

Clinical Trial Protocol

Iranian Registry of Clinical Trials

02 Jul 2026

Evaluation of efficacy of topical subgingival application of gel prepared from plants of *Quercus Brantii* L and *Coriandrum Sativum* L compared with placebo gel on periodontal clinical indices in moderate chronic periodontitis patients.

Protocol summary

Summary

Aim: Determination of efficacy of topical subgingival application of gel prepared from plants of *Quercus Brantii* L and *Coriandrum Sativum* L on periodontal clinical indices in moderate chronic periodontitis patients.

Inclusion criteria: any systemic disease, any antibiotic therapy in last 1 month, no history of any periodontal therapy 3 months prior to the initial examination and any orthodontic therapy. Exclusion criteria: smoking habit, pregnancy, sites with severe caries and restoration, allergy to gel and other drugs used in the study. Ten patients with chronic moderate periodontitis (with 4 or more sites with a probing depth of 3-5 mm) were selected from the Department of Periodontics of Isfahan dental school. It was a single blind study. Examiner was unaware of treatment prescribed for each site. Totally seventy sites (pockets) were selected and divided into experimental and control sites randomly. Experimental sites were treated with scaling and root planning (SRP) adjunctive topical subgingival application of herbal gel and control sites were treated with SRP and topical subgingival application of placebo gel into periodontal pockets. Clinical indices: Plaque index (PI), Probing pocket depth (PPD), clinical attachment loss (CAL) and Papilla Bleeding Index (PBI) were measured before and also one and three months after treatment. Then results were analyzed with the descriptive statistics, repeated measures ANOVA, Mann-whitney and McNemar tests.

General information

Acronym

there is no acronym

IRCT registration information

IRCT registration number: **IRCT201111014877N7**

Registration date: **2012-08-22, 1391/06/01**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2012-08-22, 1391/06/01

Registrant information

Name

Jaber Yaghini

Name of organization / entity

Isfahan University of Medical Sciences and Health Services

Country

Iran (Islamic Republic of)

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Recruitment status

Recruitment complete

Funding source

Vice chancellor for research Dental Faculty of Isfahan University of Medical Sciences

Expected recruitment start date

2012-02-20, 1390/12/01

Expected recruitment end date

2012-04-08, 1391/01/20

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Evaluation of efficacy of topical subgingival application of gel prepared from plants of Quercus Brantii L and Coriandrum Sativum L compared with placebo gel on periodontal clinical indices in moderate chronic periodontitis patients.

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Approval date

2012-01-16, 1390/10/26

Ethics committee reference number

390554

Public title

Evaluation of efficacy of gel prepared from plants of Quercus Brantii L and Coriandrum Sativum L on periodontal clinical indices.

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: any systemic disease, any antibiotic therapy in last 1 month, no history of any periodontal therapy 3 months prior to the initial examination and any orthodontic therapy. Exclusion criteria: smoking habit, pregnancy, sites with severe caries and restoration, allergy to gel and other drugs used in the study.

Age

From **20 years** old to **55 years** old

Gender

Both

Phase

2

Groups that have been masked

No information

Sample size

Target sample size: **35**

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Single blinded

Blinding description

Placebo

Used

Assignment

Parallel

Other design features

Single blind study means that the examiner who had the task of gathering information, was unaware of treatment of prescribed for each site.

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics Committee of Isfahan University of Medical Sciences

Street address

Ethics Committee of Isfahan University of Medical Sciences, Hezar Jerib Avenue, Isfahan

City

Isfahan

Postal code

Health conditions studied

1

Description of health condition studied

chronic periodontitis

ICD-10 code

K05.3

ICD-10 code description

Chronic pericoronitis

Periodontitis:•NOS•complex•simplex

Primary outcomes

1

Description

Pocket depth

Timepoint

Before treatment, 1 and 3 months after treatment

Method of measurement

With probe

2

Description

Clinical attachment loss

Timepoint

Before treatment, 1 and 3 months after treatment

Method of measurement

With probe

3

Description

Papilla bleeding index

Timepoint

Before treatment, 1 and 3 months after treatment

Method of measurement

With probe

4

Description

Plaque index

Timepoint

Before treatment, 1 and 3 months after treatment

Method of measurement

With probe

Secondary outcomes

1

Description

tooth sensitivity

Timepoint

Before treatment, 1 and 3 months after treatment

Method of measurement

Visual examination

Intervention groups

1

Description

Ten patients were selected with moderate chronic periodontitis (with 4 or more sites with a probing depth of 3-5 mm). Totally seventy sites (pockets) were selected and divided into experimental and control sites randomly. Clinical indices: Plaque index (PI), Probing pocket depth (PPD), clinical attachment loss (CAL) and Papilla Bleeding Index (PBI) were measured before treatment. Experimental sites were treated with scaling and root planning (SRP) adjunctive topical subgingival application of gel was prepared from plants extract of Quercus Brantii L (20%) and Coriandrum Sativum L (1%) in pharmacy Faculty of Isfahan University of Medical Sciences. Gel was supplied in syringe (0.2 ml) with 21 gauge needle into the pocket. This was done two times. Also clinical indices were measured one and three months after treatment.

Category

Treatment - Drugs

2

Description

Control sites were treated with SRP and topical application of placebo gel into periodontal pockets. It was applied subgingivally using similar syringe and needle as that of experimental gel.

Category

Placebo

Recruitment centers

1

Recruitment center

Name of recruitment center

Dental Faculty of Isfahan Medical University

Full name of responsible person

Dr Jaber Yaghini

Street address

Dr Jaber Yaghini, Periodontology department, Dental Faculty of Isfahan Medical University, Hezar Jerib Avenue

City

Isfahan

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Vice chancellor for research, Dental Faculty of Isfahan

University of Medical Sciences

Full name of responsible person

Dr Savabi

Street address

Vice chancellor for research, Dental faculty Isfahan Medical University, Hezar Jerib Avenu, Isfahan

City

Isfahan

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Vice chancellor for research, Dental Faculty of Isfahan University of Medical Sciences

Proportion provided by this source

100

Public or private sector

empty

Domestic or foreign origin

empty

Category of foreign source of funding

empty

Country of origin

Type of organization providing the funding

empty

Person responsible for general inquiries

Contact

Name of organization / entity

Dental Faculty of Isfahan Medical University

Full name of responsible person

Dr Jaber Yaghini

Position

Assistant Professor of Periodontology of Dental Faculty of Isfahan Medical University

Other areas of specialty/work

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PhD

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Person responsible for updating data

Contact

Sharing plan

Deidentified Individual Participant Data Set (IPD)

empty

Study Protocol

empty

Statistical Analysis Plan

empty

Informed Consent Form

empty

Clinical Study Report

empty

Analytic Code

empty

Data Dictionary

empty