Clinical Trial Protocol
Iranian Registry of Clinical Trials

08 Nov 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)
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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 boulvard

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 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.

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

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aliheidari55@gmail.com

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
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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
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
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Position
Faculty Member
Latest degree
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Other areas of specialty/work
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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