

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

The Effect of Jacobson's Progressive Relaxation Technique on Postoperative Pain, Activity Tolerance and Sleeping Quality in Patients Undergoing Gynaecological Surgery

Protocol summary

Study aim

evaluate the effect of JPRT on post-operative pain, activity tolerance, and sleeping quality in patients undergoing gynaecological surgery.

Design

randomized controlled clinical trial

Settings and conduct

This study will be carried out at the Obstetrics and Gynaecology Department at Damanhour Educational Institute affiliated to the ministry of health in Elbehira governorate /Egypt.

Participants/Inclusion and exclusion criteria

patients undergoing abdominal gynaecological surgery for benign conditions, being able to differentiate between the different images in visual analogue scale, being free from any psychological or mental disorders, taking non-steroidal anti-inflammatory medication as post-operative analgesia, and being enthusiastic about contributing in the study. While drug abusers, alcoholics, those who undergo laparoscopic surgery, drink more than 3 cups of coffee per day, use sleep medications, and had intra or post-operative complications will be excluded from the study.

Intervention groups

The patients in the intervention group will be explained that the technique involves the systemic sequential tension in specific muscle groups associated. Inhale deeply, then hold the breath for ten seconds. This tension is then released while exhaling from pursed lips within ten seconds slowly. Also, it will explained that the muscles of the body are divided into twelve groups: hands, biceps and triceps, shoulders, neck, mouth, jaw, eyes and forehead, chest, abdomen, back, thighs, legs, and feet muscles. The researchers will help the patient to sit comfortably in her bed from the beginning till the end of the JPRT session.

Main outcome variables

pain, activity tolerance, and sleep quality

General information

Reason for update

Acronym

JPRT

IRCT registration information

IRCT registration number: **IRCT20210131050193N1**

Registration date: **2021-02-07, 1399/11/19**

Registration timing: **prospective**

Last update: **2021-02-07, 1399/11/19**

Update count: **0**

Registration date

2021-02-07, 1399/11/19

Registrant information

Name

Heba Ibrahim

Name of organization / entity

Benha University

Country

Egypt

Phone

+20 13 2265261

Email address

heba_esmael18@yahoo.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2021-02-15, 1399/11/27

Expected recruitment end date

2021-06-15, 1400/03/25

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The Effect of Jacobson's Progressive Relaxation Technique on Postoperative Pain, Activity Tolerance and Sleeping Quality in Patients Undergoing Gynaecological Surgery

Public title

Jacobson's Technique on Postoperative Pain, Activity Tolerance and Sleeping

Purpose

Other

Inclusion/Exclusion criteria**Inclusion criteria:**

patients undergoing abdominal gynaecological surgery for benign conditions, being able to differentiate between the different images in visual analogue scale, being free from any psychological or mental disorders, taking non-steroidal anti-inflammatory medication as post-operative analgesia, and being enthusiastic about contributing in the study.

Exclusion criteria:

Drug abusers, alcoholics, those who undergo laparoscopic surgery, drink more than 3 cups of coffee per day, use sleep medications, and had intra or post-operative complications will be excluded from the study.

Age

From **20 years** old

Gender

Female

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **116**

Randomization (investigator's opinion)

Randomized

Randomization description

Randomization block technique will be used to randomly assign participants to the JPRT and control group. The researchers will follow six phases to conduct the randomization block technique. First; the researchers will make a list that contains numbers from 1 to 116. Second; the researchers will make small pieces of papers that contain numbers from 1 to 116. Third; the researchers will fold the paper pieces to hide the numbers written on it, then it will be put in a bowl. Fourth; the researchers will divide the 116 pieces of papers into six blocks randomly and blindly; the first five blocks will involve 20 random numbers, and the last one will involve 16 remaining numbers. Fifth; half of the numbers will be randomly and blindly selected to the JPRT group from each block, while the residual will be allocated to the control group. Sixth; the sequence of cases will be recorded in the preset list (the word JPRT or control will be written in front of each number) to be taken into consideration when collecting data.

Blinding (investigator's opinion)

Not blinded

Blinding description**Placebo**

Not used

Assignment

Single

Other design features

Nursing care

Secondary Ids

empty

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

nursing college ethical committee at Damanhur University

Street address

Ataa Al leathy street

City

Damanhour

Postal code

55461

Approval date

2019-02-02, 1397/11/13

Ethics committee reference number

02-02-02-2019 EC

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

Patients Undergoing Gynaecological Surgery

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

Postoperative Pain, Activity Tolerance and Sleeping Quality

Timepoint

before intervention and 2, days after intervention

Method of measurement

pain analogue scale; activity tolerance questionnaire, and the Groningen sleeping quality scale.

Secondary outcomes**1****Description**

None

Timepoint

None

Method of measurement

None

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

Intervention group:

Category

Treatment - Other

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

Obstetrics and Gynecology Department/Damanhour educational institute, Elbehira, Egypt.

Full name of responsible person

wafaa Elgzar

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

Damanhour University

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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

Damanhour University

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**

Benha University

Full name of responsible person

Heba Ibrahim

Position

Associate professor

Latest degree

Ph.D.

Other areas of specialty/work

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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