# Clinical Trial Protocol
# Iranian Registry of Clinical Trials

17 Sep 2026

## The effects of massage therapy and reflexology on patients' anxiety before angiography at hajar hospital

## Protocol summary

**Summary**

In this non-blinded randomized clinical trial aimed to determine the effectiveness of Reflexology and Massage therapy on anxiety of patient before angiography. A total of 75 patients with an indication of angiography were referred to the department of cardiology at Hajar hospital in Shahrekord in 2013. The exclusion criteria were those not willing to continue their enrollment and patients suffering from any psychiatric or clinical diseases while undergoing this study were removed from this study. Patients were randomly assigned to 3 groups of Reflexology, Massage therapy and control, using block randomization. Two hours before angiography, patients were seen and massage therapy and reflexology were performed for the two groups. Anxiety was evaluated before and after intervention with questionnaires. We used State-Trait Anxiety Inventory at first and after intervention for the three groups. In Reflexology group patients received 15 minutes intervention for each foot and in the second group patients received 20 minutes back massage before Angiography.

## General information

**Acronym**

**IRCT registration information**

IRCT registration number: **IRCT2016101719316N3**
Registration date: **2016-11-15, 1395/08/25**
Registration timing: **retrospective**

Last update:
Update count: **0**

**Registration date**

2016-11-15, 1395/08/25

**Registrant information**

**Name**

Pouya Nezafati

**Name of organization / entity**

Mashhad University of Medical Sciences

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**Recruitment status**

**Recruitment complete**

**Funding source**

Shahrekord University of Medical Sciences

**Expected recruitment start date**

2013-08-01, 1392/05/10

**Expected recruitment end date**

2013-12-01, 1392/09/10

**Actual recruitment start date**

empty

**Actual recruitment end date**

empty

**Trial completion date**

empty

**Scientific title**

The effects of massage therapy and reflexology on patients' anxiety before angiography at hajar hospital

**Public title**

Massage therapy and reflexology effects on anxiety of patients before undergoing angiography at hajar hospital in shahrekord - 2013

**Purpose**

Treatment

**Inclusion/Exclusion criteria**

Inclusion criteria: age ≥ 18 years old; State Trait Anxiety Inventory (STAI) was scored less than 60 by each applicant. This means participants are not suffering from a severe anxiety disorder; patients were entered by their own interest; not having history of suffering from mental retardation, deafness, or blindness; no history of

suffering from any psychiatric or anxiety disorder and not taking any anti-anxiety disorder drug; no history of any burn scar, rashes, trauma in the sites being massaged. Exclusion criteria: no willing to continue their enrollment; suffering from any psychiatric or clinical problems while being under treatment for this study.

**Age**
No age limit

**Gender**
Both

**Phase**
N/A

**Groups that have been masked**
*No information*

**Sample size**
Target sample size: **75**

**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**
Ethics committee of Shahrekord University of Medical Sciences

**Street address**
Vice Chancellery for Research and Technology, Shahrekord University of Medical Sciences. Kashani Bld. Shahrekord. IRAN

**City**
Shahrekord

**Postal code**

**Approval date**
2013-05-18, 1392/02/28

**Ethics committee reference number**
IR.SKUMS.REC.1392.334

## Health conditions studied

### 1

**Description of health condition studied**
Unstable Angina

**ICD-10 code**
120.0

**ICD-10 code description**
Unstable angina

## Primary outcomes

### 1

**Description**
Anxiety change after each intervention

**Timepoint**
Before and 15 minutes after intervention

**Method of measurement**
State-Trait Anxiety Inventory questionnaire

## Secondary outcomes

### 1

**Description**
Vital signs changes after intervention

**Timepoint**
Before and 15 minutes after intervention

**Method of measurement**
Clinical examination, sphygmomanometer

## Intervention groups

### 1

**Description**
Reflexology technique: Reflexotherapy was conducted for each patient for 30 minutes, first for the left foot and then for the right foot (15 minutes each). Conducting reflexotherapy, first of all, the relaxation technique was used from the footstalk toward the sole (plantar surfaces) at the beginning of the session. Then, four major plantar reflexology points (solar plexus, pituitary, heart and liver) were put under pressure using the thumbs. The other reflexology areas of the plantar surface of the foot were also massaged and finally intervention was put to an end with massaging the solar plexus by the researcher. The vital signs were measured again after finishing the intervention.

**Category**
Treatment - Other

### 2

**Description**
Massage technique: massage therapy was performed by the same physiotherapist during the protocol and consisted of neck, shoulder and back massages for 20 minutes. The massages were initiated with light compression by the inner regions of the fingers and progressed to hard compression. Cervical traction, and mobilization in all planes (e.g., the front, back, and sides) was followed. The massage was finished with light manual compression

**Category**
Treatment - Other

**3**

**Description**
Control group: The control group received only routine intervention including resting for 30 minutes before angiography
**Category**
Treatment - Other

## Recruitment centers

**1**

**Recruitment center**
**Name of recruitment center**
Department of Cardiology, Hajar Hospital
**Full name of responsible person**
Ali Mokhtari
**Street address**
Hajar Hospital, Parastar St.
**City**
Shahrekord

## Sponsors / Funding sources

**1**

**Sponsor**
**Name of organization / entity**
Vice Chancellor for Research - Shahrekord University of Medical Sciences
**Full name of responsible person**
Kamal Solati
**Street address**
Vice Chancellery for Research and Technology, Shahrekord University of Medical Sciences, Kashani Blvd.
**City**
Shahrekord
**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 - Shahrekord 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**
Shahrekord University of Medical Sciences
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## Person responsible for updating data

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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*