Clinical Trial Protocol
Iranian Registry of Clinical Trials

26 Jun 2026

Investigating the effect of magnetic therapy on the incidence of post-operative acute urinary retention in patients undergoing surgery in hospital: a randomized controlled trial

Protocol summary

Study aim

Determining the effect of magnetic therapy on the incidence of acute urinary retention after surgery in patients admitted to selected hospitals in Isfahan: a randomized controlled trial

Design

A total of 70 eligible patients are randomly divided into experimental and control groups as soon as they enter the recovery and will be followed up in the recovery and even in the surgical ward until the first urine is excreted after surgery. Will be affected by seven magnets. The total time the magnets are in place will be about 5.35 minutes. All stages of the intervention will be performed by the intervener who has been trained in acupuncture and magnetic therapy and will be coordinated and supervised by the treating physician. The length of time that the patient will be able to urinate after the installation of magnets or magnets is recorded in the experimental and control groups. Excreted urine volume will also be recorded.

Settings and conduct

This study is a single-blind clinical trial in the operating room recovery ward and in the men and women surgery ward of selected hospitals in Isfahan.

Participants/Inclusion and exclusion criteria

Patients at least 18 years old, without urinary catheterization, Class I and II according to the American Society of Anesthesiology (ASA) rankings, no drug addiction (according to the patient), no heart problems, elective and non-urological surgery

Intervention groups

In the experimental group, the magnets are glued at points P6, H7 on the right and left hands, and points SP6, ST36 only on the left foot, and a point on the sole of the left bladder / gastrointestinal foot. In the control group, they are placed at the same points of the facade without magnetic properties.

Main outcome variables

Elimination of urinary retention as a problem after surgery with the least cost and time and complications

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20210415050985N1**
Registration date: **2021-10-10, 1400/07/18**
Registration timing: **prospective**

Last update: **2021-10-10, 1400/07/18**
Update count: **0**

Registration date

2021-10-10, 1400/07/18

Registrant information

Name

Mohammad Sadegh Aboutalebi

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 31 3792 7574

Email address

aboutalebi@nm.mui.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2021-10-23, 1400/08/01

Expected recruitment end date

2022-02-20, 1400/12/01

Actual recruitment start date

empty

Actual recruitment end date
empty
Trial completion date
empty

Scientific title
Investigating the effect of magnetic therapy on the incidence of post-operative acute urinary retention in patients undergoing surgery in hospital: a randomized controlled trial

Public title
The effect of magnetic therapy on the incidence of post-operative acute urinary retention in patients undergoing surgery in hospital
Purpose
Prevention
Inclusion/Exclusion criteria
Inclusion criteria:
Patient informed consent Patients at least 18 years old Classes I and II are ranked according to the American Society of Anesthesiology (ASA) The duration of surgery was more than 2 hours Availability of places for putting magnets on the patient's body Elective surgeries Non-urological surgeries
Exclusion criteria:
Existence of urinary catheter Drug addiction Existence of heart problems History of previous urinary retention Existence of cardiovascular problems Existence of pacemaker Intervention to eliminate urinary retention and catheterization patient expressing a feeling of urination when entering to recovery
Age
From **18 years** old
Gender
Both

Phase
N/A
Groups that have been masked

- Participant

Sample size
Target sample size: **64**
Randomization (investigator's opinion)
Randomized
Randomization description
Sampling will be simple and accessible and according to the inclusion criteria. The allocation of samples in the control and test groups will be done randomly and individually using the website www.sealedenvelope.com in random mode. The samples will also be homogenized by minimization software in terms of age, sex and type of surgery and its duration.
Blinding (investigator's opinion)
Single blinded
Blinding description
The patient will not notice the magnet or non magnetic metal properties
Placebo
Not used
Assignment
Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
Faculty of Nursing, Management and Rehabilitation - Isfahan University of Medical Sciences
Street address
HezarJarib
City
Isfahan
Province
Isfehan
Postal code
8174993541
Approval date
2021-06-08, 1400/03/18
Ethics committee reference number
IR.MUI.NUREMA.REC.1400.047

Health conditions studied

1

Description of health condition studied
urinary retention
ICD-10 code
R33
ICD-10 code description
Retention of urine

Primary outcomes

1

Description
Elimination of urinary retention completely
Timepoint
During the study and the probable time of urination from the start of magnetite therapy
Method of measurement
obsevation

2

Description
The degree of relaxation
Timepoint
Before placing the magnets and the time to remove them and one hour after removing them
Method of measurement
Orally asked based on visual numerical scale 0 to 10

3

Description
Nausea score
Timepoint
Before placing the magnets and the time to remove them and one hour after removing them
Method of measurement
Orally asked based on visual numerical scale 0 to 10

4

Description
Heart rate beat
Timepoint
Before placing the magnets and the time to remove them and one hour after removing them
Method of measurement
Digital monitor

5

Description
Average arterial blood pressure
Timepoint
Before placing the magnets and the time to remove them and one hour after removing them
Method of measurement
Barometer

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group: Magnets are glued at points P6, H7 on the right and left hands, and points SP6, ST36 only on the left foot, and one point on the left foot of the bladder / gastrointestinal tract. The total time the magnets are in place will be about 35 minutes.
Category
Treatment - Other

2

Description
Control group: Non-magnetic irons are glued at points P6, H7 on the right and left hands, and points SP6, ST36 on the left foot only, and a point on the sole of the left foot corresponding to the bladder / gastrointestinal tract. The total time the magnets are in place will be about 5.35 minutes.
Category
Treatment - Other

Recruitment centers

1

Recruitment center
Name of recruitment center
Amin hospital
Full name of responsible person
Mohammad Sadegh Aboutalebi
Street address
HezarJarib
City
Isfahan
Province
Isfehan
Postal code
8174893541
Phone
+98 31 3792 7574
Email
aboutalebi@nm.mui.ac.ir

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Esfahan University of Medical Sciences
Full name of responsible person
Mohammad Sadegh Aboutalebi
Street address
HezarJarib
City
Isfahan
Province
Isfehan
Postal code
8174893541
Phone
+98 31 3792 7574
Email
Aboutalebi@nm.mui.ac.ir
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Esfahan 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
Esfahan University of Medical Sciences
Full name of responsible person
Mohammad Sadegh Aboutalebi
Position
Consultant
Latest degree
Master
Other areas of specialty/work
Nursery
Street address
HezarJarib
City
Isfahan
Province
Isfehan
Postal code
8174893541
Phone
+98 31 3792 7574
Email
aboutalebi@nm.mui.ac.ir

Person responsible for scientific inquiries

Contact

Name of organization / entity
Esfahan University of Medical Sciences
Full name of responsible person
Mohammad Sadegh Aboutalebi
Position
Consultant
Latest degree
Master
Other areas of specialty/work
Nursery
Street address
Hezarjarib
City
Isfahan
Province
Isfehan
Postal code
8174893541
Phone
+98 31 3792 7574
Email
aboutalebi@nm.mui.ac.ir

Person responsible for updating data

Contact

Name of organization / entity
Esfahan University of Medical Sciences
Full name of responsible person
Mohammad Sadegh Aboutalebi
Position
Consultant
Latest degree
Master
Other areas of specialty/work
Nursery
Street address
Hezarjarib
City
Isfahan
Province
Isfehan
Postal code
8174893541
Phone
+98 31 3792 7574
Email
aboutalebi@nm.mui.ac.ir

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
Yes - There is a plan to make this available
Data Dictionary
Yes - There is a plan to make this available
Title and more details about the data/document
All data is potentially shareable after unidentified individuals
When the data will become available and for how long
2022
To whom data/document is available
It will be available only to researchers working in academic and scientific institutions
Under which criteria data/document could be used
no problem
From where data/document is obtainable
Mohammad Sadegh Aboutalebi
What processes are involved for a request to access data/document
As soon as possible
Comments