Clinical Trial Protocol
Iranian Registry of Clinical Trials

09 Jun 2026

Comparison of the effectiveness of Celecoxib, Ibuprofen and Acetaminophen Codeine in pain relief after impacted lower third molar surgery

Protocol summary

Summary

Introduction: NSAIDs such as Ibuprofen are the most commonly used drugs for pain relief after impacted third molar surgery. Recently, new generation of these drugs have been introduced that act more selectively and have lower gastrointestinal side effects. As to our knowledge there are not enough studies about the effectiveness of these drugs, the objective of this study is to compare celecoxib with ibuprofen and acetaminophen codeine. Materials and Methods: This randomized clinical trial was done on 180 patients from whom attending oral and maxillofacial surgery department of Tehran university. Patients were divided into three groups to use a single dose of Celecoxib 100mg, Ibuprofen 400 mg or Acetaminophen Codeine(Acetaminophen 300mg + codeine 20mg) after surgery. A questionnaire was given to the patients to mark their pain intensity. Inclusion Criteria: impcated wisdom teeth, healthy medical history, no analgesic consumption in 24hours ago, no drugs addiction, no pregnancy and breastfeeding, no drugs sensitivity(Analgesics ,Non-steroidal anti-inflammatory drug commonly used, Cyclooxygenase-2 inhibitors)

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2014113020158N1**
Registration date: **2015-01-08, 1393/10/18**
Registration timing: **registered_while_recruiting**

Last update:
Update count: **0**

Registration date

2015-01-08, 1393/10/18

Registrant information

Name

Mohammad Ebrahimi Saravi

Name of organization / entity

Mazandaran University of Medical Sciences / Dentistry Faculty

Country

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Recruitment status

Recruitment complete

Funding source

Tehran University of Medical Sciences

Expected recruitment start date

2014-12-22, 1393/10/01

Expected recruitment end date

2015-12-22, 1394/10/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison of the effectiveness of Celecoxib, Ibuprofen and Acetaminophen Codeine in pain relief after impacted lower third molar surgery

Public title

evaluation of decreasing pain of impacted wisdom teeth

Purpose

Supportive

Inclusion/Exclusion criteria

Inclusion Criterai: impcated wisdom teeth; healthy medical history; no gastrointestinal ulcer treatment in

30days ago; no analgesic consumption in 24hours ago; no drugs addiction; no pregnancy and breastfeeding; no drugs sensitivity(Analgesics ,Non-steroidal anti-inflammatory drug commonly used, Cyclooxygenase-2 inhibitors) ; no nasal polyps; no bronchospasm and angioedema.

Age
From **16 years** old to **70 years** old

Gender
Both

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: **180**

Randomization (investigator's opinion)
Randomized

Randomization description

Blinding (investigator's opinion)
Single blinded

Blinding description

Placebo
Not used

Assignment
Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee
tehran university of medical sciences

Street address
enghelab square

City
tehran

Postal code

Approval date
2008-09-22, 1387/07/01

Ethics committee reference number
4693

Health conditions studied

1

Description of health condition studied
pain control

ICD-10 code
Chapter V

ICD-10 code description
F45.4 Persistent somatoform pain disorder

Primary outcomes

1

Description
pain intensity

Timepoint
2,4,6,10,16,24 hours after surgery

Method of measurement
standard questionnaire

Secondary outcomes

empty

Intervention groups

1

Description
ibuprofen 400 mg 2,4,6,10,16 and 24 hours after impacted wisdom teeth

Category
Treatment - Drugs

2

Description
celecoxib 100 mg 2,4,6,10,16 and 24 hours after impacted wisdom teeth

Category
Treatment - Drugs

3

Description
acetaminophen codeine 320 mg 2,4,6,10,16 and 24 hours after impacted wisdom teeth

Category
Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center
oromaxillofacial surgery department of dental school of tehran university of medical sciences

Full name of responsible person
mohammad ebrahimi saravi

Street address
khazar BLV

City
sari

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Tehran University of Medical Sciences

Full name of responsible person
Mohammad Ebrahimi Saravi

Street address
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City
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Grant name

Grant code / Reference number

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

Title of funding source
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
mazandaran university of medical sciences

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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