Clinical Trial Protocol
Iranian Registry of Clinical Trials

08 Nov 2026

Investigating the effect of using bee propolis solution on the speed of surgical wound healing

Protocol summary

Study aim
Investigating the effect of using bee propolis solution on the speed of surgical wound healing

Design
Controlled clinical trial, double-blind, non-randomized, on 10 adult patients undergoing surgery using a convenient sampling method.

Settings and conduct
Adults undergoing open surgery who have undergone surgery in the surgical department of Ghaem Hospital (Aj) will be included in the study using the convenient method, if they meet the inclusion criteria. On the second day after surgery, the control and intervention site of the surgery wound will be determined. In the intervention site, the wound site will be washed twice daily with the athenole based 2% propolis solution for a week. In the control site, the wound site will be washed twice daily with normal saline drops (placebo). The study will be conducted in a double-blind manner so that the statistical analyst and the patient are unaware of the type of intervention.

Participants/Inclusion and exclusion criteria
inclusion Criteria: The surgery has an incision, The surgeon's consent to the patient's participation in the study, The patient's consent to participate in the study, The possibility of removing the operating room dressing on the second day after surgery, Age over 18 years. No history of allergy to bee products.

Intervention groups
1- Intervention group: which is used to wash the wound area twice daily with a 2% ethanol-based propolis solution. The intervention lasts for one week. Propolis will be supplied from Shahd Mom Pars Company. 2- Control group: In this group, normal saline solution manufactured by Samen Pharmaceuticals (placebo) is used to wash their wound site.

Main outcome variables
Wound healing rate, which is the change in wound score per unit of time.

General information

Reason for update
Acronym
IRCT registration information
IRCT registration number: **IRCT20220119053762N2**
Registration date: **2025-06-18, 1404/03/28**
Registration timing: **registered_while_recruiting**

Last update: **2025-06-18, 1404/03/28**
Update count: **0**

Registration date
2025-06-18, 1404/03/28

Registrant information
Name
Aramesh Rezaeian
Name of organization / entity
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Iran (Islamic Republic of)
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Recruitment status
Recruitment complete
Funding source

Expected recruitment start date
2025-05-11, 1404/02/21
Expected recruitment end date
2025-07-12, 1404/04/21
Actual recruitment start date
empty
Actual recruitment end date
empty
Trial completion date
empty

Scientific title

Investigating the effect of using bee propolis solution on the speed of surgical wound healing

Public title
Effect of propolis on surgical wound healing
Purpose
Treatment
Inclusion/Exclusion criteria
Inclusion criteria:
1- The surgery must have an incision, 2- The surgeon's consent to the patient's participation in the study, 3- Patient consent to participate in the study 4- The possibility of removing the operating room dressing on the second day after surgery, 5- Age over 18 years. 6- No history of allergy to bee products.
Exclusion criteria:
Age
From **18 years** old
Gender
Both

Phase
2
Groups that have been masked

- Participant
- Data analyser

Sample size
Target sample size: **10**
More than 1 sample in each individual
Number of samples in each individual: **2**
Each individual provides two sites for the study. The control site, which is irrigated with normal saline after the initial surgical incision dressing removal. And the intervention site, which is irrigated with propolis solution after the initial surgical incision dressing removal. If the patient has more than one surgical site, one of the wounds will be randomly designated as the control site and the other as the intervention site. If there is only one surgical incision, the wound area will be divided into two parts, half as the control site and half as the intervention site.
Randomization (investigator's opinion)
Not randomized
Randomization description
Blinding (investigator's opinion)
Double blinded
Blinding description
Given that both products used, i.e. placebo (normal saline) and propolis solution, are used in the same person, half of the wound is washed with one solution and half with the other. And the name of the containers containing the solution is coded. The patient is unaware of the allocation. Moreover, each person is his or her own control. And receives placebo and intervention simultaneously, all aspects of bias are eliminated.
Placebo
Used
Assignment
Parallel
Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
Ethics Committee of Mashhad University of Medical Sciences
Street address
Daneshgah Avenue, Mashad, Khoorasan Razavi , Iran
City
Mashad
Province
Razavi Khorasan
Postal code
۹۹۱۹۱ ۹۱۷۷۸
Approval date
2025-04-12, 1404/01/23
Ethics committee reference number
IR.MUMS.REC.1404.021

Health conditions studied

1

Description of health condition studied
Surgical wound
ICD-10 code
ICD-10 code description

Primary outcomes

1

Description
Speed of wound healing
Timepoint
Before the intervention and then daily until the seventh day after the start of the intervention
Method of measurement
Taking pictures of the wound site

Secondary outcomes

empty

Intervention groups

1

Description
In the patient, half of the surgical incision is considered as the intervention site. To avoid bias in horizontal incisions, the right side of the wound is considered as the intervention site, and in vertical incisions, the upper half of the wound is considered as the intervention site. The intervention site is washed twice daily with a 2% ethanol-based propolis solution. The intervention lasts for one

week. Propolis will be supplied from Shahd Mom Pars Company.

Category

Treatment - Drugs

2

Description

Control group: In the present study, half of the surgical incision area was considered as the control site in each patient, such that in horizontal surgical incisions, the left side was considered as the control site and in vertical surgical incisions, the lower half was considered as the control site. The control group received routine care and treatment, which included intravenous antimicrobial treatment and dressing the site in case of discharge with normal saline solution manufactured by Samen Pharmaceutical Company (placebo), which was done daily for one week.

Category

Placebo

Recruitment centers

1

Recruitment center

Name of recruitment center
Quaem hospital (Ajj)

Full name of responsible person
Mostafa Dastani

Street address
Qaem Hospital-Dr. Shariati Square, beginning of Ahmadabad Avenue, Mashhad - Iran

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9919991766

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ghaem-dabir@mums.ac.ir

Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Mashhad University of Medical Sciences

Full name of responsible person
Mohsen Tafaghodi

Street address
Knowledge and Health City – In the end of Shahid Fakouri Blvd (In front of Fakouri ۹۴) – Mashhad - Iran

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Fax

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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
Mashhad 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
Mashhad University of Medical Sciences

Full name of responsible person
Aramesh Rezaeian

Position
Faculty member

Latest degree
Master

Other areas of specialty/work
Nursery

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Sharing plan

Deidentified Individual Participant Data Set (IPD)
No - There is not a plan to make this available
Justification/reason for indecision/not sharing IPD
There is no further information.
Study Protocol
No - There is not a plan to make this available
Statistical Analysis Plan
Not applicable
Informed Consent Form
No - There is not a plan to make this available
Clinical Study Report
Not applicable
Analytic Code
Not applicable
Data Dictionary
Not applicable