Clinical Trial Protocol
Iranian Registry of Clinical Trials

17 Sep 2026

The effect of adjunctive low-dose doxycycline and licorice therapy on gingival cervicular fluid matrix metalloproteinase-8 levels in chronic periodontitis

Protocol summary

Summary

Aims: Comparing the effect of adjunctive low dose doxycycline and licorice on ginigival cervicular fluid matrix metalloproteinase-8 levels in patients with chronic periodontits. Study design: Interventional, Double blind, Placebo usage, Uni-center. a- Study population: No age limit, no sex limit. Inclusion criteria: chronic mild to moderate periodontitis. Exclusion criteria: Patients with any infectious or systemic diseases; no drug usage at all; pregnant, breast feeder patients; patients allergic to antibiotics; no scaling and root planning or periodontal surgeries in the last six months; no usage of herbal or antibiotic drugs during the last six months; Smokers, alcoholics; patients with poor oral hygiene or patients with poor compliance Sample size:39 patients b- Intervention/Control: Intervention: One 20mg Capsule of Doxycycline per day for six weeks Intervention: One 400mg Tablet of Licorice per day for six weeks Control: One Placebo Capsule per day for six weeks Time of intervention: 6 weeks. Primary or under study outcome measures: concentrate of MMP-8 in gingival cervicular fluid.

General information

Acronym

-

IRCT registration information

IRCT registration number: **IRCT2012121611771N1**
Registration date: **2013-01-10, 1391/10/21**
Registration timing: **retrospective**

Last update:
Update count: **0**

Registration date

2013-01-10, 1391/10/21

Registrant information

Name
Shirin Zahra Farhad
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Recruitment status

Recruitment complete

Funding source

private

Expected recruitment start date

2010-10-23, 1389/08/01

Expected recruitment end date

2011-10-23, 1390/08/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of adjunctive low-dose doxycycline and licorice therapy on gingival cervicular fluid matrix metalloproteinase-8 levels in chronic periodontitis

Public title

The effect of doxycycline and licorice therapy on gingival cervicular fluid matrix metalloproteinase-8 levels in chronic periodontitis

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: chronic mild to moderate periodontitis. Exclusion criteria: Patients with any infectious or systemic diseases; no drug usage at all; pregnant, breast feeder patients; patients allergic to antibiotics; no scaling and root planning or periodontal surgeries in the last six months; no usage of herbal or antibiotic drugs during the last six months; Smokers, alcoholics; patients with poor oral hygiene or patients with poor compliance

Age
No age limit

Gender
Both

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: **39**

Randomization (investigator's opinion)
Randomized

Randomization description

Blinding (investigator's opinion)
Double blinded

Blinding description

Placebo
Used

Assignment
Parallel

Other design features
because the low dosage (20mg) of Doxycycline was no commercially available, it was ordered to a pharmacologist to be prepared in small capsules similar to placebos.

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee
Islamic Azad Dental School Khorasgan Branch, (Isfahan), Iran

Street address
Islamic Azad University Khorasgan (Isfahan) Branch, University Boulevard, Arghavanieh, Eastern Jay Street, Isfahan, Iran.

City
Isfahan

Postal code

Approval date
2010-12-11, 1389/09/20

Ethics committee reference number
89092007405

Health conditions studied

1

Description of health condition studied
Chronic Periodontitis

ICD-10 code
K05.3

ICD-10 code description
Chronic periodontitis

Primary outcomes

1

Description
MMP-8 concentrate in GCF

Timepoint
0 and 6 weeks

Method of measurement
Nanogram per milliliter by means of ElLISAreader

Secondary outcomes

empty

Intervention groups

1

Description
Intervention: One 20mg Capsule of Doxycycline per day for six weeks

Category
Treatment - Drugs

2

Description
Intervention: One 400mg Tablet of Licorice per day for six weeks

Category
Treatment - Drugs

3

Description
Control: One Placebo Capsule per day for six weeks

Category
Placebo

Recruitment centers

1

Recruitment center

Name of recruitment center
Khorasgan Islamic Azad Dental School (Isfahan)

Full name of responsible person
Shirin Zahra Farhad

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Islamic Azad University Khorasgan (Isfahan) Branch, University Boulevard, Arghavanieh, Eastern Jay Street, Isfahan, Iran.

City
Isfahan

Sponsors / Funding sources

1

Sponsor
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Full name of responsible person
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Periodontics Department of Islamic Azad University Khorasgan (Isfahan) Branch, University Boulevard, Arghavanieh, Eastern Jay Street, Isfahan, Iran.
City
Isfahan
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Islamic Azad University Khorasgan Branch (Isfahan)
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
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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