

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

10 Jun 2026

### Comparison of the Effect of IAC-CPR and Current CPR Methods on ETCO2 and 24 Hour Survival of Cardiopulmonary Arrest Patient

#### Protocol summary

##### Summary

The purpose of this study is comparison of the effect of Interposed Abdominal Compression Cardiopulmonary resuscitation and current Cardiopulmonary resuscitation methods on End Tidal CO2 and 24 Hour survival of cardiopulmonary arrest patient. Inclusion criteria include confirmation of cardiopulmonary arrest Age between eighteen to eighty-five years, Existence of endotracheal tube, No recent abdominal surgery No pregnancy exclusion criteria: Suspected pregnancy Inability to intubation.the study population included patients who suffered from cardiac arrest in Ghaem Hospital of Mashhad. Target sample size is 80 cpr in both groups that in control group current Cardiopulmonary resuscitation and in intervention group Interposed Abdominal Compression CardioPulmonary resuscitation is performed. It is expected that Interposed Abdominal Compression Cardiopulmonary resuscitation could better the End Tidal CO2 and 24 hour survival of cardiac arrest patients.

#### General information

##### Acronym

IAC-CPR = Interposed abdominal compression cardiopulmonary resuscitation ETCO2 = End Tid

##### IRCT registration information

IRCT registration number: **IRCT2014010216033N1**  
Registration date: **2014-01-22, 1392/11/02**  
Registration timing: **registered\_while\_recruiting**

Last update:

Update count: **0**

##### Registration date

2014-01-22, 1392/11/02

##### Registrant information

Name

Ali Movahedi

##### Name of organization / entity

Mashhad University of Medical Science

##### Country

Iran (Islamic Republic of)

##### Phone

+98 51 1385 0988

##### Email address

movahedia901@mums.ac.ir

##### Recruitment status

**Recruitment complete**

##### Funding source

Mashhad University of Medical Science

##### Expected recruitment start date

2013-12-22, 1392/10/01

##### Expected recruitment end date

2014-02-04, 1392/11/15

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

##### Scientific title

Comparison of the Effect of IAC-CPR and Current CPR Methods on ETCO2 and 24 Hour Survival of Cardiopulmonary Arrest Patient

##### Public title

Effect of interposed abdominal compression cardiopulmonary resuscitation on end tidal co2 and 24 Hour Survival of Cardiopulmonary Arrest Patient

##### Purpose

Treatment

##### Inclusion/Exclusion criteria

Inclusion criteria: confirmation of cardiopulmonary arrest; nonTraumatic cardiopulmonary arrest; Age between eighteen to eighty-five years; Existence of endotracheal tube; No history of abdominal aortic

aneurysm; No recent abdominal surgery; No pregnancy; exclusion criteria: Suspected pregnancy; Inability to intubation; Return of spontaneous circulation before beginning of resuscitation

#### Age

From **18 years** old to **85 years** old

#### Gender

Both

#### Phase

N/A

#### Groups that have been masked

*No information*

#### Sample size

Target sample size: **80**

#### Randomization (investigator's opinion)

Randomized

#### Randomization description

#### Blinding (investigator's opinion)

Not blinded

#### Blinding description

#### Placebo

Not used

#### Assignment

Parallel

#### Other design features

## Secondary Ids

empty

## Ethics committees

### 1

#### Ethics committee

##### Name of ethics committee

Research Council of Mashhad University of Medical Sciences

##### Street address

Mashhad - University Avenue - Building Qureshi -  
Research Council of Mashhad University of Medical Sciences

##### City

Mashhad

##### Postal code

#### Approval date

2013-10-09, 1392/07/17

#### Ethics committee reference number

920717

## Health conditions studied

### 1

#### Description of health condition studied

cardiac arrest

#### ICD-10 code

I46

#### ICD-10 code description

Cardiac Arrest

## Primary outcomes

### 1

#### Description

End Tidal CO2

#### Timepoint

During the intervention

#### Method of measurement

Capnograph

### 2

#### Description

Return of spontaneous Circulation

#### Timepoint

After the intervention

#### Method of measurement

check of pulse and blood pressure

### 3

#### Description

24 hours survival

#### Timepoint

24 hour after intervention

#### Method of measurement

By questionnaire

## Secondary outcomes

### 1

#### Description

side effect

#### Timepoint

During and 24 hours after intervention

#### Method of measurement

By observation and examination

## Intervention groups

### 1

#### Description

in intervention group after confirmation of cardiac arrest and endotracheal intubation Interposed Abdominal Compression Cardiopulmonary Resuscitation is performing.

#### Category

Treatment - Other

### 2

#### Description

in control group after confirmation of cardiac arrest and endotracheal intubation current Cardiopulmonary Resuscitation is performing.

#### Category

Treatment - Other

## Recruitment centers

1

### Recruitment center

**Name of recruitment center**

Clinical research training center of Ghaem

**Full name of responsible person**

kazem ahmadi meybodi

**Street address**

Mashhad - St. Ahmedabad - Ghaem Hospital.

**City**

Mashhad

Mashhad - Doktora Cross - School of Nursing and Midwifery

**City**

Mashhad

**Postal code**

ç

**Phone**

00

**Fax**

**Email**

malekzadehj@mums.ac.ir

**Web page address**

## Sponsors / Funding sources

1

### Sponsor

**Name of organization / entity**

Research Council of Mashhad University of Medical Sciences

**Full name of responsible person**

dr mohsen tafaghodi

**Street address**

Mashhad - University Avenue - Building Qureshi -  
Research Council of Mashhad University of Medical Sciences

**City**

Mashhad

**Grant name**

**Grant code / Reference number**

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

Yes

**Title of funding source**

Research Council of Mashhad 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**

Mashhad University of Medical Sciences

**Full name of responsible person**

javad malekzadeh

**Position**

Faculty members working in Mashhad University of Medical Sciences

**Other areas of specialty/work**

**Street address**

## Person responsible for scientific inquiries

### Contact

**Name of organization / entity**

Mashhad University of Medical Science

**Full name of responsible person**

javad malekzadeh

**Position**

Faculty members working in Mashhad University of Medical Sciences

**Other areas of specialty/work**

**Street address**

Mashhad - Doktora Cross - School of Nursing and Midwifery

**City**

mashhad

**Postal code**

**Phone**

+98 51 1845 0845

**Fax**

**Email**

malekzadehj@mums.ac.ir

**Web page address**

## Person responsible for updating data

### Contact

**Name of organization / entity**

Mashhad University of Medical Science

**Full name of responsible person**

Ali Movahedi

**Position**

MS Student in critical care Nursing

**Other areas of specialty/work**

**Street address**

**City**

Mashhad

**Postal code**

**Phone**

+98 51 1385 0988

**Fax**

**Email**

movahedia901@mums.ac.irmovahedia67@gmail.com

**Web page address**

## 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*