Clinical Trial Protocol
Iranian Registry of Clinical Trials

16 Sep 2026

Comparison of the effect of intra venous magnesium sulfate and succinylcholine in prevention of muscle contraction due to obturator nerve stimulation in Transurethral Resection Bladder Tumor surgery.

Protocol summary

Study aim

Comparison between the effect of intra venous magnesium sulfate and succinylcholine in prevention of muscle contraction due to obturator nerve stimulation in Transurethral Resection Bladder Tumor surgery.

Design

This study is a double-blinded clinical trial. The study population will include all patients referred to Imam Reza hospital of Kermanshah. 118 eligible patients will be selected conveniently and randomly assigned to two intervention groups.

Settings and conduct

This study will be conducted in Imam Reza hospital of Kermanshah city is double blinded one, that Physicians and participants have been kept blind about the allocation of intervention groups and drug doses. In both groups, magnesium, potassium, and calcium are measured before surgery and recorded in a checklist.

Participants/Inclusion and exclusion criteria

Inclusion criteria: patients with ASA Class1,2; patients are candidates for bladder tumor resection through the urethra. Exclusion criteria: kidney failure with GFR <45 ml / min; heart failure, heart rhythm disturbances, calcium and magnesium plasma disorders, hemodynamic disorders; taking drugs that affect calcium and magnesium transfer in muscle; musculoskeletal diseases; hemodynamic instability; taking medications that affect the transmission of neuromuscular messages.

Intervention groups

The first intervention group will receive an intravenous infusion of Saxil Neil Colin bolus1 mg/kg over 10 minutes. The second intervention group will receive 40 mg/kg intravenous magnesium sulfate as an infusion over 10 minutes.

Main outcome variables

Muscular pain

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20130812014333N152**
Registration date: **2020-06-27, 1399/04/07**
Registration timing: **registered_while_recruiting**

Last update: **2020-06-27, 1399/04/07**
Update count: **0**

Registration date

2020-06-27, 1399/04/07

Registrant information

Name

Feizollah Foroughi

Name of organization / entity

kermanshah University of Medical Sciences

Country

Iran (Islamic Republic of)

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Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2020-06-24, 1399/04/04

Expected recruitment end date

2020-08-25, 1399/06/04

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title
Comparison of the effect of intra venous magnesium sulfate and succinylcholine in prevention of muscle contraction due to obturator nerve stimulation in Transurethral Resection Bladder Tumor surgery.

Public title
The effect of intravenous magnesium sulfate and succinylcholine in resection bladder tumor surgery.
Purpose
Treatment
Inclusion/Exclusion criteria
Inclusion criteria:
Patients with ASA Class1,2 Patients are candidates for bladder tumor resection through the urethra
Exclusion criteria:
Kidney failure with GFR <45 ml / min Heart failure, heart rhythm disturbances, calcium and magnesium plasma disorders, hemodynamic disorders Taking drugs that affect calcium and magnesium transfer in muscle Musculoskeletal Diseases Hemodynamic instability Taking medications that affect the transmission of neuromuscular messages
Age
No age limit
Gender
Both

Phase
2-3
Groups that have been masked

- Participant
- Care provider

Sample size
Target sample size: **52**
Randomization (investigator's opinion)
Randomized
Randomization description
Block randomization method. In this study, 4 blocks will be used and with the help of web randomization, 13 random 4 blocks will be created for the sample size of 52 people. Then, in addition to block randomization, a special code was assigned to each random sequence created to prevent the random process from leaking. This code is a specific code for each patient.
Blinding (investigator's opinion)
Double blinded
Blinding description
In this study, the therapist and the participants were kept blind about the allocation of intervention groups and drug doses.
Placebo
Not used
Assignment
Parallel
Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
Ethics committee of Kermanshah University of Medical Sciences
Street address
Building No.2, Shahid Beheshti, Vice Chancellor for Research Affairs, Kermanshah University of Medical Sciences
City
Kermanshah
Province
Kermanshah
Postal code
6715847141
Approval date
2020-06-15, 1399/03/26
Ethics committee reference number
IR.KUMS.REC.1399.253

Health conditions studied

1

Description of health condition studied
Bladder tumor
ICD-10 code
C67
ICD-10 code description
Malignant neoplasm of bladder

Primary outcomes

1

Description
Muscular pain
Timepoint
The first 24 hours after surgery
Method of measurement
Using the NRS method (numerically from 0 to 10)

Secondary outcomes

empty

Intervention groups

1

Description
The first intervention group will receive an intravenous infusion of Saxil Neil Colin bolus1 mg/kg over 10 minutes.
Category
Treatment - Drugs

2

Description

The second intervention group will receive 40 mg/kg intravenous magnesium sulfate as an infusion over 10 minutes.

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center

Emam Reza Hospital

Full name of responsible person

Shayesteh Rezaei

Street address

Emam Reza Hospital, Parastar Boulevard

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Kermanshah University of Medical Sciences

Full name of responsible person

Dr. Farid Najafi

Street address

Building No.2, Shahid Beheshti, Vice Chancellor for Research Affairs, Kermanshah University of Medical Sciences

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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

Kermanshah 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

Kermanshah University of Medical Sciences

Full name of responsible person

Shayesteh Rezaei

Position

medical student

Latest degree

A Level or less

Other areas of specialty/work

General Practitioner

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Person responsible for scientific inquiries

Contact

Name of organization / entity

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Full name of responsible person

Dr. Elham Siyakamari

Position

Faculty member of Kermanshah University of Medical Sciences

Latest degree

Ph.D.

Other areas of specialty/work

Anesthesiology

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Person responsible for updating data

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Position
medical student

Latest degree
A Level or less

Other areas of specialty/work
General Practitioner

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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
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
Not applicable

Data Dictionary
Not applicable

Title and more details about the data/document
The main outcomes of the study will be shared.

When the data will become available and for how long
4 months

To whom data/document is available
If requested, results will be made available to other academic researchers

Under which criteria data/document could be used
Collected data is confidential and will not be shared with anyone else

From where data/document is obtainable
Send E-mail to the responsible for the update to get the documentation

What processes are involved for a request to access data/document
Documentation will be emailed within a 25-day timeframe

Comments