Clinical Trial Protocol
Iranian Registry of Clinical Trials

14 Jun 2026

Comparative assessment of the effect of methanolic extracts of green tea and chlorhexidine gel on postoperative pain control following surgical removal of impacted third molars

Protocol summary

Study aim
Comparison of the effect of methanolic extracts of green tea and chlorhexidine gel on postoperative pain control following surgicalremoval of impacted third molars

Design
In this clinical trial study, there will be 30 person aged 18-40 that are given after third molar surgery, randomly two compounds of chlorhexidine and green tea . Each participant is assigned a code. .

Settings and conduct
Dental wisdom surgery is done by an oral and maxillofacial specialist in a similar process. Patients are trained to use chlorhexidine or green tea gel twice a day for one week. Choosing a gel type will be random and the participants will not be aware of the type of substance. VAS is used to record the level of pain.

Participants/Inclusion and exclusion criteria
The entering criteria including the person 18-40 years old that have two impacted third molar in mandible and have not the Hemorrhagic disorders , systemic diseases and acute and uncontrolled infection in the surgical ward the exclusion criteria including Pregnant or lactating people and The presence of lesion in the area of surgery in radiography.

Intervention groups
Chlorhexidine, Green Tea

Main outcome variables
Postoperative pain

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20171020036896N7**
Registration date: **2018-12-21, 1397/09/30**
Registration timing: **registered_while_recruiting**
Last update: **2018-12-21, 1397/09/30**
Update count: **0**

Registration date
2018-12-21, 1397/09/30

Registrant information

Name

Name of organization / entity

Country
Iran (Islamic Republic of)

Phone
+98 32119023

Email address
sajadi@kmu.ac.ir

Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2018-12-11, 1397/09/20

Expected recruitment end date
2019-03-11, 1397/12/20

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
Comparative assessment of the effect of methanolic extracts of green tea and chlorhexidine gel on postoperative pain control following surgical removal of impacted third molars

Public title
the effect of methanolic extracts of green tea and chlorhexidine gel on postoperative pain control

Purpose

Supportive

Inclusion/Exclusion criteria

Inclusion criteria:

Existence of tow impacted third molar in mandible The absence of Hemorrhagic disorders and systemic diseases The absence of acute and uncontrolled infection in the surgical ward

Exclusion criteria:

Smokers Pregnant or lactating people The presence of lesion in the area of surgery in radiography

Age

From **18 years** old to **40 years** old

Gender

Both

Phase

N/A

Groups that have been masked

- Participant
- Data analyser

Sample size

Target sample size: **30**

More than 1 sample in each individual

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

Two impacted wisdom teeth in each person's mandible

Randomization (investigator's opinion)

Randomized

Randomization description

Simple randomization or unrestricted method will be used and randomization unit is Individual .we will use from Roll of a die from the methods of simple randomization because there are 2 agent in this study that actually the tool of randomization is dice. So the numbers 1 and 2 are for the first agent(chlorhexidine) 3 and 4 for the second agent (green tea) . The next step Allocation concealment will be done, In such a way that the allocated group is not known before the assignment of the individual. To achieve this goal, a non-transparent, sealed, random sequence envelope is used . In this way, the statistical specialist will provide 30envelopes and each of the randomly generated links will be recorded on a card and the cards are arranged in the envelopes . In order to maintain a random sequence, the numbering of envelopes on the outer surface is done in the same order. Finally, the envelops are enclosed and placed in the box, respectively. At the time of the implementation of the study, according to the order of entry of eligible participants, one of the envelopes is opened respectively and will determine the group assigned to that participant. In this study, the assistant of Pediatric Dentistry examines the participants in terms of inclusion and exclusion criteria. Randomization methods are done by an statistical specialist and performance of the study is done by a trained dental student.

Blinding (investigator's opinion)

Double blinded

Blinding description

Because all two materials are in the same consistency gel, in a uniform shape and color, considering the informed consent, participants are unaware of material. Data analyzer, is also unaware of the groups

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

The Ethic Committee of kerman University of Medical Sciencess

Street address

Vice-Chancellor for Research, Building of Kerman University of Medical Sciences, Tahmasbabad cross, Jahad Street

City

Kerman

Province

Kerman

Postal code

7619813159

Approval date

2018-09-30, 1397/07/08

Ethics committee reference number

IR.KMU.REC.1397.240

Health conditions studied

1

Description of health condition studied

The level of postoperative pain of impacted third molar

ICD-10 code

ICD-10 code description

Primary outcomes

1

Description

The level of postoperative pain of impacted third molar

Timepoint

One week

Method of measurement

Visual Analogue Scale

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: The two cc methanolic extract of green tea 20 % is applied twice a day for one week after surgery of the impacted wisdom teeth by the patient on the surgical site.

Category

Treatment - Drugs

2

Description

Control group: The two cc chlorhexidine 2 % is applied twice a day for one week after surgery of the impacted wisdom teeth by the patient on the surgical site.

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center

Kerman Faculty of Dentistry

Full name of responsible person

Dr Fatemeh sadat Sajadi

Street address

Department of Maxillofacial Surgery ,School of Dentistry,Shafa street

City

Kerman

Province

Kerman

Postal code

7618759689

Phone

+98 34 3211 9021

Email

Sajadi@kmu.ac.ir

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Kerman University of Medical Sciences

Full name of responsible person

Dr Abbas Pardakhti

Street address

Tahmasebabad Crossing, Deputy of Research and Technology University

City

Kerman

Province

Kerman

Postal code

7619813159

Phone

+98 34 3226 3815

Email

kmu_research@yahoo.com

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Kerman University of Medical Sciences

Proportion provided by this source

60

Public or private sector

Private

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

Kerman University of Medical Sciences

Full name of responsible person

Fatemeh Sadat Sajadi

Position

Associate Professor of Pediatric Dentistry

Latest degree

Specialist

Other areas of specialty/work

Dentistry

Street address

Pediatric Department, School of Dentistry, Shafa street, Kerman

City

Kerman

Province

Kerman

Postal code

7618759689

Phone

+98 34 3211 9021

Email

sajadi@kmu.ac.ir

Person responsible for scientific inquiries

Contact

Name of organization / entity

Kerman University of Medical Sciences

Full name of responsible person

Fatemeh sadat Sajadi

Position

Associate Professor of Pediatric Dentistry

Latest degree

Specialist

Other areas of specialty/work

Dentistry

Street address

Pediatric Department, School of Dentistry, Shafa street, Kerman

City
Kerman
Province
Kerman
Postal code
7618759689
Phone
+98 34 3211 9021
Email
sajadi@kmu.ac.ir

Person responsible for updating data

Contact
Name of organization / entity
Kerman University of Medical Sciences
Full name of responsible person
Fatemeh Sadat Sajadi
Position
Associate Professor of Pediatric Dentistry
Latest degree
Specialist
Other areas of specialty/work
Dentistry
Street address
Shafa Street, Faculty of Dentistry, Department of pediatrics
City
Kerman
Province
Kerman
Postal code
7618759689
Phone
+34 32119021
Email
Sajadi@kmu.ac.ir

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
No - There is not a plan to make this available
Data Dictionary
Undecided - It is not yet known if there will be a plan to make this available