

# 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

**Street address**

AlOrgan street

**City**

Damanhour

**Postal code**

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**Phone**

+20 13 2261265

**Email**

heba\_esmael18@yahoo.com

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

Damanhour University

**Full name of responsible person**

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wafaa.elgzar@nur.dmu.edu.eg

**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**

Midwifery

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**Person responsible for scientific inquiries****Contact****Name of organization / entity**

Benha University

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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