

Clinical Trial Protocol

Iranian Registry of Clinical Trials

21 Jul 2026

The effect of intraarticular magnesium sulfate on postoperative pain after knee arthroscopy

Protocol summary

Summary

The purpose of this study is to evaluate the effects of intraarticular administration of magnesium sulphate on postoperative pain in the patients who are candidate for knee arthroscopy for repair of anterior cruciate ligament . In this randomized double blind trial, 60 patients, aged 18-55 years old, and ASA physical status I and II, are assigned into two groups(30 patients in every group).Induction of anesthesia and route of surgery are the same for all the patients.The patients receive randomly intraarticular administration of 1g of magnesium sulphate in 10 ml normal saline at the end of the surgery or placebo(10 ml normal saline). Pain is assessed through visual analog scale (VAS) at1, 2, 6, 12, 18 and 24 hours after the surgery. In addition, the first request of the patient for analgesia, the amount of opioid consumed, and side effects of magnesium sulphate (flushing ,hypotension, bradycardia) are evaluated during 24 hours and compared between the groups.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201204092963N8**

Registration date: **2012-04-21, 1391/02/02**

Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2012-04-21, 1391/02/02

Registrant information

Name

Shekoufeh Behdad

Name of organization / entity

Shahid Sadoughi University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 35 1822 1386

Email address

drbehdad@ssu.ac.ir

Recruitment status

Recruitment complete

Funding source

Shahid Sadoughi University of Medical Sciences

Expected recruitment start date

2012-03-10, 1390/12/20

Expected recruitment end date

2012-09-10, 1391/06/20

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of intraarticular magnesium sulfate on postoperative pain after knee arthroscopy

Public title

The effect of intraarticular magnesium sulfate on postoperative pain after knee surgery

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:patients with American Society of Anesthesia (ASA) physical status I or II who are candidate for elective ACL arthroscopy, age18-55years old

Exclusion criteria: patients with mental impairment,chronic pain ,a history of addiction were excluded.

Age

From **18 years** old to **50 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: 60

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Double blinded

Blinding description

Placebo

Used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Shahid Sadoughi University of Medical Sciences

Street address

Bahonar square

City

Yazd

Postal code

Approval date

2012-03-07, 1390/12/17

Ethics committee reference number

159135

Health conditions studied

1

Description of health condition studied

pain in knee

ICD-10 code

M79.6

ICD-10 code description

Pain in limb

Primary outcomes

1

Description

postoperative pain

Timepoint

1, 2, 6, 12, 18 and 24 hours after the surgery

Method of measurement

visual analog scale (VAS)

Secondary outcomes

1

Description

opioid consumption

Timepoint

during 24 hours after operation

Method of measurement

mg morphine

2

Description

the first request of the patient for analgesic

Timepoint

during 24 hours after operation

Method of measurement

in hours

3

Description

Drug side effects

Timepoint

during 24 hours after the operation

Method of measurement

asking the patient

Intervention groups

1

Description

intraarticular administration of 1g of magnesium sulphate in 10 ml normal saline at the end of the surgery

Category

Treatment - Drugs

2

Description

intraarticular administration of placebo(10 ml normal saline) at the end of the surgery

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center

Shahid Sadoughi Hospital

Full name of responsible person

Dr.Shekoufeh Behdad

Street address

Shahid Sadoughi Hospital

City

Yazd

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Shahid Sadoughi University of Medical Sciences

Full name of responsible person

Dr. Hasan Mozaffari

Street address

Bahonar square

City

Yazd

Grant name**Grant code / Reference number****Is the source of funding the same sponsor organization/entity?**

Yes

Title of funding source

Shahid Sadoughi University of Medical Sciences

Proportion provided by this source

100

Public or private sector

empty

Domestic or foreign origin

empty

Category of foreign source of funding

empty

Country of origin**Type of organization providing the funding**

empty

Person responsible for general inquiries

Contact**Name of organization / entity**

Shahid Sadoughi University of Medical Sciences

Full name of responsible person

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Web page address

Sharing plan

Deidentified Individual Participant Data Set (IPD)

empty

Study Protocol

empty

Statistical Analysis Plan

empty

Informed Consent Form

empty

Clinical Study Report

empty

Analytic Code

empty

Data Dictionary

empty