Clinical Trial Protocol
Iranian Registry of Clinical Trials

16 Sep 2026

Evaluating the efficacy of Ketorolac as an adjunct to the Bier Block to control post operative pain following traumatic forearm surgery

Protocol summary

Summary

One of the issues of concern to anesthesiologists is to control pain after surgery. This is important especially in orthopedic surgery. One of the appropriate methods to pain control is Biers block local anesthesia. In the course of time, various drugs were applied for this purpose such as Lidocaine. Ketorolac is the only venous NSAID available in Iran which has FDA approval. This drug has been used in some traumatic surgeries for nerve block but with different results. This study is to evaluate the efficacy of Ketoroloc to control pain in patients undergoing surgeries due to fractures of forearm. Patients are categorized to a control group for whom nerve block in done with Lidocain and treatment group undergoing nerve block with Lidocain and Ketorolac. Onset and duration of analgesia will be compared between the two groups. Pain will be measured on the basis of “Numeric Pain Intensity Scale” in specific intervals and each patients will be given a score to be use in comparison between the two groups.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2014042115587N5**
Registration date: **2014-07-05, 1393/04/14**
Registration timing: **retrospective**

Last update:
Update count: **0**

Registration date

2014-07-05, 1393/04/14

Registrant information

Name

Nasrin Naseri

Name of organization / entity

Shiraz University of Medical Sciences

Country

Iran (Islamic Republic of)

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grc@sums.ac.ir

Recruitment status

Recruitment complete

Funding source

Vice Chancellor for research, Shiraz University of Medical Sciences

Expected recruitment start date

2013-12-22, 1392/10/01

Expected recruitment end date

2014-03-20, 1392/12/29

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Evaluating the efficacy of Ketorolac as an adjunct to the Bier Block to control post operative pain following traumatic forearm surgery

Public title

Efficacy of ketorolac as an adjunct to the Bier Block to control post operative pain following traumatic forearm surgery

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria of the study: 15> age> 60; Patients who undergo orthopedic surgery because of traumatic forearm fracture; Duration of surgery less than 90 minutes. Exclusion criteria: History of chronic analgesics consumption, for example Acetaminophen; History of

drug abuse; Any signs of upper limb infection; Upper limb vascular disease; History of the severe psychiatric disease; Allergy to lidocaine or Ktorolac; Pregnancy; Renal Diseases

Age

From **15 years** old to **60 years** old

Gender

Both

Phase

2

Groups that have been masked

No information

Sample size

Target sample size: **80**

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

Shiraz University of Medical Siences

Street address

Shiraz University of Medical Siences, Shiraz, Iran

City

Shiraz

Postal code

-

Approval date

2013-09-07, 1392/06/16

Ethics committee reference number

90-01-01-4203

Health conditions studied

1

Description of health condition studied

fracture of forearm

ICD-10 code

S52

ICD-10 code description

fracture of forearm

Primary outcomes

1

Description

The pain score in each group

Timepoint

-Every 15 min in the first hour then every 2 hr in the first day

Method of measurement

Numeric pain intensity scale (VAS Scoring system)

Secondary outcomes

1

Description

Narcotic consumption in the first 24 hours

Timepoint

24 hours after surgery.

Method of measurement

mg

Intervention groups

1

Description

Intervention group: Ketoroloc and Lidocain will be injected.

Category

Treatment - Drugs

2

Description

Control Group: Lidocain will be injected.

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center

Chamran hospital , Shiraz, Iran

Full name of responsible person

Mohammad Rahmanian, MD

Street address

Chamran hospital , Chamran Boulevard, Shiraz, Iran

City

Shiraz

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Shiraz University of Medical Sciences

Full name of responsible person
Seyed Basir Hashemi, MD
Street address
Shiraz University of Medical Sciences, Shiraz, Iran
City
Shiraz
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Shiraz 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

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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