

Clinical Trial Protocol

Iranian Registry of Clinical Trials

28 May 2026

The effect of intraarticular injection of dexmedetomidine on postoperative pain in diagnostic arthroscopic knee surgery

Protocol summary

Summary

Purpose: This study is prospective, randomized, double-blinded and clinical trial. 44 patients candidate for diagnostic arthroscopic knee surgery were chosen and divided randomly to same groups. Method and intervention: The night before surgery and 2 hours before surgery all patient received 0.5 mgr Alprazolam for pre-medication. Patients were randomly assigned into two groups. The first group of patients 1 micro gram/kg of Dexmedetomidine with normal saline is intra articular injected. In group two 25cc of normal saline is intra articular injected.(The surgeon is blind about the type of drug) Inclusion/exclusion criteria: Inclusion criteria: Age between 18 to 60 years; ASA I,II; Candidate arthroscopic knee surgery. Exclusion criteria: Renal failure; Hepatic failure; Ischemic heart failure; Blood pressure; Use narcotic or NSAIDs 24 hours before surgery; History of infection or cancer; Surgical time of more than an hour and a half; Excessive manipulation of the knee; Addiction; History of surgery; Need for a narcotic during operation. Primary and Secondary outcome: after surgery, the incidence of severity of pain, the onset time require the analgesic and the average total dose of analgesic are evaluated with VAS in the first 24 hours after surgery.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201307274780N3**

Registration date: **2013-08-28, 1392/06/06**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2013-08-28, 1392/06/06

Registrant information

Name

Mohammad Alipour

Name of organization / entity

Mashhad University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 51 1801 2612

Email address

alipourm@mums.ac.ir

Recruitment status

Recruitment complete

Funding source

Vice Chancellor for Research, Mashhad University of Medical Sciences

Expected recruitment start date

2013-01-04, 1391/10/15

Expected recruitment end date

2013-05-07, 1392/02/17

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of intraarticular injection of dexmedetomidine on postoperative pain in diagnostic arthroscopic knee surgery

Public title

The effect of intra articular injection of dexmedetomidine on postoperative pain

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: Age between 18 to 60 years; ASA I,II; Candidate arthroscopic knee surgery. Exclusion criteria:

Renal failure; Hepatic failure; Ischemic heart failure; Blood pressure; Use narcotic or NSAIDs 24 hours before surgery; History of infection or cancer; Surgical time of more than an hour and a half; Excessive manipulation of the knee; Addiction; History of surgery; Need for a narcotic during operation

Age

From **18 years** old to **60 years** old

Gender

Both

Phase

2-3

Groups that have been masked

No information

Sample size

Target sample size: **44**

Randomization (investigator's opinion)

N/A

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

Ethics Committee of Mashhad University of Medical Sciences

Street address

Vice Chancellor for Research, Mashhad University of Medical Science, Ghoreishi apartment, Daneshgah street

City

Mashhad

Postal code

Approval date

2012-12-01, 1391/09/11

Ethics committee reference number

3354

Health conditions studied

1

Description of health condition studied

postoperative pain in diagnostic arthroscopic knee surgery

ICD-10 code

M23.6

ICD-10 code description

Other spontaneous disruption of ligament(s) of knee

Primary outcomes

1

Description

Severity of pain

Timepoint

1, 3, 12 and 24 h after Surgery

Method of measurement

VAS

Secondary outcomes

1

Description

Analgesic onset time

Timepoint

1 hour after surgery to 24 hours later

Method of measurement

Verbal analogue scale

2

Description

Total dose of analgesic

Timepoint

1 hour after surgery to 24 hours later

Method of measurement

Verbal analogue scale

Intervention groups

1

Description

Intra articular injection after surgery(1 ml/kg dexmedetomidine with normal saline

Category

Treatment - Drugs

2

Description

control group: Intra articular 25cc normal saline injection after surgery

Category

Placebo

Recruitment centers

1

Recruitment center

Name of recruitment center

Ghaem Hospital

Full name of responsible person

Dr Mohammad Alipour

Street address**City**

Mashhad

Sponsors / Funding sources**1****Sponsor****Name of organization / entity**Vice Chancellor for Research, Mashhad University of
Medical Science**Full name of responsible person**

Dr Tavakol Afshar

Street addressVice Chancellor for Research, Mashhad University of
Medical Science, Ghoreishi apartment, Daneshgah
street**City**

Mashhad

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

Yes

Title of funding sourceVice Chancellor for Research, Mashhad University of
Medical Science**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**

Mashhad University of Medical Sciences

Full name of responsible person

Dr Mohammad Alipour

Position

Anesthesiologist

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Fax**Email****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*