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 opration. 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 failur; 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 opration

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 address
Vice 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 source
Vice 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
Other areas of specialty/work
Street address
Ghaem Hospital
City
Mashhad
Postal code
Phone
+98 51 1801 2612
Fax
Email
Alipourm.mums.ac.ir
Web page address

Person responsible for scientific inquiries

Contact
Name of organization / entity
Mashhad University Of Medical Sciences
Full name of responsible person
Dr Mohammad Alipour
Position
Anesthesiologist
Other areas of specialty/work
Street address
Ghaem hospital
City
Mashhad
Postal code
Phone
+98 51 1801 2612
Fax
Email
alipourm@mums.ac.ir
Web page address

Person responsible for updating data

Contact
Name of organization / entity
Mashhad University of Medical Sciences
Full name of responsible person
Dr Mohammad Alipour
Position
Anesthesiologist
Other areas of specialty/work
Street address
Ghaem Hospital
City
Mashhad
Postal code
Phone
+98 51 1801 2612
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