

Clinical Trial Protocol

Iranian Registry of Clinical Trials

18 Jun 2026

The effect of Eye Movement Desensitization and Reprocessing on anxiety, depression, stress and hemodynamic parameters in patients undergoing Coronary Artery Bypass Graft (CABG)

Protocol summary

Study aim

Determining the effect of EMDR on anxiety, depression, stress and hemodynamic parameters in patients undergoing CABG.

Design

90 eligible patients included in the study through available sampling, after a thorough explanation of the objectives of the study and informed consent, They were by the randomly blocks method assigned into two groups of control (n = 45) and intervention (n = 45).

Settings and conduct

The present study aimed to evaluate the efficacy of EMDR on anxiety, depression, stress and hemodynamic parameters in patients undergoing CABG and will be referred to the Shahid Rajaei, Educational Center.

Participants/Inclusion and exclusion criteria

Inclusion criteria: The sample population included patients undergone CABG who were candidates for surgery one week before intervention, Not receiving any psychological treatment or counseling before intervention period. Exclusion criteria: Having sustained stable angina, acute phase of myocardial infarction and unstable arrhythmia, Having Cognitive impairment, Visual disturbances and strabismus

Intervention groups

Intervention group: EMDR method will be done individually conduct for each patient in the consultation room within 2 sessions 30-45 minutes before the surgery. The patient following the rapid movements of the therapist's finger with rapid eye movement. The therapist's finger is about 30 cm far from the eyes of the subject and moved from right to left and vice versa in the patient's field of vision. This move included two rounds to the sides in one second, which is a cycle, and each 12-24 cycles are a set. The process is repeated to the extent that the levels of mental disorientation units are zero or minimized. In the final session, the

Depression, Anxiety and Stress Questionnaire will be completed again. The control group :receive no intervention

Main outcome variables

Anxiety: Depression: Stress

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20171223038015N1**

Registration date: **2020-02-29, 1398/12/10**

Registration timing: **retrospective**

Last update: **2020-02-29, 1398/12/10**

Update count: **0**

Registration date

2020-02-29, 1398/12/10

Registrant information

Name

Fatemeh Rahimi

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 26 3457 0030

Email address

frahimi@abzums.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2017-09-23, 1396/07/01

Expected recruitment end date

2018-11-22, 1397/09/01

Actual recruitment start date

2017-09-23, 1396/07/01

Actual recruitment end date

2018-12-21, 1397/09/30

Trial completion date

2018-12-21, 1397/09/30

Scientific title

The effect of Eye Movement Desensitization and Reprocessing on anxiety, depression, stress and hemodynamic parameters in patients undergoing Coronary Artery Bypass Graft (CABG)

Public title

The effect of Eye Movement Desensitization and Reprocessing in patients undergoing Coronary Artery Bypass Graft (CABG)

Purpose

Supportive

Inclusion/Exclusion criteria**Inclusion criteria:**

Undergoing non-emergency open heart surgery for the first time one week before intervention Not receiving any psychological treatment or counseling before intervention period Patient's willingness to participate in the study

Exclusion criteria:

Having sustained stable angina, acute phase of myocardial infarction and unstable Arrhythmia Having Cognitive impairment Visual disturbances and strabismus

Age

From **18 years** old to **70 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **90**

Actual sample size reached: **90**

Randomization (investigator's opinion)

Randomized

Randomization description

Simple randomization

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 Alborz University of Medical Sciences

Street address

No.9,North Yasaman St,East Pone Ave,Dara Town

City

karaj

Province

Alborz

Postal code

3197635141

Approval date

2017-07-24, 1396/05/02

Ethics committee reference number

Abzums.Rec.1396.72

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

anxiety

ICD-10 code**ICD-10 code description****2****Description of health condition studied**

Depression

ICD-10 code**ICD-10 code description****Primary outcomes****1****Description**

Anxiety

Timepoint

Before and after the intervention and after CABG

Method of measurement

anxiety and depression scale (HADS)

2**Description**

stress

Timepoint

Before and after the intervention and after CABG

Method of measurement

stress scale(DASS21)

Secondary outcomes

empty

Intervention groups

1

Description

"Intervention group": EMDR method will be done individually conduct for each patient in the consultation room within 2 sessions 30-45 minutes before the surgery . The patient following the rapid movements of the therapist's finger with rapid eye movement. The therapist's finger is about 30 cm far from the eyes of the subject and moved from right to left and vice versa in the patient's field of vision. This move included two rounds to the sides in one second, which is a cycle, and each 12-24 cycles are a set. The process is repeated to the extent that the levels of mental disorientation units are zero or minimized. In the final session, the Depression, Anxiety and Stress Questionnaire will be completed again.

Category

Treatment - Other

2

Description

Control group: receive no intervention and only complete depression, anxiety, and stress questionnaires in the first and last sessions of the study.

Category

Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Shahid Rajaei , Educational & Medical Center

Full name of responsible person

Fatemeh Rahimi

Street address

Shahid Rajaei St, Shahid Beheshti Ave, Shahid Rajaei Hospital

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<https://rajaei.abzums.ac.ir/Portal/Home/Default.aspx>

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Karaj University of Medical Sciences

Full name of responsible person

Dr Mohamad Noorisepehr

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Grant name

Grant code / Reference number

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

Yes

Title of funding source

Karaj 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

Type of organization providing the funding

Academic

Person responsible for general inquiries

Contact

Name of organization / entity

Karaj University of Medical Sciences

Full name of responsible person

Fatemeh Rahimi

Position

Critical Care Nursing

Latest degree

Master

Other areas of specialty/work

In Critical Care Nursing (BScN, MScN) Clinical Research Development Unit

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Person responsible for scientific inquiries

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Person responsible for updating data

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

Undecided - It is not yet known if there will be a plan to make this available

Study Protocol

Undecided - It is not yet known if there will be a plan to make this available

Statistical Analysis Plan

Not applicable

Informed Consent Form

Undecided - It is not yet known if there will be a plan to make this available

Clinical Study Report

Undecided - It is not yet known if there will be a plan to make this available

Analytic Code

Not applicable

Data Dictionary

Not applicable