

Clinical Trial Protocol

Iranian Registry of Clinical Trials

20 Jul 2026

Effect of Acupressure Technique and Diaphragmatic Breathing Exercise on Nausea and Vomiting in Cholecystectomy Patient: A comparative study

Protocol summary

Study aim

To Compare the Effectiveness of Acupressure Technique and Diaphragmatic Breathing Exercise on Nausea and Vomiting in Cholecystectomy Patients. .

Design

A Quasi Experimental Comparative Design on non random in patient with cholecystectomy with minimum sample size of 30 for each group will be used ; the total size 90 patient enrolled between December 2023 to September 2024

Settings and conduct

The study was conducted in Imam Al-Hussein medical city Hospital For Surgical unit For Cholecystectomy patient in Karbala Governorate, Iraq.

Participants/Inclusion and exclusion criteria

Inclusion criteria: All patient with cholecystectomy who have nausea and vomiting. More than 18 years old patient who complete surgery of cholecystectomy during the first 6 hour of surgery. Exclusion criteria: patient who declined to enroll in the study. patient with physical disability. patient who has amputation in upper extremity. Patient who has discontinuing to intervention. patient who had on mechanical ventilation and/or in intensive care for more than 48 hours.

Intervention groups

Data will be collected using the pre- and post-test methods. After assessing the level of nausea and vomiting, the sample will be allocated into three groups: (Group 1) performed the acupressure technique on PC6 using elastic wrist bands with a 1 cm-diameter plastic button stud for 6 hours. Group 2: diaphragmatic breathing exercise, for 6 hours. The researcher assesses the severity of nausea and vomiting after six hours to determine the effect of this exercise on both nausea and vomiting. All groups were evaluated prior to the intervention (post-test assessment) after six hours by using the Rhodes index to assess nausea. Group 3: control group without any intervention.

Main outcome variables

Reducing Nausea and Vomiting .

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20240111060680N1**

Registration date: **2024-02-13, 1402/11/24**

Registration timing: **registered_while_recruiting**

Last update: **2024-02-13, 1402/11/24**

Update count: **0**

Registration date

2024-02-13, 1402/11/24

Registrant information

Name

Bushra.A. jasem Jasem

Name of organization / entity

Kerbala University

Country

Iraq

Phone

+964 771 434 0379

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bushra.a@s.uokerbala.edu.iq

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2024-01-31, 1402/11/11

Expected recruitment end date

2024-03-01, 1402/12/11

Actual recruitment start date

2024-02-10, 1402/11/21

Actual recruitment end date

2024-06-25, 1403/04/05

Trial completion date

2024-07-01, 1403/04/11

Scientific title

Effect of Acupressure Technique and Diaphragmatic Breathing Exercise on Nausea and Vomiting in Cholecystectomy Patient: A comparative study

Public title

Effect of Acupressure Technique and Diaphragmatic Breathing Exercise on Nausea and Vomiting in patient with Cholecystectomy :A Clinical Trial

Purpose

Education/Guidance

Inclusion/Exclusion criteria**Inclusion criteria:**

Patient Those who are Surgical Diagnosed with Cholecystectomy Patient between Age 18-and above , Able to perform intervention.

Exclusion criteria:

Patient who have Discontinuing to Intervention- Patient who had on Mechanical Ventilation and/or in Intensive Care for More than 48 hours Patient who have Amputation in Upper Extremity

Age

From **18 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **90**

More than 1 sample in each individual

Number of samples in each individual: **30**

Actual sample size reached: **90**

More than 1 sample in each individual

Actual sample size in each individual: **30**

Randomization (investigator's opinion)

Not randomized

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

Not blinded

Blinding description**Placebo**

Not used

Assignment

Parallel

Other design features

Quasi experimental design purposive sample comparative study with a minimum sample size of 30 for each group will be used. The total sample size would be 90 subjects

Secondary Ids

empty

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

Ethics committee in College of Nursing at University of Kerbela

Street address

Al-Baladia Distract

City

Karbala

Postal code

10053

Approval date

2023-09-26, 1402/07/04

Ethics committee reference number

4626

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

Cholecystectomy patient

ICD-10 code

R11

ICD-10 code description

Nausea and Vomiting

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

The primary outcome variable is the level of nausea and vomiting post operative in patient cholecystectomy that can be changed based on Acupressure Technique and diaphragmatic breathing exercises.

Timepoint

Before intervention and 6 hours after intervention.

Method of measurement

The Rhodes index and visual analog scale will be used to assess the level of nausea vomiting

Secondary outcomes

empty

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

Intervention group: group1 perform the acupressure technique on pc6 with wrist band were used for this technique which are elastic wrist bands with plastic button 1cm in diameter stud ,The Stud of the wrist band pressing upon PC6acupoint it is located on the anterior surface of the forearm ,about three finger 'width up from the wrist crease ,between the tendon of the palmaris longus and flexior carpi radialis The patient wearing wrist bands at pc6 bilaterally starting at 0 hour postoperative and Removed for 6 hours .Group 2 Diaphragmatic

Breathing Exercise starting through inhale the nose slowly to take as much as possible amount of air ,while the mouth was closed and keep it on for few second paying close attention to the abdomen-hand movement with each breath while keeping the hand on the chest steady and then exhale slowly through the mouth for a few seconds in a circle shape, The patient in this group were instructed to perform diaphragmatic breathing exercise for 2-3 min every two hour for 6 hours , in all groups were evaluated prior to the intervention (post-test assessment) after six hours by using the Rhodes index and visual analog scale for assess nausea and vomiting level.

Category

Treatment - Other

2

Description

Control group received no intervention ;instead they received pretest and post test assessment after 6 hours ,as did the other groups ,and they will be compared to the other groups in the study. Then patients in all groups were evaluated prior to the intervention (post-test assessment) after 6 hours by using the Rhodes index and Visual Analog Scale .

Category

Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Imam Al-Hussein Medical City Hospital

Full name of responsible person

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

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Full name of responsible person

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Grant name

Grant code / Reference number

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

No

Title of funding source

The author of the trial is the funding source

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

University of Kerbala

Full name of responsible person

Bushra Abd Ali Jasem

Position

Lecture

Latest degree

Master

Other areas of specialty/work

Nursery

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Other areas of specialty/work

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Person responsible for updating data

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Email

Sharing plan

Deidentified Individual Participant Data Set (IPD)

Yes - There is a plan to make this available

Study Protocol

Yes - There is a plan to make this available

Statistical Analysis Plan

Yes - There is a plan to make this available

Informed Consent Form

Yes - There is a plan to make this available

Clinical Study Report

Yes - There is 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

Title and more details about the data/document

The data will be the result of Cholecystectomy Patient with Nausea and Vomiting Level in Both the Control and Intervention Groups .

When the data will become available and for how long

God Willing, Once the Article is Published, The Data will be Available after 6 Months of Publication. If the Article will be Published in a Subscribed Journal, The Data Will be Available after One Year because of the Policy of The Subscribed Journals.

To whom data/document is available

With Academic Nurses and any Researcher who is Interested in the Data.

Under which criteria data/document could be used

The Data Could be Used after Getting permission Via Email. Also, Users need to Acknowledge The Owner.

From where data/document is obtainable

Users can Ask for the Data and Permission via email. is the Corresponding Author. He will contact whoever he requests the information from. His email is bushra.a@s.uokerbala.edu.iq Bushra Abd Alli works at the University of Kerbala/College of Nursing. The address is Al- Baladia district, Kerbala, Iraq. What processes are involved for a request to access data/document

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Users Can ask for The Data and Permission via email. Bushra Abd Ali Jasem is The Corresponding Author. He will Contact whoever he Requests the Information from. His email is bushra.a@s.uokerbala.edu.iq

Comments