Clinical Trial Protocol
Iranian Registry of Clinical Trials

16 Sep 2026

The comparison of analgesic effect of ketamine by per kg dose(0.75mg/kg) and fixed dose 50 mg on acute traumatic and non traumatic muscluskletal pain in patient come to Emegency ward of Emam khomeini hospital

Protocol summary

Summary

The purpose of this study is comparing reduction of pain and complications of intranasal ketamine 0.75mg/kg versus fixed dose(50mg)of Ketamine in traumatic and non traumatic mucluskeletal pain. over 15 years old with acute musculoskeletal pain patients were enrolled and patients with hemodynamic instability, impaired level of consciousness, blood pressure above 180/110, increased intracranial pressure, headache, chest pain, abdominal pain were excluded.This study is a double blind randomized clinical trial and all patients with musculoskeletal pain in Emergency department of Imam Khomeini Hospital from July to March of 1391 were included. Sample size was 132 and participants were randomized into two intervention and control groups. In intervention group, divided by weight from 40 kg to 100 kg. intervention group received 0.75 mg/kg ketamine. control group received 50mg fixed dose of ketamine. We used numerical rating scale (NSR) for assessing reduction of pain every 10 minutes for one hour.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201212109162N5**
Registration date: **2014-02-03, 1392/11/14**
Registration timing: **retrospective**

Last update:
Update count: **0**

Registration date

2014-02-03, 1392/11/14

Registrant information

Name
Amir Nejati
Name of organization / entity
Tehran University of Medical Sciences, Imam Khomeini Hospital
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Recruitment status

Recruitment complete

Funding source
Tehran University of Medical Sciences

Expected recruitment start date

2012-06-21, 1391/04/01

Expected recruitment end date

2013-02-19, 1391/12/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The comparison of analgesic effect of ketamine by per kg dose(0.75mg/kg) and fixed dose 50 mg on acute traumatic and non traumatic muscluskletal pain in patient come to Emegency ward of Emam khomeini hospital

Public title

comparison the effect of ketamine by per kg dose and fixed dose on pain loss of traumatic and non traumatic injury

Purpose
Treatment
Inclusion/Exclusion criteria
structural disease of upper airway, age<15 yr, low LOC, dementia, unstable situation, patient request of analgesic, neck pain, headache, chest pain, rise in ICP, history of rise of Iop, person who take analgesic in last 24 hour, pregnant women, BP over 180/110, acute cronary disease, heart failure, ketamine sensitivity, nasal fracture & bleeding, use of opioid & analgesic in EMS or triage, recent nasopharynx and facial surgery, orbit & eye trauma, head trauma.
Age
From **15 years** old to **85 years** old
Gender
Both

Phase
N/A
Groups that have been masked
No information
Sample size
Target sample size: **132**
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
Deputy of Research- Tehran University of Medical Sciences
Street address
Keshavarz Blvd, Qods Avenue, Central Building of Tehran University of Medical Sciences
City
Tehran
Postal code
1439633764
Approval date
2012-09-02, 1391/06/12
Ethics committee reference number
9997/210/D/90

Health conditions studied

1

Description of health condition studied
trauma
ICD-10 code
S40-S49,S5
ICD-10 code description
Injuries to the shoulder and upper arm,Injuries to the elbow and forearm,Injuries to the wrist and handInjuries to the hip and thigh,Injuries to the knee and lower leg,Injuries to the knee and lower leg,Injuries to the ankle and foot,

Primary outcomes

1

Description
pain
Timepoint
10,20,30,40,60 min after injection drug
Method of measurement
numeric rating scale protocol

Secondary outcomes

empty

Intervention groups

1

Description
in control group ketamine injection 50 mg intra nasal
Category
Treatment - Drugs

2

Description
in intervention group injection of ketamin intranasal 0.75mg/kg
Category
Treatment - Drugs

Recruitment centers

1

Recruitment center
Name of recruitment center
Emergency Ward of Emam Hospital
Full name of responsible person
Dr Sara Payami
Street address
Emergency Department, Imam Khomeini Hospital, Bagherkhan Street, Chamran highway
City
Tehran

Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Deputy of Research- Tehran University of Medical Sciences

Full name of responsible person
Dr Akhondzadeh, Deputy of research, Medical School

Street address
Medical School, Poorsina Avenue, 16 Azar, Keshavarz Blvd, Tehran

City
Tehran

Grant name

Grant code / Reference number

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

Title of funding source
Deputy of Research- Tehran 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
Tehran University of Medical Sciences

Full name of responsible person
Dr Sara Payami

Position
Emergency medicine resident

Other areas of specialty/work

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Person responsible for scientific inquiries

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Assistant Professor, Faculty of educational group of Emergency Medicine

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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