

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

12 Jun 2026

### The effect of acupressure(UB32) on pain severity of intramuscular magnesium sulfate injection(Z technique)in postpartum cesarean section women with severe Precambrian and eclampsia

#### Protocol summary

##### Summary

The purpose of this study is to determine the effect of acupressure on pain reduction of intramuscular magnesium sulfate injection with Z technique in postpartum cesarean section women. This study will be conducted in Hafez, Zeinabie and Shooshtari hospitals affiliated to Shiraz University of Medical Sciences. 47 eligible post partum cesarean section women affected with severe preeclampsia and eclampsia will enter the study after obtaining a written informed consent. Magnesium sulfate injections are repeated every 4 hours until 24 hours after delivery. In each injection 5cc of drug will be injected in one buttock and the remaining 5cc will be injected in the other buttock. In this study researcher herself do all the injections. The first injection is without acupressure. The second injection is with acupressure in sham control point which is similar in all patients. The third one is with pressure on UB32 point. Acupressure point is pressed by thumb directly and continuously with pressure equal to 4.5kg/cm<sup>2</sup> for one minute followed by three times sequentially. In second injection the same pressure and method is used in the sham control point. After each injection patients pain will be measured and documented by co-researcher and according to VAS scale. In order to avoid bias neither patients nor co-researcher know which injection is in real point and which is in sham control point. Finally the severity of pain will be compared in three injection.

#### General information

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT201410278505N12**  
Registration date: **2017-01-18, 1395/10/29**  
Registration timing: **registered\_while\_recruiting**

Last update:

Update count: **0**

##### Registration date

2017-01-18, 1395/10/29

##### Registrant information

###### Name

Seyed Saeed Najafi

###### Name of organization / entity

Shiraz University of Medical Sciences

###### Country

Iran (Islamic Republic of)

###### Phone

+98 71 1727 7445

###### Email address

najafisa@sums.ac.ir

##### Recruitment status

###### Recruitment complete

##### Funding source

Vice Chancellor for research of Shiraz University of Medical Sciences

##### Expected recruitment start date

2016-12-20, 1395/09/30

##### Expected recruitment end date

2017-02-18, 1395/11/30

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

##### Scientific title

The effect of acupressure(UB32) on pain severity of intramuscular magnesium sulfate injection(Z technique)in postpartum cesarean section women with severe Precambrian and eclampsia

**Public title**

The effect of acupuncture on intramuscular injection pain severity

**Purpose**

Supportive

**Inclusion/Exclusion criteria**

Inclusion criteria: Range of age between 15-45; Willingness to participate; Gynecologist order for magnesium sulfate injection; No chronic pain in lumbosacral area including disk herniation  
Exclusion criteria: Unwillingness to participate; Any psychological disease including depression; Allergy to magnesium sulfate; Receiving pain killers before injection (Except diclofenac suppository); Femur and hip fracture in the last year

**Age**

From **15 years** old to **45 years** old

**Gender**

Female

**Phase**

N/A

**Groups that have been masked**

*No information*

**Sample size**

Target sample size: **47**

**Randomization (investigator's opinion)**

N/A

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

Double blinded

**Blinding description****Placebo**

Not used

**Assignment**

Single

**Other design features**

In current study the first intervention is simple, the second is acupuncture in sham control point and the third one is acupuncture in UB32 point. Patients are not aware of which pressure is in real and which is in unreal point. Co-researcher also does not aware of patients injection group.

**Secondary IDs**

empty

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

Medical Research Ethics Committee of Shiraz University of Medical sciences

**Street address**

Central building of Shiraz University of Medical Sciences, Zand street

**City**

Shiraz

**Postal code**

713451978

**Approval date**

2016-10-09, 1395/07/18

**Ethics committee reference number**

IR.SUMS.REC.1395.122

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

eclampsia and severe preeclampsia

**ICD-10 code**

XV,010-016

**ICD-10 code description**

oedema, proteinuria and hypertensive disorder in pregnancy

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

Pain

**Timepoint**

immediately after injection

**Method of measurement**

Visual analogue scale

**Secondary outcomes**

empty

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

The first intervention is intramuscular magnesium sulfate injection with Z technique as a conventional method. 5cc of drug will be injected in one buttock and the remaining 5cc will be injected to the other buttock. Then patients will be asked about their pain by co-researcher and according to VAS scale.

**Category**

N/A

**2****Description**

The second intervention is intramuscular magnesium sulfate injection with Z technique with acupuncture in sham control point which is same in all patients and located in 5cm of posterior superior iliac spine. Acupuncture point is pressed by thumb directly and continuously with pressure equal to 4.5kg/cm<sup>2</sup> for one minute followed by three times sequentially. Then 5cc of drug will be injected in that buttock. Then patients will be asked to lie in the other side and acupuncture will be done with same pressure and technique in the other side. Then remaining 5cc will be injected in other buttock immediately. Then patients will be asked about their pain by co-researcher and according to VAS scale.

**Category**

Treatment - Drugs

**3****Description**

The third intervention is intramuscular magnesium sulfate injection with Z technique with acupressure in UB32 point. Acupressure point is pressed by thumb directly and continuously with pressure equal to 4.5kg/cm<sup>2</sup> for one minute followed by three times sequentially. Then 5cc of drug will be injected in that buttock immediately. Then patients will be asked to lie in the other side and acupressure will be done with same technique and pressure and the remaining 5cc will be injected to the other buttock. Then patients will be asked about their pain by co-researcher and according to VAS scale

**Category**

Treatment - Drugs

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

Hafez, Zeinabie & shoostary hospitals affiliated to Shiraz University of Medical Science

**Full name of responsible person**

Setare Nazaribin

**Street address**

Fatemeh(PBUH) School of Nursing and Midwifery, Shiraz University of Medical Sciences

**City**

Shiraz

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

Vice Chancellor for research of Shiraz University of Medical Sciences

**Full name of responsible person**

Sayed Basir Hashemi

**Street address**

Central Building of Shiraz University of Medical Sciences, Zand street

**City**

Shiraz

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

Yes

**Title of funding source**

Vice Chancellor for research of Shiraz 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**

Shiraz University of Medical Sciences

**Full name of responsible person**

Setare Nazaribin

**Position**

MSc in Nursing

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

Fatemeh(PBUH) School of Nursing and Midwifery, Shiraz University of Medical Sciences, Namazi Square

**City**

Shiraz

**Postal code****Phone**

+98 71 3825 2704

**Fax****Email**

setare1991\_2013@yahoo.com

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

Shiraz University of Medical Sciences

**Full name of responsible person**

Sayed Saeed Najafi

**Position**

MS in Nursing

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

Fatemeh(PBUH) School of Nursing and Midwifery, Shiraz University of Medical Science, Namazi Square

**City**

Shiraz

**Postal code**

0098713451978

**Phone**

+98 71 3647 4255

**Fax**

+98 71 3831 5561

**Email**

najafisa@sums.ac.ir

**Web page address****Person responsible for updating data****Contact**

**Name of organization / entity**

Shiraz University of Medical Sciences

**Full name of responsible person**

Seyed Saeed Najafi

**Position**

MS in Nursing

**Other areas of specialty/work****Street address****City****Postal code****Phone**

00

**Fax****Email**

najafisa@sums.ac.ir

**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*