

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

18 Jul 2026

### Effect of vasopressin and epinephrine in cardiac arrest outcomes in patients with asystole rhythm

#### Protocol summary

##### Summary

The most persistent rhythm in treatment of cardiac arrest is asystole rhythm. In this situation, the survival is low. Although epinephrine is the choice but some studies suggested vasopressin as an alternative drug. This study's purpose is to compare effects of vasopressin and epinephrine in the patients with asystole rhythm. Inclusion criteria is including the patients with Asystole rhythm. Exclusion criteria are including : Ventricular Fibrillation : Pulsless Ventricular Tachycardia : Pulseless Electrical Activity : Do Not Resuscitation protocol : Pregnancy : Hemorrhagic shock : CPR after 20 minutes. This double blind clinical trial will perform on 210 patients with asystole rhythm. 105 patients will receive epinephrine (group 1) and 105 patients vasopressin (group 2) as first drug. Next, American Heart Association guideline 2010 will perform in both of them. Then data collection such as age, sex, Return Of Spontaneous Circulation (ROSC), the survival of 1 hour, 24 hours and one month, heart rate after resuscitation and survival to discharge.

#### General information

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT2015050922181N1**

Registration date: **2015-06-30, 1394/04/09**

Registration timing: **retrospective**

Last update:

Update count: **0**

##### Registration date

2015-06-30, 1394/04/09

##### Registrant information

##### Name

Mehdi Torabi

##### Name of organization / entity

##### Country

Iran (Islamic Republic of)

##### Phone

+98 913 199 2016

##### Email address

mtorabi1390@yahoo.com

##### Recruitment status

##### Recruitment complete

##### Funding source

Kerman University Medical Sciences

##### Expected recruitment start date

2011-03-20, 1389/12/29

##### Expected recruitment end date

2013-03-20, 1391/12/30

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

##### Scientific title

Effect of vasopressin and epinephrine in cardiac arrest outcomes in patients with asystole rhythm

##### Public title

Vasopressin effect in asystole rhythm patients

##### Purpose

Treatment

##### Inclusion/Exclusion criteria

Inclusion criteria: Patients with Asystole rhythm

Exclusion criteria: Ventricular Fibrillation; Pulsless Ventricular Tachycardia; Pulseless Electrical Activity; no resuscitation; Pregnancy; Hemorrhagic shock; CPR after 20 minutes

##### Age

No age limit

##### Gender

Both

## Phase

N/A

## Groups that have been masked

No information

## Sample size

Target sample size: 210

## Randomization (investigator's opinion)

Randomized

## Randomization description

## Blinding (investigator's opinion)

Double blinded

## Blinding description

## Placebo

Not used

## Assignment

Parallel

## Other design features

## Secondary Ids

empty

## Ethics committees

### 1

#### Ethics committee

##### Name of ethics committee

Kerman Univercity Medical Sciences

##### Street address

After shafa cross-street, jomhoori street, kerman

##### City

Kerman

##### Postal code

7618747653

#### Approval date

2015-05-23, 1394/03/02

#### Ethics committee reference number

IR.KMU.REC.1394.117

## Health conditions studied

### 1

#### Description of health condition studied

Cardiac arrest

#### ICD-10 code

146.0

#### ICD-10 code description

Cardiac arrest with successful resuscitation

## Primary outcomes

### 1

#### Description

Return of Spontaneous Circulation

#### Timepoint

After cardiac rhythm change

#### Method of measurement

Carotid pulse check

### 2

#### Description

Heart rate per minute

#### Timepoint

After return of circulation

#### Method of measurement

Cardiac monitoring

### 3

#### Description

Patient survival time

#### Timepoint

First hour, First day, First month

#### Method of measurement

Patient survival (having respiration and cardiac rhythm)

### 4

#### Description

Total patient survival time

#### Timepoint

After return of circulation

#### Method of measurement

Minute

## Secondary outcomes

empty

## Intervention groups

### 1

#### Description

Intervention group: Vasopressin 40 unit intravenous will be pushed in asystole group patients. If there is no response, epinephrine will be pushed every 5 minutes.

#### Category

Treatment - Drugs

### 2

#### Description

Control group: Epinephrine 1 mg intravenous will be pushed in asystole group patients. If there is no response, epinephrine will be pushed every 5 minutes.

#### Category

Treatment - Drugs

## Recruitment centers

### 1

#### Recruitment center

##### Name of recruitment center

Afzalipoor Hospital

##### Full name of responsible person

Mehdi Torabi

##### Street address

Kerman , Emam khomeini Avenue

##### City

## Sponsors / Funding sources

### 1

#### Sponsor

**Name of organization / entity**

Kerman University Medical Sciences

**Full name of responsible person**

Assistance of Research and Technology

**Street address**

After shafa cross-street, jomhoori street, kerman

**City**

Kerman

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

Yes

**Title of funding source**

Kerman University 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**

Kerman University Medical Sciences

**Full name of responsible person**

Mehdi Torabi

**Position**

Assistant Professor

**Other areas of specialty/work**
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## inquiries

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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*

