Clinical Trial Protocol
Iranian Registry of Clinical Trials

07 Nov 2026

Studying the effect of electric uterine massager on postpartum pain and postpartum hemorrhage: A Randomized control trial

Protocol summary

Study aim
To compare the effect of electric uterine massage versus routine manual uterine massage on postpartum pain and vaginal bleeding after vaginal delivery

Design
A randomized parallel-group clinical trial with simple randomization and a total sample size of 100 participants.

Settings and conduct
Hospitals affiliated of Medical Sciences that have maternity units.

Participants/Inclusion and exclusion criteria
Inclusion criteria Women in the postpartum period after vaginal delivery Low-risk pregnancy Singleton pregnancy Gestational age between 37 and 42 weeks Resident of Iran No history of postpartum hemorrhage No risk factors for postpartum uterine atony No genetic anemic disorders Uncomplicated vaginal delivery and placental expulsion Ability to understand and speak Persian Exclusion criteria Unwillingness to continue participation in the study Bleeding requiring emergency management according to the clinical protocol Transfer to the operating room Manual removal of the placenta Hematoma Severe perineal or genital tract laceration Inability to continue the study procedures due to clinical or logistical conditions

Intervention groups
A non-invasive postpartum uterine massage device with an ergonomic pistol-shaped handle, an adjustable vibration motor, and a soft flexible multi-ring massage head. Massage lasts approximately 30–60 seconds and is performed every 15 minutes during the first 2 hours after delivery. Routine postpartum care with manual uterine massage during the first 2 hours after delivery.

Main outcome variables
Postpartum pain; vaginal bleeding

General information

Reason for update

Acronym
EUM-Uterotonic

IRCT registration information
IRCT registration number: **IRCT20220712055438N3**
Registration date: **2026-05-30, 1405/03/09**
Registration timing: **prospective**

Last update: **2026-05-30, 1405/03/09**
Update count: **0**

Registration date
2026-05-30, 1405/03/09

Registrant information

Name
Sedigheh Abdollahpour

Name of organization / entity

Country
Iran (Islamic Republic of)

Phone
+98 51 3841 7660

Email address
abdollahpourts2@yahoo.com

Recruitment status
recruiting

Funding source

Expected recruitment start date
2026-07-21, 1405/04/30

Expected recruitment end date
2028-07-20, 1407/04/30

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
Studying the effect of electric uterine massager on postpartum pain and postpartum hemorrhage: A Randomized control trial

Public title
electric uterine massager
Purpose
Prevention
Inclusion/Exclusion criteria
Inclusion criteria:
Women with low-risk pregnancy in the postpartum period following vaginal delivery; singleton pregnancy; resident of Iran; no history of postpartum hemorrhage; no risk factors for postpartum uterine atony; no genetic anemic disorders; gestational age between 37 and 42 weeks; uncomplicated vaginal delivery and placental expulsion; and ability to understand and speak Persian
Exclusion criteria:
Unwillingness to continue participation in the study; occurrence of bleeding requiring emergency management according to the clinical protocol; transfer of the patient to the operating room; lack of cooperation of the labor and postpartum ward staff; manual removal of the placenta; hematoma; or severe laceration.
Age
No age limit
Gender
Female

Phase
N/A
Groups that have been masked
No information
Sample size
Target sample size: **100**
Randomization (investigator's opinion)
Randomized
Randomization description
Eligible participants will be assigned to the intervention or control group by simple randomization using a pre-generated random allocation list. Allocation will be concealed using coded assignments prepared by a person other than the researcher
Blinding (investigator's opinion)
Not blinded
Blinding description
Placebo
Not used
Assignment
Parallel
Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
Mashhad University of Medical Sciences
Street address
Vakilabad Blvd, Shahid Bahonar Blvd, University Campus, Kharazmi Building, School of Nursing and Midwifery
City
mashhad
Province
Razavi Khorasan
Postal code
9177943760
Approval date
2026-04-21, 1405/02/01
Ethics committee reference number
IR.MUMS.NURSE.REC.1405.017

Health conditions studied

1

Description of health condition studied
Postpartum period
ICD-10 code
O72
ICD-10 code description
Postpartum hemorrhage

Primary outcomes

1

Description
Postpartum pain score; postpartum bleeding volume
Timepoint
every 15 minutes during the first 2 hours after delivery
Method of measurement
Visual Analog Scale (VAS) and weighing blood-soaked pads

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group: The electric uterine massager consists of an ergonomic pistol-shaped handle, an adjustable vibration motor, and a soft flexible multi-ring massage head that together provide palm-like pressure and controlled vibration over the uterine area. The device is applied by a trained provider over the lower abdomen/uterus. Massage is performed every 15 minutes during the first and second hours after delivery.
Category
Prevention

Recruitment centers

1

Recruitment center

Name of recruitment center
Hospitals affiliated with Mashhad University of Medical Sciences

Full name of responsible person
Sedigheh Abdollahpour

Street address
Vakilabad Blvd, Shahid Bahonar Blvd, University Campus, Kharazmi Building, School of Nursing and Midwifery

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Mashhad University of Medical Sciences

Full name of responsible person
Mohsen Tafaghodi

Street address
Vakilabad Blvd, Shahid Bahonar Blvd, University Campus, Kharazmi Building, 4 floor

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RIS@mums.ac.ir

Grant name

Grant code / Reference number

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

Title of funding source
Mashhad 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
Mashhad University of Medical Sciences

Full name of responsible person
Sedigheh Abdollahpour

Position
PhD on reproductive health

Latest degree
Ph.D.

Other areas of specialty/work
Midwifery

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Person responsible for scientific inquiries

Contact

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Full name of responsible person
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Position
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Latest degree
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Other areas of specialty/work
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Person responsible for updating data

Contact

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Position
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Latest degree
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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
Not applicable
Informed Consent Form
Yes - There is 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
Title and more details about the data/document
The study protocol may be made available by the corresponding investigator upon reasonable request and with approval of the research team, in accordance with institutional and ethical regulations.
When the data will become available and for how long
Availability start date: 6 months after publication of the study results.
To whom data/document is available
To qualified researchers upon reasonable request and approval by the research team.
Under which criteria data/document could be used
For scientific research purposes only, subject to approval by the research team and in compliance with ethical regulations.
From where data/document is obtainable
email addresse
What processes are involved for a request to access data/document
Requests should be submitted via email to the corresponding author.
Comments
No.