Clinical Trial Protocol
Iranian Registry of Clinical Trials

17 Sep 2026

Evaluation the effect of iodine tampon usage on pain after partially-impacted mandibular third molar surgery

Protocol summary

Study aim
Investigating the effect of iodine tampon on the pain level after partially-impacted mandibular third molar surgery
Design
Split-mouth randomized single blind clinical trial. The random allocation of samples to study groups is done using random blocks of 4.
Settings and conduct
This study is conducted in the Faculty of Dentistry, Islamic Azad University of Tehran. After the extraction of the tooth, the studied interventions are applied. During one week after the surgery, the participants enter their pain score in the questionnaire and after collecting the questionnaire, the information is evaluated. The person evaluating the information is blind to the intervention.
Participants/Inclusion and exclusion criteria
Inclusion condition The participant should have bilateral-partially-impactd mandibular third molar, no systemic problems, and be between 18 to 30 years old. Exclusion condition Smoking, the participant's allergy to the substances used in the study, pregnancy and systemic problems of the participant make t excluded from the study.
Intervention groups
In the experimental group, iodine tampon and then a gauze is placed on it at the surgical site. In the control group, gauze impregnated with physiological serum is placed at the surgical site.
Main outcome variables
Pain level after dental surgery during one week

General information

Reason for update
Acronym
IRCT registration information
IRCT registration number: **IRCT20231221060486N1**
Registration date: **2024-02-06, 1402/11/17**
Registration timing: **prospective**

Last update: **2024-02-06, 1402/11/17**
Update count: **0**
Registration date
2024-02-06, 1402/11/17

Registrant information
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Recruitment status
Recruitment complete
Funding source

Expected recruitment start date
2024-02-19, 1402/11/30
Expected recruitment end date
2024-07-21, 1403/04/31
Actual recruitment start date
empty
Actual recruitment end date
empty
Trial completion date
empty

Scientific title
Evaluation the effect of iodine tampon usage on pain after partially-impacted mandibular third molar surgery

Public title
Evaluation the effect of iodine tampon usage on pain after wisdom tooth surgery
Purpose

Prevention

Inclusion/Exclusion criteria

Inclusion criteria:

Mesioangular bilateral partially-impacted mandibular third molar The patient should be placed in the systemic classification of class 1. The patient should be between 18 to 30 years old.

Exclusion criteria:

The patient's allergy to ibuprofen The patient's allergy to iodine Smoking and tobacco usage Presence of systemic disease Presence of acute perichronitis Presence of periodontal disease The patient recently or currently has a stomach ulcer The patient receives anticoagulation treatment Pregnancy or breastfeeding of the patient The patient has a history of local infection before surgery in the last 15 days History of radiotherapy in the jaw and face area Pathological disease related to the third molar

Age

From **18 years** old to **30 years** old

Gender

Both

Phase

3

Groups that have been masked

- Investigator
- Outcome assessor

Sample size

Target sample size: **35**

More than 1 sample in each individual

Number of samples in each individual: **2**

One tooth as the control group and the other tooth as the intervention group

Randomization (investigator's opinion)

Randomized

Randomization description

In this study, the random allocation of samples to study groups is done using random blocks of 4. The randomization process is done by using a table of random numbers and by someone other than the person conducting the study. The type of allocation is noted in a note inside the numbered sealed envelopes. At the first visit of each patient, the envelopes are opened in the order of patients' visits after the end of tooth extraction, and the type of post-operative care is determined based on the intervention mentioned in the note inside each patient's envelope. According to the intervention, the intervention of the opposite tooth will also be determined.

Blinding (investigator's opinion)

Single blinded

Blinding description

The main researcher and the evaluator, who are the same person, are blind to the intervention and do not know what intervention was done on the tooth. This person only evaluates the data collected from the questionnaires.

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics committee of Islamic Azad University Tehran Medical sciences Dental Branch

Street address

4th Floor , No. 25 , 17th St. , Jahan are St. , Yousef Abad

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Province

Tehran

Postal code

1438696845

Approval date

2023-10-30, 1402/08/08

Ethics committee reference number

IR.IAU.DENTAL.REC.1402.110

Health conditions studied

1

Description of health condition studied

Partially-impacted mandibular third molar

ICD-10 code

ICD-10 code description

Primary outcomes

1

Description

Pain score in visual analog scale (VAS) pain assessment

Timepoint

Pain score during the first week after surgery

Method of measurement

Visual analog scale (VAS) pain assessment

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: After tooth extraction, iodine tampon and then a gauze on it will be placed in the surgical site.

Category

Treatment - Drugs

2

Description
Control group: Gauze impregnated with physiological serum is placed in the surgical site
Category
Treatment - Drugs

Recruitment centers

1

Recruitment center
Name of recruitment center
Islamic Azad University, Tehran Dental Branch
Full name of responsible person
Amirarsalan Yazdani Boroujeni
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Sponsors / Funding sources

1

Sponsor
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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
Islamic Azad University
Proportion provided by this source
100
Public or private sector
Public
Domestic or foreign origin
Domestic
Category of foreign source of funding
empty
Country of origin
Type of organization providing the funding
Academic

Person responsible for general inquiries

Contact
Name of organization / entity
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Person responsible for updating data

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Sharing plan

Deidentified Individual Participant Data Set (IPD)
Undecided - It is not yet known if there will be a plan to make this available

Study Protocol
Undecided - It is not yet known if there will be a plan to make this available

Statistical Analysis Plan
Undecided - It is not yet known if there will be a plan to make this available

Informed Consent Form
Undecided - It is not yet known if there will be a plan to make this available

Clinical Study Report
Undecided - It is not yet known if there will be a plan to make this available

Analytic Code
Undecided - It is not yet known if there will be a plan to make this available

Data Dictionary
Undecided - It is not yet known if there will be a plan to make this available