

Clinical Trial Protocol

Iranian Registry of Clinical Trials

04 Jun 2026

Evaluation of the effect of collagen plug in socket repair after surgical extraction of semi-impacted third molar

Protocol summary

Study aim

Determining the effect of collagen plug in socket repair after surgical extraction of semi-impacted third molar

Design

Single-group clinical trial without blinding, trial phase does not apply, on 30 patients.

Settings and conduct

The study site is the dental clinics of Hamadan, which collagen plugs are used for patients on the left or right side. In this study, blinding is not performed.

Participants/Inclusion and exclusion criteria

Inclusion criteria: Candidate for bilateral surgery of Semi-impacted wisdom teeth of the mandible and Be in a PELL & GEORGI class one. Exclusion criteria: Patients with systemic disease, clotting or bone problems.

Intervention groups

Intervention group: After the surgery of the semi-impacted tooth and before the wound is sutured, a collagen plug with the brand name BONEPROTECT CONE, produced by the German company DENTEGRIS, is inserted into the remaining cavity of the tooth and then it is sutured. The treatment is performed only in one session and in the next visits, the patient is followed only to evaluate the signs and symptoms.

Main outcome variables

Repair of dental socket

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20170117032025N8**

Registration date: **2020-08-08, 1399/05/18**

Registration timing: **registered_while_recruiting**

Last update: **2020-08-08, 1399/05/18**

Update count: **0**

Registration date

2020-08-08, 1399/05/18

Registrant information

Name

Arash Khalili

Name of organization / entity

Hamadan University Of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 81 3838 0320

Email address

a.khalili@umsha.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2020-07-11, 1399/04/21

Expected recruitment end date

2020-10-12, 1399/07/21

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Evaluation of the effect of collagen plug in socket repair after surgical extraction of semi-impacted third molar

Public title

Effect of collagen plug in socket repair after surgical extraction of third molar

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

Candidate for bilateral surgery of Semi-impacted wisdom

teeth of the mandible Be in a PELL & GEORGI class one.

Exclusion criteria:

Patients with systemic disease Clotting problems Bone problems

Age

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

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **30**

Randomization (investigator's opinion)

N/A

Randomization description

Blinding (investigator's opinion)

Not blinded

Blinding description

Placebo

Not used

Assignment

Single

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics committee of Hamadan of University of Medical Sciences

Street address

Hamadan of University of Medical Sciences, Shahid Fahmideh boulevard

City

Hamadan

Province

Hamadan

Postal code

7615665175

Approval date

2020-06-04, 1399/03/15

Ethics committee reference number

IR.UMSHA.REC.1399.339

Health conditions studied

1

Description of health condition studied

Repair of dental socket

ICD-10 code

K08.52

ICD-10 code description

Unrepairable overhanging of dental restorative materials

Primary outcomes

1

Description

Repair of dental socket after third molar surgery

Timepoint

At intervals of day 2, the first week and the second week, the patient is evaluated for the desired indicators

Method of measurement

Maximum distance between the edges of the upper and lower incisors

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: After the surgery of the semi-impacted tooth and before the wound is sutured, a collagen plug with the brand name BONEPROTECT CONE, produced by the German company DENTTEGRIS, is inserted into the remaining cavity of the tooth and then it is sutured. The treatment is performed only in one session and in the next visits, the patient is followed only to evaluate the signs and symptoms.

Category

Treatment - Surgery

Recruitment centers

1

Recruitment center

Name of recruitment center

Dental clinic of Hamadan University of Medical Sciences

Full name of responsible person

Dr Ali Heidari

Street address

Hamadan of University of Medical Sciences, Shahid Fahmideh boulevard

City

Hamadan

Province

Hamadan

Postal code

6517838698

Phone

+98 81 3525 0182

Email

aliheidari55@gmail.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Hamedan University of Medical Sciences

Full name of responsible person

Dr Saeed Bashirian

Street address

Hamadan of University of Medical Sciences, Shahid Fahmideh street

City

Hamadan

Province

Hamadan

Postal code

6517838698

Phone

+98 81 3525 0182

Email

s_bashirian@yahoo.com

Grant name**Grant code / Reference number****Is the source of funding the same sponsor organization/entity?**

Yes

Title of funding source

Hamedan University of Medical Sciences

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**

Hamedan University of Medical Sciences

Full name of responsible person

Dr Ali Heidari

Position

Faculty Member

Latest degree

Specialist

Other areas of specialty/work

Dentistry

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Hamadan of University of Medical Sciences, Shahid Fahmideh boulevard

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Phone

+98 81 3525 0182

Email

aliheidari55@gmail.com

Person responsible for scientific inquiries

Contact**Name of organization / entity**

Hamedan University of Medical Sciences

Full name of responsible person

Dr Ali Heidari

Position

Faculty Member

Latest degree

Specialist

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Person responsible for updating data

Contact**Name of organization / entity**

Hamedan University of Medical Sciences

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Position

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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