

Clinical Trial Protocol

Iranian Registry of Clinical Trials

12 Jul 2026

Evaluation of the effect of virtual reality on pain reduction in emergency department patients during suture

Protocol summary

Study aim

Evaluation of the effect of virtual reality on pain relief in emergency department patients during suture

Design

The design of the study is a randomized clinical trial. The randomization method is blocked. The sample size for each study group is 60.

Settings and conduct

In this research, all patients referred to the Emergency Department of Hazrat Rasoul Akram, Shohada-e-Haftome tir and Firouzgar Hospital, who needed suture will be enrolled. Patients will be randomly divided into two groups based on 10 blocks. A total of 120 patients will be examined. Data analyzers will be blind.

Participants/Inclusion and exclusion criteria

All patients referred to the Emergency Department of Hazrat Rasoul Akram, Shohada-e-Haftome tir and Firouzgar Hospital, who needed suture will be enrolled. Inclusion criteria: Patients over 18 years, Patients without mental illness, Patients without mental retardation. Exclusion criteria: Patients over 70 years, Emergency hospitalized patients, Leave without notice or leave with personal consent, Patients who were transferred to the operating room and underwent surgery, Patient dissatisfaction.

Intervention groups

In control group, a common treatment will be performed, that is, only local anesthesia will be performed before the suture. and in intervention group, in addition to common treatment, local anesthesia will be performed before the suture and then the virtual reality glasses will be given to the patient during the suture.

Main outcome variables

Pain relief, Patient Satisfaction

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20151003024317N7**

Registration date: **2019-09-01, 1398/06/10**

Registration timing: **prospective**

Last update: **2019-09-01, 1398/06/10**

Update count: **0**

Registration date

2019-09-01, 1398/06/10

Registrant information

Name

Mahdi Rezai

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 21 8868 6772

Email address

rezaei.m@iums.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2019-09-21, 1398/06/30

Expected recruitment end date

2020-03-10, 1398/12/20

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Evaluation of the effect of virtual reality on pain reduction in emergency department patients during suture

Public title

Effect of Virtual reality on pain relief

Purpose

Treatment

Inclusion/Exclusion criteria**Inclusion criteria:**

Patients over 18 years Patients without mental illness

Patients without mental retardation

Exclusion criteria:

Patients over 70 years Emergency hospitalized patients

Leave without notice or leave with personal consent

Patients who were transferred to the operating room and

underwent surgery Patient dissatisfaction

Age

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

Gender

Both

Phase

N/A

Groups that have been masked

- Data analyser

Sample size

Target sample size: **120**

Randomization (investigator's opinion)

Randomized

Randomization description

Patients will be randomly assigned to two groups. In order to randomize, a random block method will be used.

For this purpose, we formed blocks with 10 person. In

each block, 5 individuals will be in intervention group and

5 will be in control group. A total of 12 blocks will be

considered for sample size.

Blinding (investigator's opinion)

Single blinded

Blinding description

Data will be analyzed by person who is blind to study groups.

Placebo

Not used

Assignment

Parallel

Other design features**Secondary Ids**

empty

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

Ethics committee of Iran University of Medical Sciences

Street address

Iran University of Medical Sciences, Hemmat Highway, Tehran

City

Tehran

Province

Tehran

Postal code

1449614535

Approval date

2019-08-31, 1398/06/09

Ethics committee reference number

IR.IUMS.REC.1398.547

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

Virtual reality on pain relief during suture wounds

ICD-10 code

T14.1

ICD-10 code description

Open wound of unspecified body region

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

Pain relief

Timepoint

Before the suture and during the suture

Method of measurement

From 1 to 5 (Based on numerical scale).

2**Description**

Patient Satisfaction

Timepoint

At the time of discharge from the emergency department

Method of measurement

From 1 to 5 (based on Likert scale).

Secondary outcomes

empty

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

Control group: A common treatment will be performed, that is, only local anesthesia will be performed before the suture.

Category

Treatment - Drugs

2**Description**

Intervention group: In addition to common treatment, local anesthesia will be performed before the suture and then the virtual reality glasses will be given to the patient during the suture.

Category
Treatment - Devices

Recruitment centers

1

Recruitment center

Name of recruitment center
Shohada-e- Haftome tir Hospital
Full name of responsible person
Mahdi Rezai
Street address
Emergency Department, Shohada-e- Haftome tir
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2

Recruitment center

Name of recruitment center
Firouzgar hospital
Full name of responsible person
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3

Recruitment center

Name of recruitment center
Hazrat Rasoul Akram hospital
Full name of responsible person
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Street address
Emergency department, Hazrate Rasool hospital,
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Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Iran University of Medical Sciences
Full name of responsible person
Abbas Motevallian
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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
Iran 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
Iran University of Medical Sciences
Full name of responsible person
Mahdi Rezai
Position
Assistant Professor of Emergency Medicine
Latest degree
Specialist
Other areas of specialty/work
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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

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

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

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

Data Dictionary

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