

Clinical Trial Protocol

Iranian Registry of Clinical Trials

15 Jul 2026

Comparing effects of Isoflurane and Propofol on body temperature changes during knee arthroscopy surgery

Protocol summary

Summary

Main goal: comparison body temperature changes during knee arthroscopy with Isoflurane and Propofol. Method: double blind clinical trial on 40 non addicted patients (18 to 50 year) and hemodynamically stable candidate for knee arthroscopy. Inclusion criteria: All patients (18 to 50- year) candidate for arthroscopy under general anesthesia with Isoflurane or Propofol. Exclusion criteria: Coagulation and bleeding disorders, history of nasal bleeding, drug abusers, blood transfusion during surgery, operation time more than 1.5 hour. All patients undergo this procedure in an operation room with stable temperature (21-23 C). All liquids even irrigation serums should have a same temperature as the operation room. Induction and premedication drugs in both groups are similar. 20 patients with Isoflurane and 20 ones with Propofol will be anesthetised. The body temperature evaluates every 10 minutes with tympanic thermometer from intubation till extubation. Peripheral body temperature also measures by oral or axillary thermometer. systolic and diastolic Blood pressure and post anesthesia shivering assess in both groups. No warmer uses during operation. Collected data will be analysed.

General information

Acronym

ceipbtk

IRCT registration information

IRCT registration number: **IRCT2012090410741N1**

Registration date: **2012-12-23, 1391/10/03**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2012-12-23, 1391/10/03

Registrant information

Name

Minoo Ghahraman

Name of organization / entity

Kerman University of Medical Sciences

Country

Iran (Islamic Republic of)

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Recruitment status

Recruitment complete

Funding source

Kerman University of Medical Sciences

Expected recruitment start date

2012-08-22, 1391/06/01

Expected recruitment end date

2012-12-20, 1391/09/30

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparing effects of Isoflurane and Propofol on body temperature changes during knee arthroscopy surgery

Public title

Comparing effects of Isoflurane and propofol on body temperature changes during knee arthroscopy surgery

Purpose

Prevention

Inclusion/Exclusion criteria

Inclusion criteria: All patients (18 to 50 years) candidate for knee arthroscopy under general anesthesia. Exclusion criteria: Coagulation and bleeding disorders; history of nasal bleeding, drug abusers; blood transfusion during

surgery; endocrine disorders for example thyroid disease, kidney disease, hepatitis, high blood pressure, psychiatric disorders and history of allergy to propofol or narcotics; operation time more than 1.5 hour; hemodynamic instability during anesthesia.

Age

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

Gender

Both

Phase

2

Groups that have been masked

No information

Sample size

Target sample size: **40**

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Double blinded

Blinding description

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethic Committee of Kerman University of Medical Sciences

Street address

Joomhoori blvd.

City

Kerman

Postal code

Approval date

2010-08-10, 1389/05/19

Ethics committee reference number

KA/91/105

Health conditions studied

1

Description of health condition studied

Knee Arthroscopy for treatment and diagnosis of knee ligaments tearing

ICD-10 code

M65-M68

ICD-10 code description

Disorders of synovium and tendon

Primary outcomes

1

Description

core body temprature

Timepoint

every 10 minuts during anesthesia and after extubation

Method of measurement

Degree celsius by tympanic thermometer

Secondary outcomes

1

Description

Post operative shivering

Timepoint

from extubation till departing of recovery room every 10 minuts

Method of measurement

classification of shivering

2

Description

blood pressure

Timepoint

every 10 minuts at the time of taking core body temprature

Method of measurement

electronic blood pressure monitoring

3

Description

peripheral body temperature

Timepoint

every 10 minuts at the time of taking core body temprature

Method of measurement

oral thermometer

Intervention groups

1

Description

In group 1 Isoflurane (MAC;0.8-1.2); Premedication and induction medicines in both groups are similar, including Midazolam (2mg), Fentanyl (2µgr/kg) for premedication and STP 5mg/kg - 0/5mg/kg/ Atracurium for induction. N2O%50 is administered in both groups.

Category

Treatment - Drugs

2

Description

In group 2 Propofol (200mg/kg/min); Premedication and induction medicines in both groups are similar, including Midazolam (2mg), Fentanyl (2µgr/kg) for premedication

and STP 5mg/kg - 0/5mg/kg/ Atracurium for induction.
N2O%50 is administered in both groups.

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center

Shafa hospital

Full name of responsible person

Dr Mino Ghahraman

Street address

Farabi blvd.

City

Kerman

2

Recruitment center

Name of recruitment center

Shafa hospital

Full name of responsible person

Mohamadhasan Askari

Street address

Farabi blvd.

City

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Kerman Univesity of Medical Sciences

Full name of responsible person

Research Deparment, Faranak khezri

Street address

Tahmasbabad cross

City

Kerman

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Kerman Univesity 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

Kerman Univesity of Medical Sciences

Full name of responsible person

Mohamadhasan Askari

Position

Anesthesia Resident

Other areas of specialty/work

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Person responsible for scientific inquiries

Contact

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Kerman University of Medical Sciences

Full name of responsible person

Dr Minoo Ghahraman

Position

Assisstan Professor of Anesthesiology

Other areas of specialty/work

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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