Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 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 researches 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
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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
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Heba Ibrahim
Position
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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