients will be done by file number using [www.random.org](http://www.random.org) site. On this site, the Gaussian randomization method was used with the normal distribution.

#### Blinding (investigator's opinion)

Single blinded

#### Blinding description

The Lactulose and Bisacodyl drugs are used in the same way with the same bottle, and patients will not be informed of the type of medication they receive.

#### Placebo

Not used

#### Assignment

Parallel

#### Other design features

### Secondary Ids

empty

### Ethics committees

#### 1

##### Ethics committee

###### Name of ethics committee

Ethics committee of Kashan University of Medical Science

###### Street address

Pezeshk St., Ghotbe Ravandei ave.

###### City

Kashan

###### Province

Isfahan

###### Postal code

87159/81151

##### Approval date

2017-02-08, 1395/11/20

##### Ethics committee reference number

IR.KAUMS.REC.1395.047

### Health conditions studied

#### 1

##### Description of health condition studied

Acute constipation

##### ICD-10 code

K59.0

##### ICD-10 code description

Constipation

### Primary outcomes

#### 1

##### Description

Defecation

##### Timepoint

Daily check for defecation after taking drug

##### Method of measurement

Questionnaire designed by researcher

### Secondary outcomes

empty

### Intervention groups

#### 1

##### Description

Intervention group (Bisacodyl): Patients will receive 10 mg daily and will be evaluated for at least 5 days for response to treatment.

##### Category

Treatment - Drugs

#### 2

##### Description

Control group (Lactulose): Patients will receive 20 gr equal to 15 ml syrup of lactulose daily and will be evaluated for at least 5 days for response to treatment.

**Category**

Treatment - Drugs

**Type of organization providing the funding**

Academic

**Recruitment centers****1****Recruitment center****Name of recruitment center**

Kashan Shahid Beheshtei hospital

**Full name of responsible person**

Reza Daneshvar Kakhki

**Street address**

Pezesh st., Ghotb e Ravandei ave.

**City**

Kashan

**Province**

Isfahan

**Postal code**

8715981151

**Phone**

+98 31 5554 0026

**Email**

daneshvar-r@mail.kaums.ac.ir

**Sponsors / Funding sources****1****Sponsor****Name of organization / entity**

Kashan University of Medical Sciences

**Full name of responsible person**

Dr. Hamidreza Banafshe

**Street address**

Pezesh st., Ghotb e Ravandei Ave.

**City**

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**Province**

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**Postal code**

8115187159

**Phone**

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**Email**

banafshe57@hotmail.com

**Grant name****Grant code / Reference number****Is the source of funding the same sponsor organization/entity?**

Yes

**Title of funding source**

Kashan University of Medical Sciences

**Proportion provided by this source**

100

**Public or private sector**

Public

**Domestic or foreign origin**

Domestic

**Category of foreign source of funding**

empty

**Country of origin****Person responsible for general inquiries****Contact****Name of organization / entity**

Kashan University of Medical Sciences

**Full name of responsible person**

Reza Daneshvar kakhki

**Position**

Assistant professor

**Latest degree**

Medical doctor

**Other areas of specialty/work**

Neurology

**Street address**

Neurology ward, Beheshtei general hospital, Kashan, Isfahan

**City**

Kashan

**Province**

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**Postal code**

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**Person responsible for scientific inquiries****Contact****Name of organization / entity**

Kashan University of Medical Sciences

**Full name of responsible person**

Reza Daneshvar kakhki

**Position**

Assistant professor

**Latest degree**

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**Other areas of specialty/work**

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## Person responsible for updating data

### Contact

**Name of organization / entity**

Kashan University of Medical Sciences

**Full name of responsible person**

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## Sharing plan

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

Yes - There is a plan to make this available

**Study Protocol**

Yes - There is a plan to make this available

**Statistical Analysis Plan**

Yes - There is a plan to make this available

**Informed Consent Form**

Yes - There is a plan to make this available

**Clinical Study Report**

Yes - There is a plan to make this available

**Analytic Code**

Yes - There is a plan to make this available

**Data Dictionary**

Yes - There is a plan to make this available

**Title and more details about the data/document**

demographic data and outcome after deidentification will be available

**When the data will become available and for how long**

Data will be available from 2019 for 1 year

**To whom data/document is available**

For academic researchers, data will be available

**Under which criteria data/document could be used**

The use of data will be subject to obtaining a license from the University's Research and Technology Dept.

**From where data/document is obtainable**

neurology department, Shahid Beheshti General Hospital, Pezesh St., Ghotbe Ravandi Ave. Postal Code: 8715981151

**What processes are involved for a request to access data/document**

Information will be obtained from the Department of Research and Technology of the University and correspondence with the Department of Neurology, Shahid Beheshti Hospital of Kashan.

**Comments**

No